

SCIENTIFIC REPORT

IMIBIC 2022







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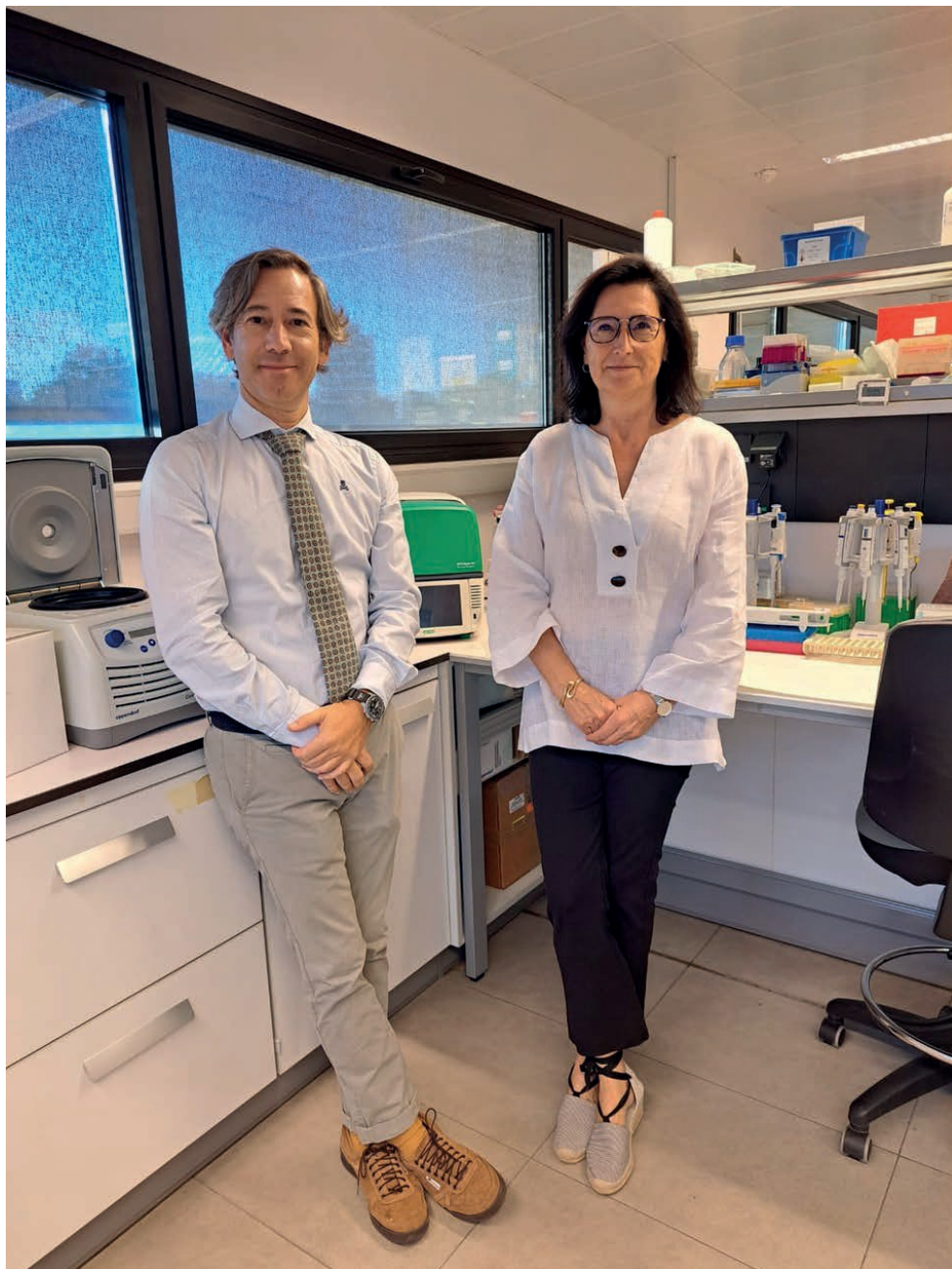
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**SCIENTIFIC REPORT
IMIBIC 2022**



DIRECTOR'S FOREWORD FOR 2022 SCIENTIFIC REPORT



Pablo Pérez Martínez
Scientific Director

María del Mar Malagón Poyato
Deputy Scientific Director

This report provides a summary of IMIBIC's activity during 2022, in which this activity was gradually recovering after the COVID epidemic. The pandemic has served us to set more ambitious goals for the future, designing an itinerary to advance in smart and sustainable ways, and putting us in a position as an international benchmark, at a higher level of excellence, on par with the large research institutions which lead the field in this, the most pioneering branch of science. In order to achieve this goal, we are currently developing the objectives that were proposed in the Strategic Plan 2021-2025 as well as posing new challenges for the near future.

One of IMIBIC's main assets is its human capital. In 2022, a significant number of predoctoral and postdoctoral researchers as well as technical personnel joined our research groups and platforms, thus reinforcing our potential for growth and, at the same time, giving these talented young people the opportunity to develop their professional careers. In this context, we would like to highlight the incorporation of 80 persons, recent graduates, who have joined the different groups of the Institute, within the Investigo Program, to be trained for two years with special emphasis on clinical research.

During 2022, we intensified our innovation activity. Our Technological Innovation unit is one of the main strengths of the Institute and, thanks to recent support from the Carlos III Health Institute, we now have the structural resources to continue growing. The scientific management fully supports this commitment, since we consider that innovation is a critical feature of a biomedical research institute. The growing activity of the Innovation Unit, as well as of all the rest of IMIBIC's technology units, some of which have been also strengthened with the latest equipments, guarantees IMIBIC's position at the forefront of translational research.

The management's proposal for the future, therefore, is aimed at promoting growth, based on the principles of excellence and translation to the healthcare environment. This includes a commitment to the promotion of young researchers, aiming to foster talent and creativity so that the Institute continues to evolve and attract researchers of excellence. This will help consolidate IMIBIC as an international reference centre. In addition, we will continue to focus our attention on attracting international funds, prioritizing European and NIH projects, and encouraging innovation and transfer as tools to reduce the gap between research and transfer both to clinical practice and to companies in the health sector. There are many steps and goals yet to be fulfilled, there are many challenges and difficulties to be overcome, but the spirit of the IMIBIC has humbly shown the path to blend basic and clinical research, to combine competitiveness with cooperation, to support profound changes while maintaining coherent and solid project goals, and to attain excellence and quality in research.

Finally, in order to align ourselves with the new requirements of the Carlos III Health Institute, we are working on aspects related to the 6 principles of Responsible Research and Innovation: ethics, gender equality, responsible governance, open access, science education and public engagement.

Over the next pages, you will have the opportunity to see the results of this continued growth and the consolidation of our efforts to progress in the field of biomedical research, but most of all, you will witness the robust willingness to continue rising altogether in this common and enduring pathway.

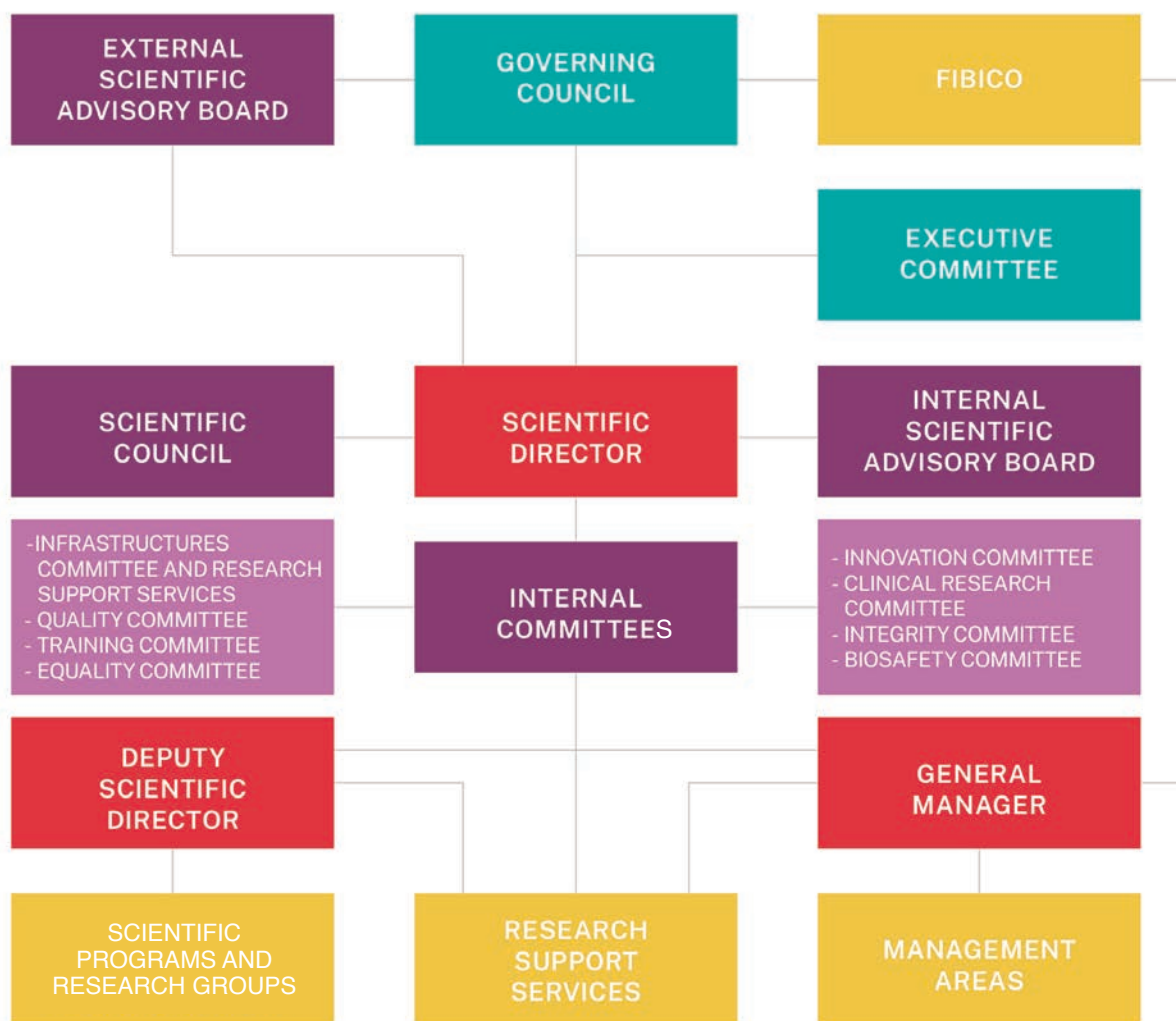


**SCIENTIFIC REPORT
IMIBIC 2022**

GOVERNANCE AND STRUCTURE

2.1 ORGANIZATION CHART

The governing and representative bodies of IMIBIC are set out below:



A. 1. COLLEGIATE BODIES

The collegiate bodies that make up the IMIBIC are the Governing Council, the Executive Committee, the External Scientific Advisory Board, the Internal Scientific Advisory Board and the Scientific Council. Each body is composed of a number of specialists and has its own competencies.

» GOVERNING COUNCIL

The Governing Council is the main governing body of IMIBIC. The Governing Council is composed of the following members:

- Two representatives from the Regional Ministry of Health and Consumer Affairs of the Regional Government of Andalusia

Dr. Isaac Túnez Fiñana

Secretary General of Public Health and R&D+i in Health of the Regional Ministry of Health and Consumer Affairs.

Dr. Valle García Sánchez

Managing Director of the Reina Sofia University Hospital and President of FIBICO.

- Two representatives from the Regional Ministry of University Research and Innovation.

Mr. Librado Carrasco Otero

Director General of Research Planning.

Mr. José Francisco Viso Sánchez

Territorial Delegate for Educational Development and University Research and Innovation.

- Two representatives from the University of Córdoba

Dr. M^a José Polo Gómez

Vice-Rector for Science Policy.

Dr. Lourdes Arce Jiménez

Vice-Rector for Innovation and Transfer.

- One representative from the Andalusian Public Foundation for Progress and Health (FPS)

Mr. Gonzalo Balbontín Casillas

Managing Director

- Scientific Director, IMIBIC

Dr. Pablo Pérez Martínez

- General Manager, IMIBIC

Mr. Álvaro Granados del Río

» EXECUTIVE COMMITTEE

On July 27, 2015, the Governing Council adopted the agreement to create an Executive Committee to facilitate efficient decision-making. The Executive Committee is made up of one member from each of the institutions that constitute the Governing Council, as set out in the collaboration agreement between the Regional Ministry of Health and Families, the Regional Ministry of Economic Transformation, Knowledge, Industry and Universities, and the University of Córdoba. The Scientific Director and General Manager participate in an advisory capacity, but without voting rights.

- One representative from the Regional Ministry of Health and Consumer Affairs of the Regional Government of Andalusia

Dr. Valle García Sánchez

Managing Director of the Reina Sofia University Hospital and President of FIBICO

- One representative from the Regional Ministry of University Research and Innovation

Mr. D. José Francisco Viso Sánchez

Territorial Delegate for Educational Development and University Research and Innovation.

- One representative from the University of Córdoba

Dr. Rafael Solana Lara

Vice-Rector for Health and Welfare of the University Community.

- One representative from the Andalusian Public Foundation for Progress and Health (FPS)

Mr. Gonzalo Balbontín Casillas

Managing Director

- Scientific Director, IMIBIC

Dr. Pablo Pérez Martínez

- General Manager, IMIBIC

Mr. Álvaro Granados del Río

» EXTERNAL SCIENTIFIC ADVISORY BOARD

The External Scientific Advisory Board is appointed by the Governing Board and its mission is to assist the Governing Council, the Scientific Council and the Scientific Director in the performance of their duties. It acts as an advisory body to the Scientific Management, although its opinions and recommendations are not legally binding. It was created on July 9, 2009, under the name of the External Advisory Board, and ratified by the Governing Council on December 21, 2009. The External Scientific Advisory Board is made up of a minimum of three and a maximum of ten highly qualified professionals with recognized experience in their field of research. Members of the External Scientific Advisory Board must carry out their professional activity outside the Autonomous Community of Andalusia, and at least one of them must not be resident in Spain. Members must be able to individually demonstrate that they have no conflicts of interest. The members of the board are:

- **Dr. Lina Badimón Maestro**

Director of the Cardiovascular Research Center (CSIC-ICCC) at the Hospital de la Santa Creu i Sant Pau, Autonomous University of Barcelona (UAB), Institute for Biomedical Research (IIB-SPau), (Barcelona). President of the CCE.

- **Dr. Carlos Diéguez González**

Scientific Director of CIBER Obesity and Nutrition (ISCIII) and Director of the Centre for Research in Molecular Medicine, University of Santiago (CIMUS). (Santiago de Compostela).

- **Dr. José María Ordovás Muñoz**

Senior Scientist, Director of the Nutrition and Genomics Laboratory and Chairman of the Functional Genomics Core Facility of the Jean Mayer USDA Human Nutrition Research Center on Aging, Tufts University (Boston, USA). Scientific Director of the Madrid Institute for Advanced Studies (IMDEA) (Madrid).

- **Dr. Francisco Sánchez Madrid**

Professor of Immunology at the Autonomous University of Madrid and Scientific Director of the Health Research Institute of the Hospital de La Princesa (Madrid).

- **Dr. Pura Muñoz Cánoves**

ICREA Research Professor and Professor of Cell Biology of the Department of Experimental and Health Sciences, University Pompeu Fabra. Leader of the Tissue Regeneration group at the National Centre for Cardiovascular Research (CNIC) in Madrid.

» INTERNAL SCIENTIFIC ADVISORY BOARD

The Internal Scientific Advisory Board is an advisory body to the Scientific Director. It is composed of the Scientific Director and Researchers (including researchers in training) and represents all priority scientific areas of the Institute. The Internal Scientific Advisory Board consists of the following members (a maximum of 18). It includes those responsible for Quality, Innovation and Training. It was established on November 25, 2019 (and was previously known as the Permanent Committee of the Scientific Council). The members of the board are as follows:

- **Dr. Pablo Pérez Martínez** Scientific Director
- **Mr. Álvaro Granados del Río** General Manager
- **Dr. M^a del Mar Malagón Poyato** Deputy Scientific Director
- **Dr. Juan de la Haba Rodríguez** Coordinator of Clinical Research
- **Dr. Fernando Sarramea Crespo** Coordinator of Active Ageing and Frailty Program
- **Dr. Manuel Tena Sempere** Coordinator of the Nutrition, Endocrine and Metabolic Diseases Program
- **Dr. Antonio Rivero Román** Coordinator of the Infectious & Immunological Diseases and Organ Transplantation Program
- **Dr. Marco A. Calzado Canale** Coordinator of the Cancer (Oncology and Oncohematology) Program
- **Ds. Marina Álvarez Benito** Coordinator of the Chronic and Inflammatory Diseases Program
- **Dr. Raúl Luque Huertas** Designated representative of the Training Committee
- **Dr. Eduardo Muñoz Blanco** Designated representative of the Innovation Committee
- **Dr. Miguel González Andrades** Emerging Researcher
- **Dr. Elena Yubero Serrano** Emerging Researcher
- **Dr. Nuria Barbarroja Puerto** Emerging Researcher
- **Ms. Laura Martín Piedra** Predoctoral Researcher
- **Mr. Juan Manuel Jiménez Vacas** Predoctoral Researcher

» SCIENTIFIC COUNCIL

The Scientific Council acts as an advisory body to the Scientific Director. It is composed of the Scientific Director, the Deputy Scientific Director, Principal Investigators (PI), Emerging Researchers (ER), one representative from the Reina Sofía University Hospital (RSUH) Board of Directors, one representative from Research Support Services, one representative of the management staff and the General Manager of the IMIBIC. It was established on July 9, 2009.

A. 2. OUTGOING MEMBERS OF THE GOVERNING BODIES

- **Mr. Ángel Herrador Leiva**
Delegate for Employment, Training, Self-Employment, Economics, Knowledge, Business and Universities.
- **Ms. M^a Teresa Serrano Gotarredona**
General Manager of Research and Knowledge Transfer.
- **Mr. Enrique Quesada Moraga**
Vice-Rector for Research and Territorial Development.
- **Mr. Antonio J. Cubero Atienza**
Vice-Rector for Coordination, Infrastructure and Sustainability.
- **Ms. Luisa M. Rancaño Martín**
Managing Director.

B. INDIVIDUAL MEMBERS

The Management Team is responsible for ensuring the effectiveness of performance in order to increase the quality and impact of IMIBIC's research activity.

» SCIENTIFIC DIRECTOR

Dr. Pablo Pérez Martínez

Full Professor of Medicine at the University of Córdoba and specialist in Internal Medicine, Reina Sofia University Hospital, Córdoba.

» DEPUTY SCIENTIFIC DIRECTOR

Dr. María del Mar Malagón Poyato

Full Professor of Cell Biology at the University of Córdoba and Principal Investigator of the GC11 research group.

» CLINICAL RESEARCH PROGRAM COORDINATOR

Dr. Juan de la Haba Rodríguez

Specialist in Medical Oncology, Reina Sofia University Hospital, and Associate Professor at the University of Córdoba.

» GENERAL MANAGER

Mr. Álvaro Granados del Río

BSc in Business Administration and Management. Advanced Program for Management of Health.

C. 1. INTERNAL COMMITTEES

» QUALITY COMMITTEE

This Committee ensures the maintenance of quality and ethical codes in all research activities and among researchers, in accordance with Quality Plan guidelines.

- | | |
|--|--|
| • Dr. M^a del Mar Malagón Poyato | Deputy Scientific Director |
| • Ms. Marisa Escabias Parejo | Quality Specialist |
| • Mr. Álvaro Granados del Río | General Manager |
| • Dr. M^a Antonia Álvarez de Lara Sánchez | Head of Quality and Clinical Documentation, RSUH |
| • Dr. José Manuel Aranda Lara | Technical Advisor to the Territorial Delegate of the Andalusian Regional Ministry of Health and Families |
| • Dr. M^a Teresa Roldán Arjona | Principal Investigator GC22 |
| • Dr. Luís Martínez Martínez | Principal Investigator GC24 |
| • Dr. Rafael Solana Lara | Principal Investigator GC01 |
| • Dr. Juan Ruano Ruiz | Principal Investigator GC29 |
| • Dr. Ana León Acuña | Postdoctoral Researcher GC09 |

» TRAINING COMMITTEE

This committee is responsible for carrying out the Training Plan, in particular, the Master's and Doctoral Programmes in Bio-medical Research.

- | | |
|---|------------------------------|
| • Dr. Juan Manuel Castellano Rodríguez | Postdoctoral Researcher GC10 |
| • Mr. David Luna Gómez | Training Technician |
| • Ms. Inmaculada Varo Urbano | Training Officer |
| • Mr. Álvaro Granados del Río | General Manager |
| • Dr. Raúl Luque Huertas | Principal Investigator GC27 |
| • Dr. Antonio Pablo Arenas de Larriva | Predoctoral Researcher GC09 |

- **Dr. Elisa Roldán Romero** Director of Studies, RSUH
- **Dr. Joaquín Toro Santiago** Head of Integrated Training Unit, RSUH
- **Dr. Nuria Barbarroja Puerto** Emerging Researcher GC05
- **Dr. Juan Solivera Vela** Head of Neurosurgery Service, RSUH
- **Dr. Sebastián Ventura Soto** Principal Investigator GC25
- **Ms. Alejandra Méndez Natera** Predoctoral Researcher GC03
- **Dr. Alejandro Ibáñez Costa** Postdoctoral Researcher GC08
- **Ms. Gema García Jurado** Technical Specialist in Cytometry and Microscopy
- **Dr. Antonio García Ríos** Emerging Researcher
- **Dr. Rafael Pineda Reyes** Postdoctoral Researcher GC10
- **Ms. Isabel de Castro Burón** Communications Officer
- **Mr. Rafael Blanco Moreno** Teacher of Biology, Ategua Secondary School, Castro del Río
- **Mr. José Carlos Prieto Baena** International Project Manager
- **Mr. Juan Luis Parras Pezard** Hospital Pharmacy Data Manager
- **Mr. Julio Manuel Martínez Moreno** Postdoctoral Researcher GC13

» EQUALITY NEGOTIATING COMMITTEE

This committee is responsible for the Equality Plan and promotes equal opportunities and equality of treatment between women and men in accordance with the principles of corporate social responsibility and in compliance with current legislation.

- **Dr. M^a del Mar Malagón Poyato** Deputy Scientific Director
- **Mr. David Luna Gómez** Quality Technician and Secretary of Equality Negotiating Committee
- **Ms. Miriam Cruzado Caballero** Head of the Research Management Unit
- **Mr. Francisco Javier López Ruiz** Head of Economic and Resource Management
- **Mr. Florencio Muñoz Encinas** Technician: Economic and Resource Management
- **Mss. Silvia Miranda Castellano** Technician: Economic and Resource Management
- **Ms. Marisa Escabias Parejo** Quality Specialist and Staff Representative
- **Ms. Estefanía Azcona Corrales** Management Control Technician and Staff Representative
- **Dr. Julio Manuel Martínez Moreno** Post-doctoral Researcher GC13 and Staff Representative
- **Mr. Daniel José Campón Montilla** Laboratory Technician and Staff Representative
- **Dr. Antonio Romero Ruiz** Emerging Researcher GE09 and External Advisor to IMIBIC
- **Dr. Alejandra Pera Rojas** Emerging Researcher GC01 and External Advisor to IMIBIC
- **Ms. Higinia Romero Crespo** External Advisor.

» INFRASTRUCTURES AND RESEARCH SUPPORT SERVICES COMMITTEE

This Committee is responsible for supervising existing IMIBIC infrastructures and implementing the Infrastructure Plan.

- **Dr. M^a del Mar Malagón Poyato** Deputy Scientific Director
- **Mr. Francisco Javier López Ruiz** Head of Financial and Human Resources Management
- **Mr. Álvaro Granados del Río** General Manager
- **Dr. Eduardo Chicano Gálvez** Senior Technical Specialist,
Research Support Service: Mass Spectrometry and Molecular Imaging Unit
- **Dr. Esther Peralbo Santaella** Senior Technical Specialist,
Research Support Services: Cytometry and Microscopy
- **Ms. Anabel Pozo Salas** Technician, Research Support Services: Animal Experimentation
- **Dr. Antonio Rodríguez Ariza** Co-Principal Investigator GC06
- **Dr. Rosario López Pedrera** Principal Investigator GC05
- **Dr. Victoria Guiote Moreno** Predoctoral Researcher GA10
- **Dr. Sara Cantisán Bohórquez** Researcher GC03
- **Dr. Juan A. Moreno Gutiérrez** Principal Investigator GE06
- **Dr. Juan Roa Rivas** Researcher CG10
- **Dr. Feliciano Priego Capote** Principal Investigator GC21
- **Dr. Esther Rivero Cortés** Senior Technical Specialist for General Procedures

» CLINICAL RESEARCH COMMITTEE

The Clinical Research Committee implements the IMIBIC Clinical Research Plan.

- **Dr. Juan de la Haba Rodríguez** Coordinator of Clinical Research
- **Dr. José Carlos Garrido Gracia** Head of UIC Management Area and Secretary of the Committee
- **Mr. Álvaro Granados del Río** General Manager
- **Dr. Julián de la Torre Cisneros** Principal Investigator GC03
- **Dr. Concepción Herrera Arroyo** Principal Investigator GC14
- **Dr. Pilar Font Ugalde** Researcher GC05
- **Dr. Juan Ruano Ruiz** Principal Investigator GC29
- **Dr. Álvaro Arjona Sánchez** Principal Investigator GE09
- **Dr. Enrique Gómez Gómez** Researcher GE05
- **Dr. Juan Carlos Castillo Domínguez** Researcher GC15
- **Dr. Eduardo Agüera Morales** Emerging Researcher GC28

- **Dr. M^a José Méndez Vidal** Clinical Researcher GC06
- **Dr. Daniel López Ruiz** Researcher GA08
- **Dr. M^a Dolores Mesa Rubio** Researcher GC15
- **Dr. Esperanza Romero Rodriguez** Researcher GC12
- **Dr. Javier Torres Borrego** Coordinator of Pediatric Allergy & Pulmonology Unit
- **Mr. Ángel Cañadilla Moyano** External Member

» INNOVATION COMMITTEE

The Innovation Committee is responsible for carrying out the IMIBIC Innovation Plan.

- **Dr. Pablo Pérez Martínez** Scientific Director
- **Dr. Luis Fernández Formoso** Project Manager
- **Dr. M^a del Mar Malagón Poyato** Deputy Scientific Director
- **Mr. Álvaro Granados del Río** General Manager
- **Dr. Marina Álvarez Benito** Principal Investigator GA08
- **Dr. Eduardo Muñoz Blanco** Principal Investigator GC04
- **Dr. Francisco Javier Delgado Lista** Co-Principal Investigator GC09
- **Dr. Rafaela Ortega Castro** Postdoctoral Researcher GC05
- **Dr. Juan Rafael Muñoz Castañeda** Emerging Researcher GC13
- **Dr. Juan Solivera Vela** Head of Neurosurgery Service RSUH
- **Dr. Manuel David Gahete Ortíz** Principal Investigator GC30
- **Dr. Miguel González Andrades** Principal Investigator GE07
- **Dr. Antonio Rivero Juárez** Emerging Researcher GC26
- **Mr. David Requena Polonio** Technical Specialist, Innovation
- **Mr. Francisco Jiménez San Martín** External Member

» SCIENTIFIC PROGRAMS

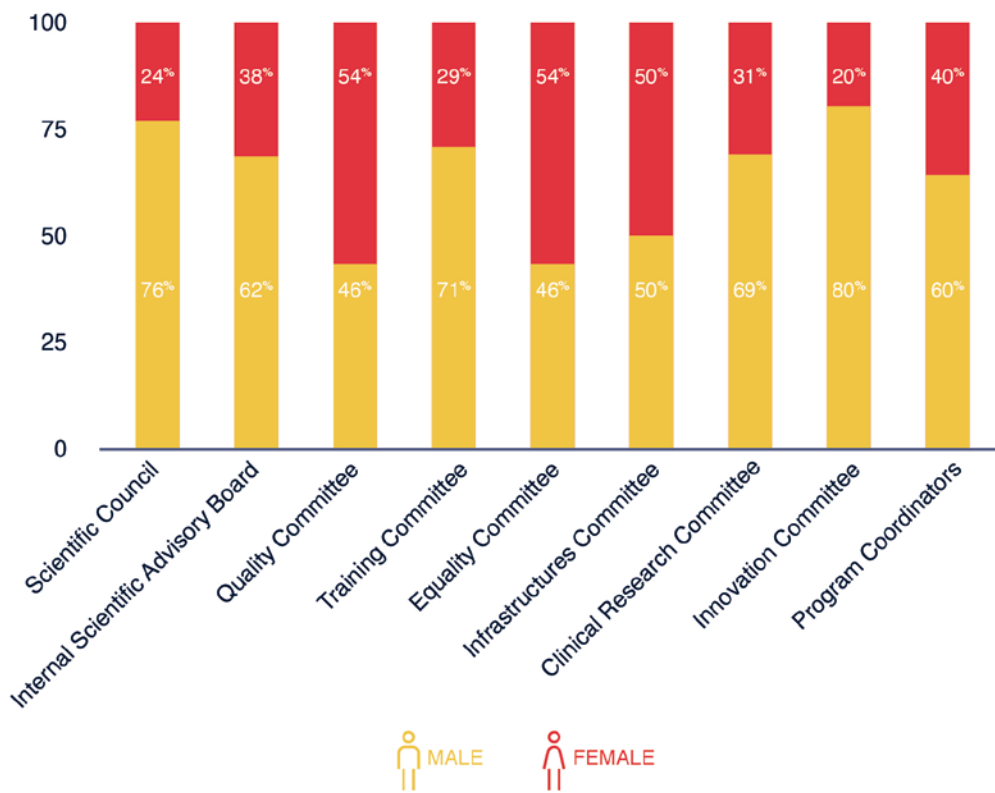
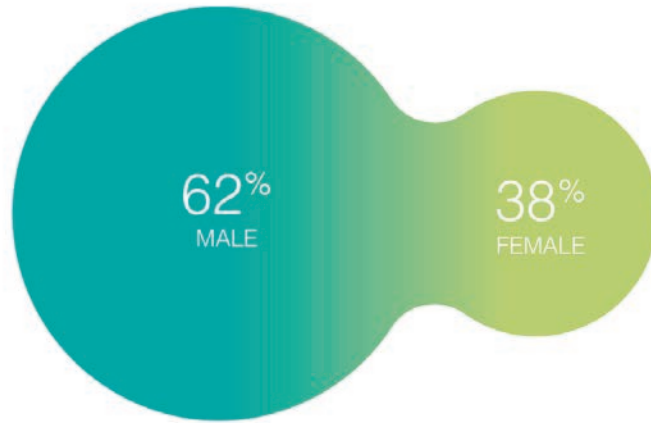
All IMIBIC research groups must be integrated into the scientific programs belonging to the main thematic areas of IMIBIC research being carried out at any given time:

- ACTIVE AGEING AND FRAILITY **Dr. Fernando Sarramea Crespo**
Dr. Rafael Solana Lara
- NUTRITION, ENDOCRINE AND METABOLIC DISEASES **Dr. Manuel Tena Sempere**
Dr. Elena Yubero Serrano
- INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION **Dr. Antonio Rivero Román**
Dr. Sara Cantisán Bohórquez
- CANCER (ONCOLOGY AND ONCOHEMATOLOGY) **Dr. Juan de la Haba Rodríguez**
Dr. Marco A. Calzado Canale
- CHRONIC AND INFLAMMATORY DISEASES **Dr. Rosario López Pedrera**
Dr. Marina Álvarez Benito

C. 2. OTHER MEMBERS OF THE GOVERNING BODIES

- **Dr. Luis A. Pérula de Torres** Principal Investigator GC12
- **Ms. María Saarela** International Project Manager
- **Mr. Antonio Luque Pineda** Clinical Trial Manager
- **Ms. Esther Pacheco Rodríguez** Clinical Pharmacologist

» INTERNAL COMMITTEE MEMBERS BY GENDER



2.2 SCIENTIFIC STRUCTURE

IMIBIC research activities are organized into five scientific programs, each comprising different research groups. The scientific programs target health problems that are both important and widespread, identifying areas in which the Institute's researchers can combine their efforts in cross-cutting collaborative projects that address and respond to the most crucial health challenges facing European society today, in line with the priorities set out in the European Union's Horizon 2020 program. Each program is structured to support translational and clinical research that will guide researchers towards the primary goal of improving patient and community health. The programs are designed to foster interaction and cooperation between different groups, to attract new talent and to continually improve the career development opportunities of young researchers. Each of our scientific programs reflects the strengths of our research teams and showcases the areas of expertise of IMIBIC.

The programs are as follows:

» ACTIVE AGEING AND FRAILITY

This program is oriented towards understanding the molecular pathogenic basis of the ageing process in relation to quality of life and to pursuing new strategies in patient care. It includes the following lines of research:

- Immunology and senescence
- Care of the chronically ill
- Frailty and quality of life of the elderly

» NUTRITION, ENDOCRINE AND METABOLIC DISEASES

This program is oriented towards studying metabolic disorders and the endocrine system, in particular the role of nutrition in the prevention and management of these processes at different stages of life. It also focuses on studies of reproductive health and neuroendocrine tumours. It includes the following lines of research:

- Metabolic syndrome
- Reproductive health
- Paediatric and perinatal diseases
- Neuroendocrine tumours

» INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

This program focuses on the study of diseases caused by different infectious agents, with a special emphasis on infections in immunocompromised patients. It includes the following lines of research:

- HIV + Hepatitis C virus
- Transplants
- Multidrug resistance

» CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

This program focuses on the study of neoplastic diseases, including both solid tumours and haematological neoplasms. It includes the following lines of research:

- Lung cancer
- Breast cancer
- Hepatocellular carcinoma
- Leukaemia and lymphomas
- Digestive tumours
- Other tumours

» CHRONIC AND INFLAMMATORY DISEASES

This program focuses on the study of a number of chronic diseases of modern society, emphasising those of an inflammatory nature. The program includes both basic research and clinical studies. Its ultimate aim is to promote a better understanding of the basis of chronic/inflammatory diseases and to improve therapies. It includes the following lines of research:

- Cardiovascular diseases
- Musculoskeletal and connective tissue diseases
- Neurological diseases and mental health
- Kidney and urological diseases
- Liver and digestive diseases
- Chronic inflammation and signalling

RESEARCH GROUPS

GC- CONSOLIDATED GROUP • GE - EMERGING GROUP • GA - ASSOCIATED GROUP

CODE	IMIBIC GROUPS AND PROGRAMS	PROGRAMS	PRINCIPAL INVESTIGATOR(S)
GC01	Immunology and Allergy	1	Rafael Solana Lara
GC02	Oxidative and Nitrosative Stress in Acute and Chronic Liver Disease	5	Manuel de la Mata García Jose Antonio Bárcena Ruíz
GC03	Infectious Diseases	3	Julián de la Torre Cisneros
GC04	Inflammation and Cancer	4	Eduardo Muñoz Blanco Marco Antonio Calzado Canalé
GC05	Systemic and Chronic Inflammatory Auto-immune Diseases of the Musculoskeletal System and Connective Tissue	5	Rosario López Pedrera Eduardo Collantes Estévez
GC06	New Therapies in Cancer	4	Enrique Aranda Aguilar Antonio Rodríguez Ariza Juan Rafael de la Haba Rodríguez
GC07	Nephrology. Cell Damage in Chronic Inflammation	5	Alejandro Martín Malo Pedro Aljama García
GC08	Hormones and Cancer	4	Justo P. Castaño Fuentes
GC09	Nutrigenomics. Metabolic Syndrome	2	José López Miranda Francisco Pérez Jiménez Javier Delgado Lista Pablo Pérez Martínez Elena Yubero Serrano
GC10	Hormonal Regulation of Energy Balance, Puberty and Reproduction	2	Manuel Tena Sempere
GC11	Adipocyte Differentiation and Metabolism: Metabolic Syndrome	2	María del Mar Malagón Poyato
GC12	Clinical and Epidemiological Research in Primary Care (GICEAP)	1	Luis Ángel Pérula de Torres
GC13	Calcium Metabolism. Vascular Calcification	5	Mariano Rodríguez Portillo Juan R. Muñoz Castañeda
GC14	Cellular Therapy	4	Inmaculada Concepción Herrera Arroyo
GC15	Invasive Cardiology and Cell Therapy	5	Manuel Pan Álvarez-Ossorio
GC16	Cellular Biology in Haematology. Hypercoagulability	4	Joaquín Sánchez García Francisco Velasco Gimena
GC17	Physiopathology of the Vitamin D Endocrine System, Biotechnology and Aging	1	José Manuel Quesada Gómez
GC18	Translational Research in Solid Organ Transplantation Surgery	5	Francisco Javier Briceño Delgado
GC19	Artificial Vision Applications	1	Rafael Medina Carnicer
GC20	Genetics and Behavioural Diseases	4	Manuel Ruiz Rubio Juan Antonio Moriana Elvira
GC21	Metabolomics and Identification of Bioactive Compounds	1	Feliciano Priego Capote María Dolores Luque de Castro
GC22	Epigenetics	4	María Teresa Roldán Arjona
GC23	Metabolism in Childhood	2	María Mercedes Gil Campos
GC24	Clinical and Molecular Microbiology	3	Luis Martínez Martínez
GC25	Knowledge Discovery and Intelligent Systems in Biomedicine	4	Sebastián Ventura Soto
GC26	Clinical Virology and Zoonosis	3	Antonio Rivero Román
GC27	OncObesity and Metabolism	4	Raúl M. Luque Huertas
GC28	Neuroplasticity and Oxidative Stress	5	Eduardo Agüera Morales
GC29	Inflammatory Immune-Mediated Cutaneous Diseases	5	Juan Alberto Ruano Ruiz
GC30	Molecular Hepatology	4	Manuel David Gahete Ortiz
GC31	Comprehensive Nursing Care. Multidisciplinary Perspective	1	Pablo Jesús López Soto

CODE	IMIBIC GROUPS AND PROGRAMS	PROGRAMS	PRINCIPAL INVESTIGATOR(S)
GE04	Applied Psychology	2	Bárbara Luque Salas
GE05	Genitourinary Diseases	4	Julia Carrasco Valiente
GE06	Pathophysiology of Renal and Vascular Damage	5	Juan A. Moreno Gutiérrez
GE07	Visual Quality	3	Miguel González Andrades
GE09	Research in Peritoneal and Retroperitoneal Oncological Surgery	4	Álvaro Arjona Sánchez
GA01	Lung Transplants. Thoracic Neoplasms	3	Ángel Salvatierra Velázquez
GA03	Pneumology	5	Bernabé Jurado Gámez
GA04	Endocrinology and Nutrition. Insulin Resistance, Diabetes and Metabolism	2	M ^a Ángeles Gálvez Moreno
GA05	Study of Growth. Endocrinology and Child Nutrition	2	Ana Belén Ariza Jiménez
GA08	Radiology	5	Marina Álvarez Benito
GA09	Cardiovascular Pathology	5	Ignacio Muñoz Carvajal
GA10	Nuclear Medicine	4	Juan Antonio Vallejo Casas
GA11	Learning and Artificial Neural Networks	3	César Hervás Martínez
GA12	Severe Mental Illness-Health Alerts	5	Fernando Sarramea Crespo
GA13	Preventive Medicine and Public Health	3	Inmaculada Salcedo Leal
GA14	Immunogenomics and Molecular Pathogenesis	3	Juan José Garrido Pavón
GA15	Foods for Health	2	Rafael Moreno Rojas
GA16	Lifestyles, Innovation and Health	1	Guillermo Molina Recio

3

SCIENTIFIC REPORT IMIBIC 2022

GOALS & HIGHLIGHTS IN 2022



3.1 GOALS FOR 2022

The institutional objectives marked for the year 2022 and approved by the Institute's Governing Council are outlined below.

GENERAL GOALS	RESULTS IN 2022
IMPLEMENTATION OF THE ACTIONS FORESEEN IN THE IMIBIC'S INTERNATIONALIZATION DYNAMIZATION PLAN	100% COMPLETED
PROPOSE ACTIONS TO STIMULATE AND PROMOTE THE INTERACTION OF SCIENTIFIC PROGRAMS, WITH A VIEW TO INCREASING INTRAMURAL COLLABORATION	100% COMPLETED
INTEGRATION OF THE PRIMARY CARE RESEARCH PERSPECTIVE IN THE DIFFERENT INTERNAL TRAINING AND RECOGNITION EVENTS OF THE INSTITUTE	100% COMPLETED
ATTRACTION OF A PULL OF PRIVATE INVESTORS ORIENTED TO INNOVATION PROJECTS DEVELOPED AT THE INSTITUTE.	100% COMPLETED

3.2 HIGHLIGHTS

» INCREASE IN SCIENTIFIC PRODUCTION:

In 2022, IMIBIC's scientific production increased by 41% in comparison with 2020 and exceeded 730 publications. Likewise, the quality of publications has improved remarkably. The Crown quality indicator for the year 2022 - 1,91 points - represents an increase of more than 20% since 2019.

Interestingly, the number of publications in journals that exceed 15 impact factor points grew considerably, doubling in 2022 those published in 2021. Likewise, and in relation to the RRI (Responsible Research and Innovation) principles, more than 60% of the total number of articles were published in JCR Open Access journals.

» FUNDING

Funds raised in 2022 experienced an increase of more than 48% over the previous year. This increase has its origin, among others, in the INVESTIGO program for the incorporation of young people in their early stages of their research career. Moreover we increased competitive funds mainly from the Carlos III Health Institute, where 2 independent clinical studies in the areas of Hematology, Nephrology and Primary Care stand out, as well as the raising of funding from private sources, either through joint public-private collaboration calls, or through the implementation of clinical studies promoted by the pharmaceutical industry.

» HUMAN RESOURCES:

2022 has been an extraordinary year in terms of obtaining competitive funding for the incorporation of personnel. Thanks to the INVESTIGO program, both national (Ministry of Labor) and regional (Ministry of Employment) calls, IMIBIC will strengthen its research groups with the incorporation of more than 70 researchers in their pre-doctoral stage.

» RESPONSIBLE RESEARCH AND INNOVATION (RRI):

In recent years, the Institute's management has been making a great effort in the area of RRI, demonstrated by the organization of the following activities:

- Creation of the Communication Committee, including researchers and the staff of the Department of Communication and Fundraising, with the objective of selecting the best papers published and disseminating it to the population, using a language that is accessible and understandable.
- Approval of the Equality Plan 2022-2026, being adapted in accordance with the applicable regulations. (Royal Decree 901/2020, of 13 October).
- IMIBIC's Plan Propio awarded 10 grants to support Open Access publications and research stays abroad. Visual material of all these RRI actions and campaigns is being promoted and disseminated to attract sponsors for their development.

4

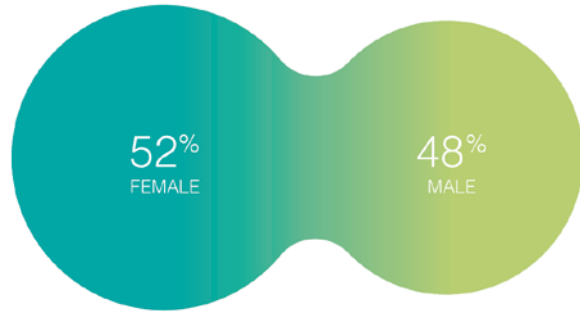
SCIENTIFIC REPORT IMIBIC 2022

STAFF

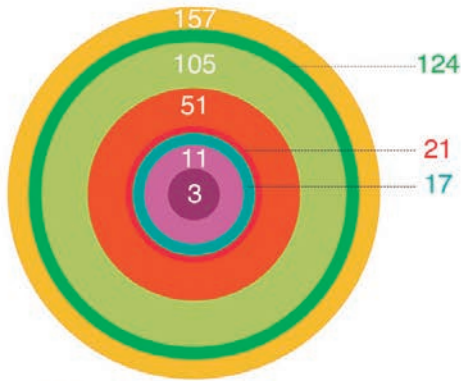




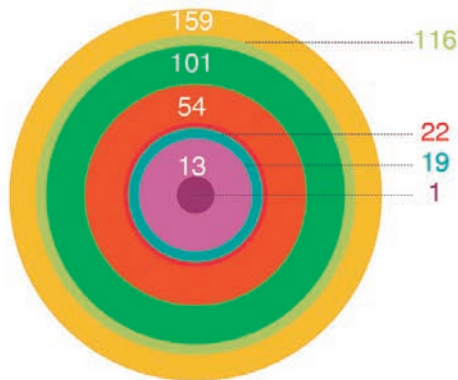
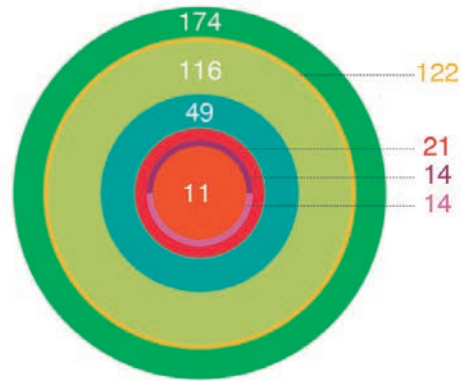
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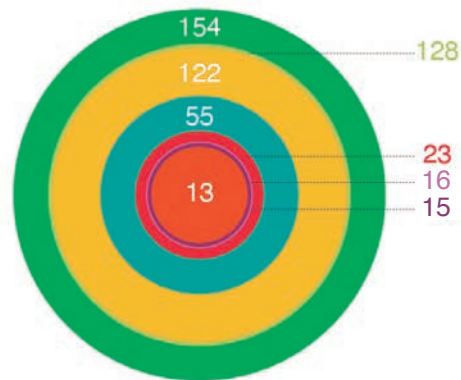
(*) The figures include all IMIBIC staff (researchers, support staff and administrative staff)



2021



2022



- NURSES
- MANAGEMENT STAFF
- IMIBIC RESEARCH SUPPORT SERVICES
- LEADING RESEARCHERS

- ESTABLISHED RESEARCHERS
- RECOGNISED RESEARCHERS
- FIRST STAGE RESEARCHERS
- TECHNICIANS

» RESEARCH STAFF 2022



Note: R1-R4 correspond to the profile descriptors for research careers provided by EURAXESS (HRS4R).

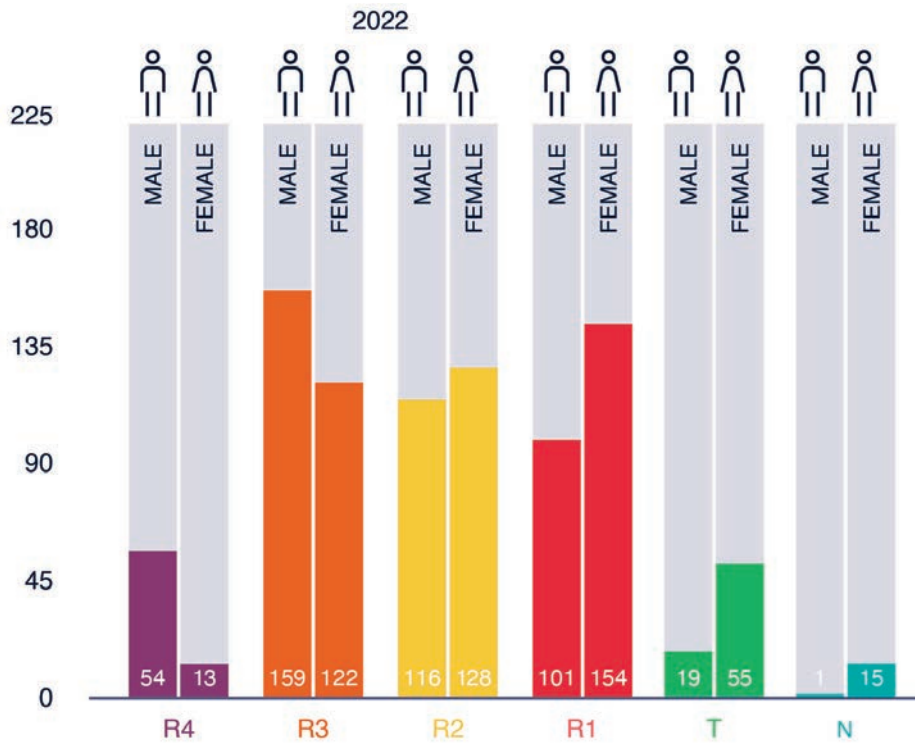
» GENDER PERSPECTIVE

IMIBIC, through its Equality Plan, is committed to implementing actions aimed at promoting gender parity in all personnel groups. The increase in female R3 researchers in recent years ensures that there will be more female leading researchers in the coming years.

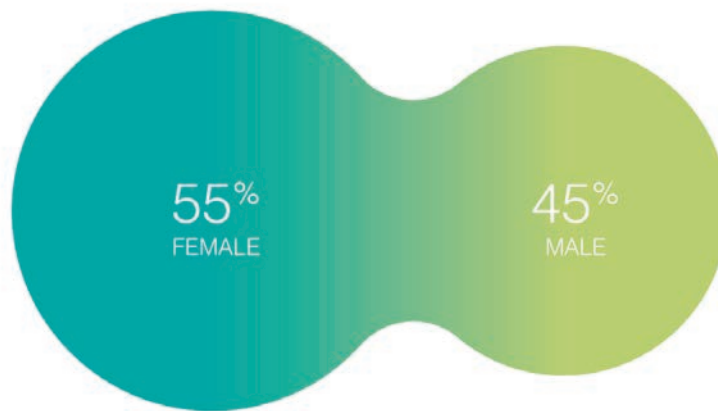
» RESEARCH STAFF 2022



» ALL PERSONNEL IN 2022



» MANAGEMENT STAFF 2022



» IMIBIC RESEARCH SUPPORT SERVICES 2022



5

SCIENTIFIC REPORT IMBIC 2022

MANAGEMENT STAFF





5.1 R&D MANAGEMENT UNIT

The mission of the IMIBIC R&D Management Area is to offer a comprehensive service to research staff, both in the research groups and Clinical Management and Primary Care Units, through a single point of contact: the Project Manager. Its main objective is to provide professionals with the necessary support for the proper management and development of their scientific projects, agreements, service contracts and grants, and provide funding bodies with the corresponding justification and closure.

TEAM MEMBERS:

- **Miriam Cruzado Caballero**
Head of Unit
- **Inmaculada González Granados**
Project Manager (until April 2022)
- **Manuel Aguilar Panadero**
Project Manager
- **Carlos Lázaro Guevara**
Project Manager
- **Mónica Carrasco Jiménez**
Project Manager
- **Laura Bocero Fernández**
Project Manager (until May 2022)
- **José Carlos Prieto Baena**
International Project Manager
- **Maria Saarela**
International Project Manager (until October 2022)

5.2 INNOVATION & TRANSFER UNIT

The Innovation and Transfer Unit identifies intangible assets resulting from the research carried out within its competencies and provides comprehensive advice on the correct protection and transfer of research results. Ideas produced by researchers are also protected as intellectual or industrial property according to the UNE 166002: 2021 standard for innovation management.

The Innovation Unit provides advisory services to researchers on the transfer of their technologies, such as the drafting of licensing agreements, advice on the creation of start-ups or the establishment of public-private partnerships.

TEAM MEMBERS:

- **Luis M. Fernández Formoso**
Head of Unit
- **Antonio Ortega Llamas**
Innovation and Transfer Technician

5.3 FINANCIAL AND HUMAN RESOURCES UNIT

MANAGEMENT

The Financial Management and Human Resources Unit, which includes Accounting, Invoicing, Financial and HR services, provides the Research, Development and Innovation (R+D+i) Unit with general and administrative support, ensuring the optimal use of available resources.

The activity of the Unit is closely aligned with the Institute's mission and is therefore strongly committed to the management of Research and Innovation in the province of Cordoba.

SERVICES OFFERED BY THIS UNIT INCLUDE:

- Financial support for R+D+i projects
- Maximization of economic resources
- Management of agreements, contracts and private donations

- Human resources management
- Invoicing/billing and maintenance services associated with clinical trials and observational studies
- Budgetary control of activities
- Design and set up of information flows and activities.

TEAM MEMBERS:

- **Francisco Javier López Ruiz**
Head of Unit
- **Marisa Escabias Parejo**
Quality Specialist
- **David Luna Gómez**
Quality Assistant
- **Marta Manganaro**
Legal and Contract Specialist
- **Rosa M^a González Soler**
Contract Specialist (until April 2022)
- **Florencio Muñoz Encinas**
Accountant and Human Resources Specialist
- **Silvia Miranda Castellano**
Human Resources Specialist
- **Andrea Moyano Rojas**
Human Resources Assistant
- **Raquel Berdud Arias**
Grants & Projects Administrator
- **Marcos Notario Ríos**
Grants & Projects Administrator
- **Maria del Carmen García Serrano**
Clinical Research Assistant
- **Francisca Lobo Ávalos**
Invoicing Assistant
- **Inmaculada Varo Urbano**
Training Officer
- **Enrique Muñoz Baena**
IT Systems Coordinator
- **Manuel Jesús Carmona Hidalgo**
IT Systems Assistant
- **Javier Núñez Morales**
IT Systems Assistant

5.4 CORPORATE DEVELOPMENT

The Corporate Development Unit comprises the Communication, Fundraising and Management Control services and provides support and assistance to research groups, as well as to the Executive Board of the Institute.

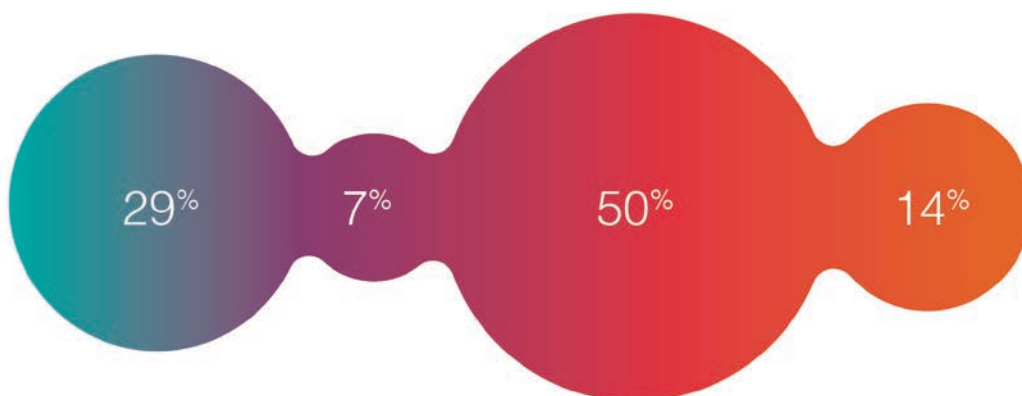
THE MAIN SERVICES OFFERED BY THIS UNIT INCLUDE:

- Increasing the visibility of the Institute in the province and elsewhere
- Management of fundraising through sponsorship and patronage
- Promotion and dissemination of research results
- Supporting researchers in the preparation and coordination of events
- Management of the Institute's website and social media accounts
- Production of promotional material
- Collecting and validating information relevant to the Institute for further analysis

TEAM MEMBERS:

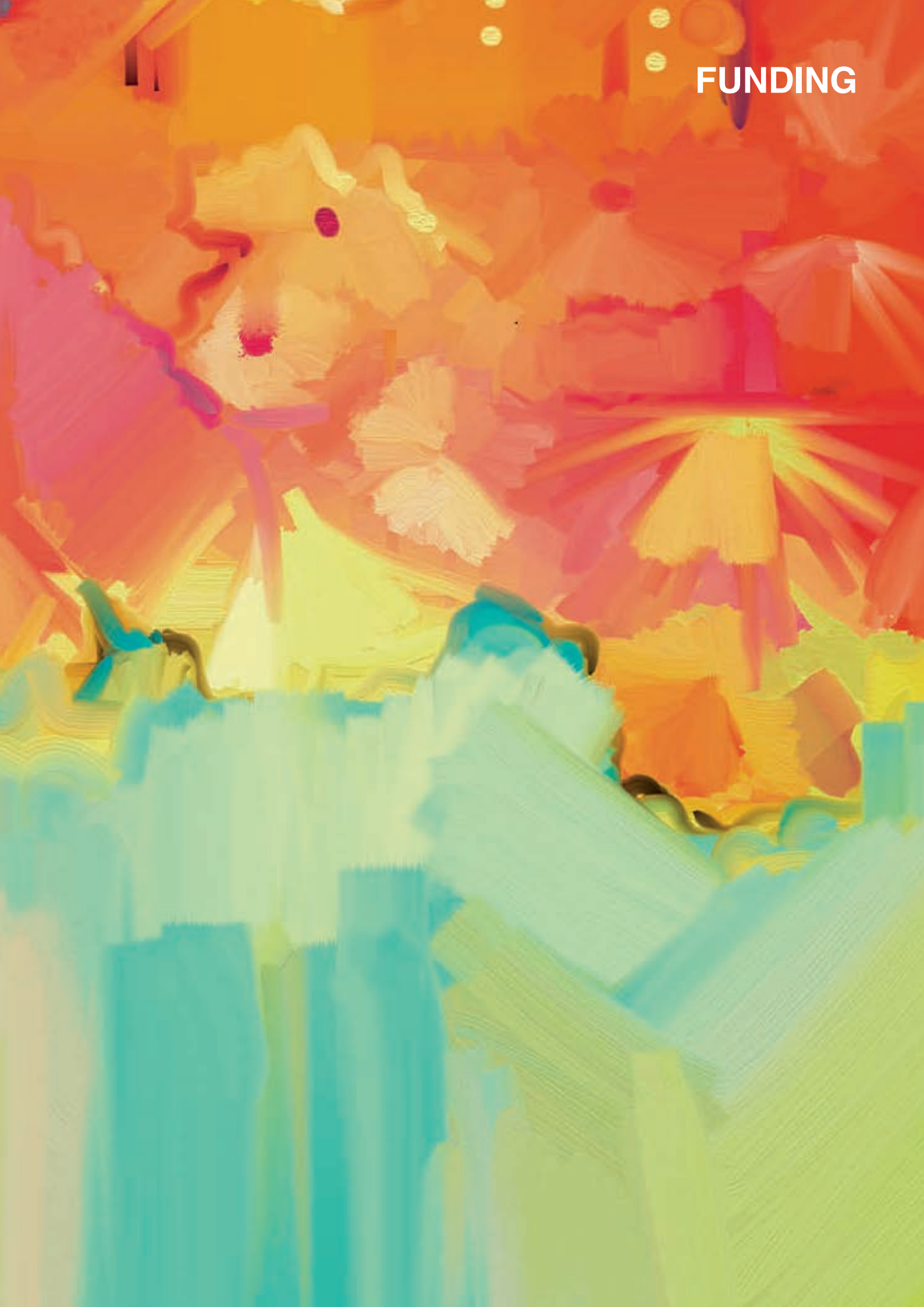
- **Isabel De Castro Burón**
Communications Officer
- **José M^a Rubio García-Sotoca**
Communications (volunteer staff)
- **Estefanía Azcona Corrales**
Management Controller
- **Marta Granados Aguirre**
Administrative Assistant

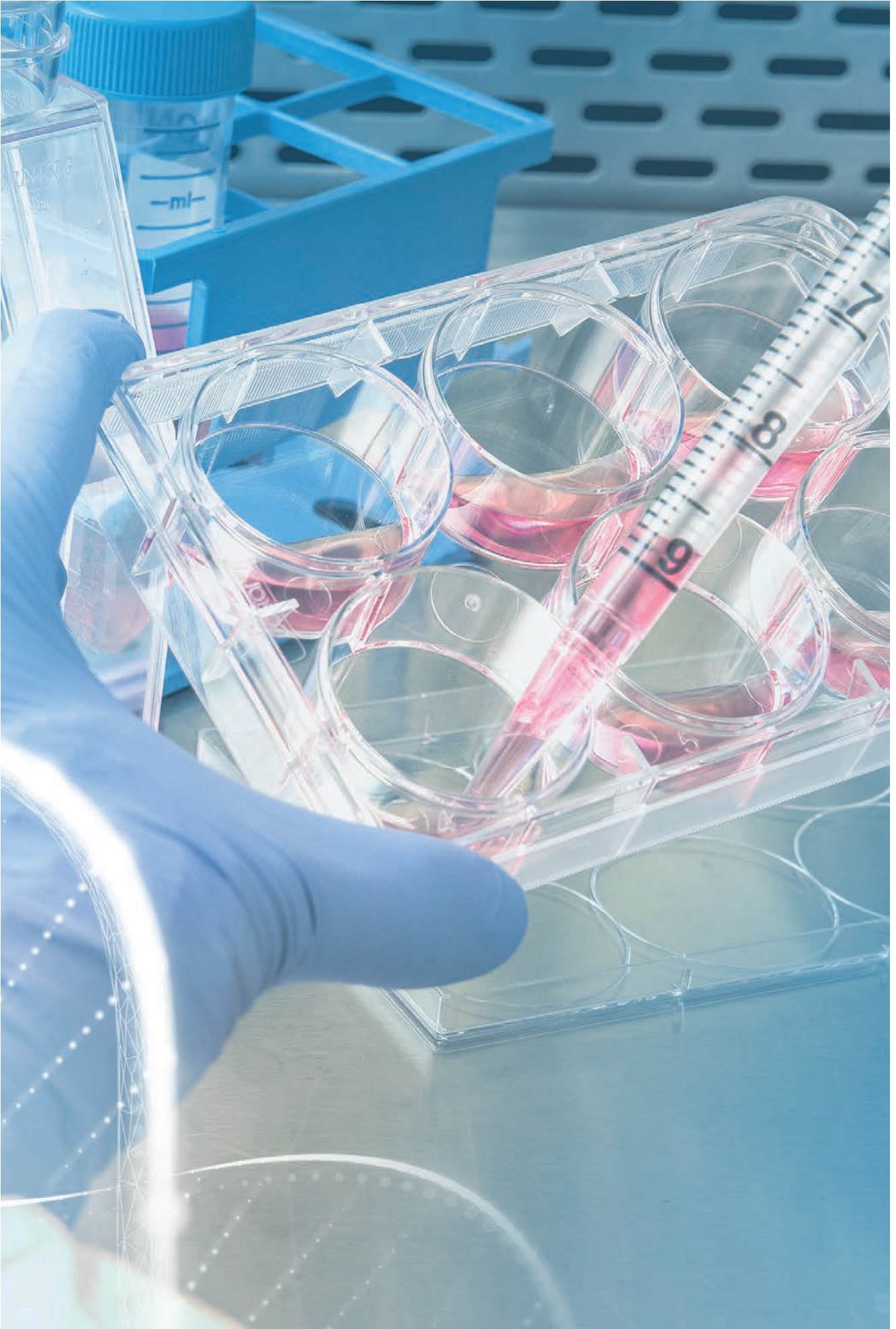
MANAGEMENT STAFF 2022



6

SCIENTIFIC REPORT IMIBIC 2022





FUNDING

FIBICO is the financial and legal entity responsible for the management of IMIBIC. The following tables present the approved financial statements of FIBICO for 2022 compared to 2021.

» PROFIT & LOSS ACCOUNT (THOUSANDS OF EUROS)

	2022	2021
REVENUES	12,987.54 €	10,912.66 €
COST OF GOODS	-1,409.87 €	-1,440.87 €
PERSONNEL	-7,265.55 €	-6,045.94 €
OTHER EXPENSES	-3,392.70 €	-2,735.11 €
DEPRECIATION	-895.68 €	-623.57 €
NET INCOME	20.45 €	67.17 €

» BALANCE SHEET (THOUSANDS OF EUROS)

ASSETS	2022	2021
Non-current assets	9,719.66 €	8,221.81 €
Accounts receivable	13,129.09 €	8,327.00 €
Cash & cash equivalents	18,076.75 €	17,878.30 €
Current assets	31,205.84 €	26,205.30 €
Total Assets	40,925.30 €	34,427.11 €
LIABILITIES		
Non-current liabilities	3,794.29 €	6,855.82 €
Current liabilities	31,931.88 €	22,722.42 €
Equity	5,199.13 €	4,848.88 €
Total liabilities	40,925.30 €	34,427.11 €

» OVERHEADS

The breakdown of project overhead revenues is as follows (thousands of euros):

OH from research projects	332
Private projects	185
Other	6
Total	523
Compensation to IMIBIC from Clinical Research	907

The accreditation guide for research institutes states that “at least 20% of the indirect costs received annually should be allocated to actions aimed at supporting IIS researchers, such as capacity building, training, co-financing of contracts, IIS own projects for emerging groups, etc.” In accordance with this, at least 104,600 euros should be allocated to these purposes.

Taking into account only co-financing of personnel expenses for competitive calls (Miguel Servet, Sara Borrell, private entities, etc), IMIBIC committed 349,600 euros to this item.

Each year, IMIBIC launches certain prizes and sponsorships for its groups and researchers, in accordance with the policy framework of its Research Promotion Plan (RPP), aimed at stimulating collaboration with external groups, increasing publications in open access journals, among others. Last year, the amount allocated to this item was 40,000 euros.

As part of its own program for the promotion of clinical research, the Institute also finances the contracting of staff required in the Institute’s clinical research areas. The amount for staff associated with clinical research (nurses, coordinators, administrative staff, etc.) increased to 293,000 euros.

FUNDING

In terms of Funding, 2022 continued the positive trend of 2021, despite the absence of extraordinary calls for HR like those launched by the regional government in 2021.

As highlights, Clinical Trial invoicing exceeded 4 million euros, and funds obtained from ISCIII raised 5 million euros.

» THE BREAKDOWN OF FUNDS IS AS FOLLOWS (THOUSANDS OF EUROS):

	2018	2019	2020	2021	2022
IMIBIC Partners	900	900	900	900	900
Public Funding	4,430	5,078	7,752	6,679	11,505
Private Funding	4,544	5,061	5,397	6,317	8,173
	9,874	11,039	14,049	13,896	20,579

	2018	2019	2020	2021	2022
Total funds raised	9,874	11,039	15,396	13,956	20,579

	2018	2019	2020	2021	2022
National	3,927	3,320	4,510	5,264	7,671
Regional	453	746	3,241	1,416	3,534
International	50	1,012	0	57	300
IMIBIC Partners	900	900	900	900	900
Clinical Trials	2,472	3,248	3,384	4,097	4,652
Other Private Funding	2,072	1,813	2,014	2,222	3,522
TOTAL	9,874	11,039	14,049	13,956	20,579

As in previous years, the balance of private and public funding has been higher for public funding, although the percentage of private funds has increased in recent years:

» CLINICAL TRIALS

Clinical Research is one of IMIBIC'S main strategic pillars. The tables below show the total amount and trend for clinical trial invoicing signed by the Institute since 2017.

(thousands of euros)

	2017	2018	2019	2020	2021	2022
Clinical trials invoiced	1,922	2,472	3,248	3,384	4,097	4,651

The table below shows the most active medical services in terms of invoicing. At the same time, the management of IMIBIC and the HURS have also implemented a plan to add new medical services to this activity in order to provide the latest available treatments to the patients of Cordoba, as well as take further steps forward along the path of economic sustainability of the Institute.

Clinical Management Units	2017	2018	2019	2020	2021	2022
Oncology	623,740.64	1,051,109.07	1,740,243.38	1,557,507.14	1,874,701.37	2,201,761.51
Neurology	246,619.95	332,195.83	275,708.58	411,326.78	588,775.71	528,188.75
Internal Medicine	195,547.81	133,373.75	168,191.43	244,295.11	240,678.43	375,818.72
Rheumatology	148,343.24	227,167.75	237,448.57	135,818.73	260,350.45	171,101.56
Dermatology	48,640.22	115,649.89	276,966.30	398,973.67	180,433.07	271,832.26
Infectious Diseases	131,314.95	202,100.46	109,513.37	102,186.87	263,515.29	327,857.39
Nephrology	90,083.38	174,978.70	108,258.06	89,945.75	122,289.42	139,054.64

Clinical Management Units	2017	2018	2019	2020	2021	2022
Digestive Health	108,596.63	101,872.23	135,662.11	122,986.16	114,066.95	133,282.24
Haematology	54,689.08	65,932.02	94,024.37	140,900.92	70,305.32	207,255.58
Top 10	1,647,575.90	2,404,379.70	3,146,016.17	3,203,941.13	3,715,116.01	4,356,152.65
% TOP10	84.9%	89.5%	90.7%	94.7%	92.0%	93.6%

To conclude this summary of IMIBIC funding, the evolution of revenues from the IMIBIC Biomedical Research Support Units should also be mentioned, since they had an outstanding performance during 2022. Members of these units are committed to improving the quality of research and improving financial sustainability.

THOUSANDS OF EUROS	2017	2018	2019	2020	2021	2022
Invoicing from UCAIBs	198.29	201.56	350.93	266.32	348.30	476.97



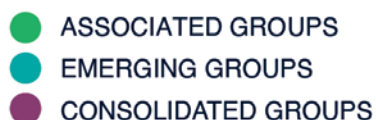
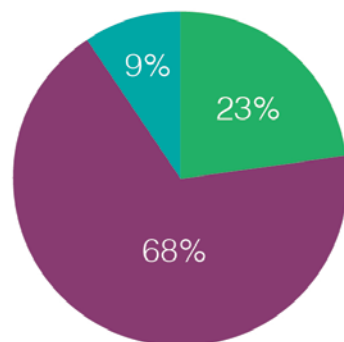
**SCIENTIFIC REPORT
IMIBIC 2022**

FACTS & FIGURES

7.1 STAFF

RESEARCHERS IN IMIBIC GROUPS

IMIBIC comprises 49 research groups, made up of 31 consolidated, 5 emerging and 13 associated groups, respectively, in 2022.



In 2020, IMIBIC implemented the 2020-2022 Action Plan as part of its Human Resources Strategy for Researchers (HRS4R), which was originally launched in 2017 after receiving the “HR Excellence in Research” award from the European Commission.

The IMIBIC HRS4R Action Plan is based on the recommendations and principles set out in the Charter & Code designed to ensure transparency, accessibility, equity and the pursuit of excellence in the recruitment of researchers.

During 2022, an evaluation of the 2020-2022 Plan was carried out and the necessary documentation prepared in readiness for the external evaluation by the European Commission in 2023 to renew recognition of IMIBIC’s “HR Excellence in Research” award. The evaluation will involve presentation of a new self-assessment and the 2023-2025 Action Plan, as well as the visit of three European evaluators who will assess the implementation carried out so far and the future actions to be undertaken.

RESEARCHERS R1-R4



COMPETITIVE HUMAN RESOURCES GRANTS

During 2022, IMIBIC held the following ongoing human resources grants:



FUNDING AGENCY	CALL	ONGOING IN 2022	GRANTED IN 2022
CE	P2MED	6	
CE	MARIE CURIE	2	
ISCIII	BIOINFORMÁTICO	1	
ISCIII	GIS	1	
ISCIII	INTENSIFICACIONES	3	
ISCIII	IPFIS	1	
ISCIII	JUAN RODÉS	4	
ISCIII	MIGUEL SERVET I	4	2
ISCIII	MIGUEL SERVET II	1	
ISCIII	PFIS	15	5
ISCIII	RÍO HORTEGA	6	5
ISCIII	SARA BORRELL	6	1
ISCIII	MOVILIDAD		5
MEC	FPU	24	2

FUNDING AGENCY	CALL	ONGOING IN 2022	GRANTED IN 2022
MICINN	PREDOCTORAL I+D+i	2	
MICINN	PERSONAL TÉCNICO DE APOYO	2	0
MICINN	PEJ	2	
MICINN	JUAN DE LA CIERVA (FORMACIÓN)	1	2
MICINN	FPI	6	
MICINN	RAMÓN Y CAJAL		
MINISTERIO DE TRABAJO	PROGRAMA INVESTIGO	0	39
CSYF	PROYECTO CON PREDOCT	7	0
CSYF	POSTDOC ESPECIALISTA (clínicos)	3	0
CSYF	POSTDOC	14	0
CTEICU	PREDOCTORAL	1	0
CTEICU	POSTDOCTORALES	9	
CTEICU	POEJ	19	
SAE	PROGRAMA INVESTIGO	0	37
SAS	TÉCNICOS DE ECAI	5	2
SAS	INTENSIFICACIONES (ACCIÓN A)	3	10
SAS	INTENSIFICACIONES DE LA UNIDAD (ACCIÓN B)		1
SAS	INVESTIGADOR CLÍNICO (ACCIÓN B)	2	2
SAS	NICOLÁS MONARDES (ACCIÓN C)	5	0
PRIVATE FUNDS		6	5
	TOTAL	161	118

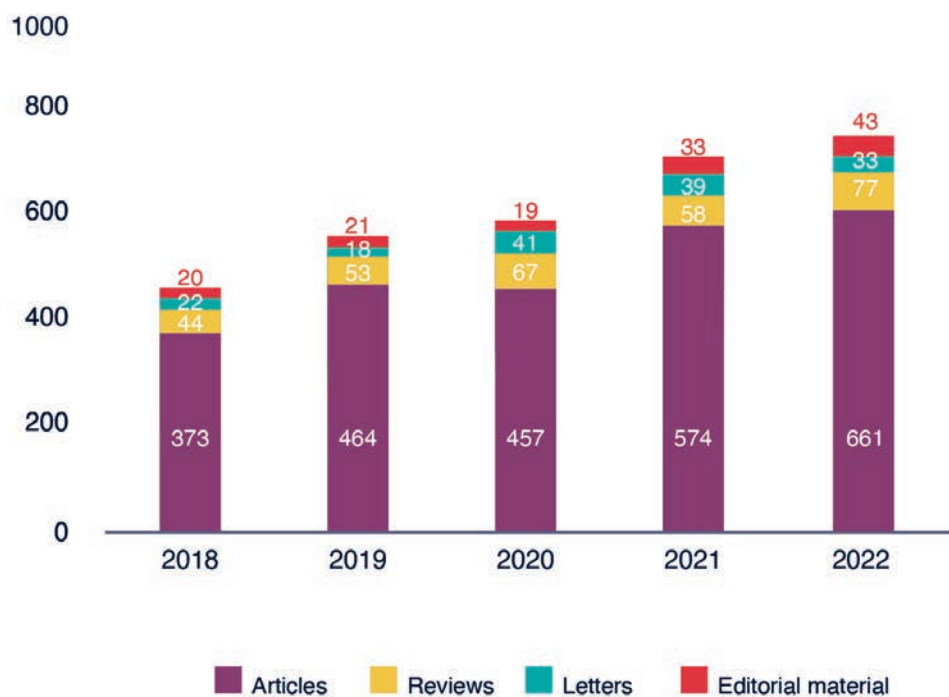
7.2 PUBLICATIONS

In 2022, our researchers contributed 823 scientific documents, 804 of which were published in journals indexed in the Web of Science citation database and ranked in quartiles according to journal impact factor.



The number of IMIBIC publications in Open Access increased by 123 in 2022 compared to 2021 (almost 60% of the total number of publications in both years).

PUBLICATIONS (2018–2022)



PUBLICATIONS IN 2022 (BY TYPE)

	TOTAL	D1	Q1 (*)	Q2	Q3-Q4
ORIGINAL ARTICLES	661	84	291	232	138
REVIEWS	77	3	33	22	22
TOTAL ORIGINAL ARTICLES & REVIEWS	738	87	324	254	160
LETTERS	33	4	18	8	7
EDITORIAL MATERIAL	43	2	18	11	14
TOTAL PUBLICATIONS	814	93	360	273	181

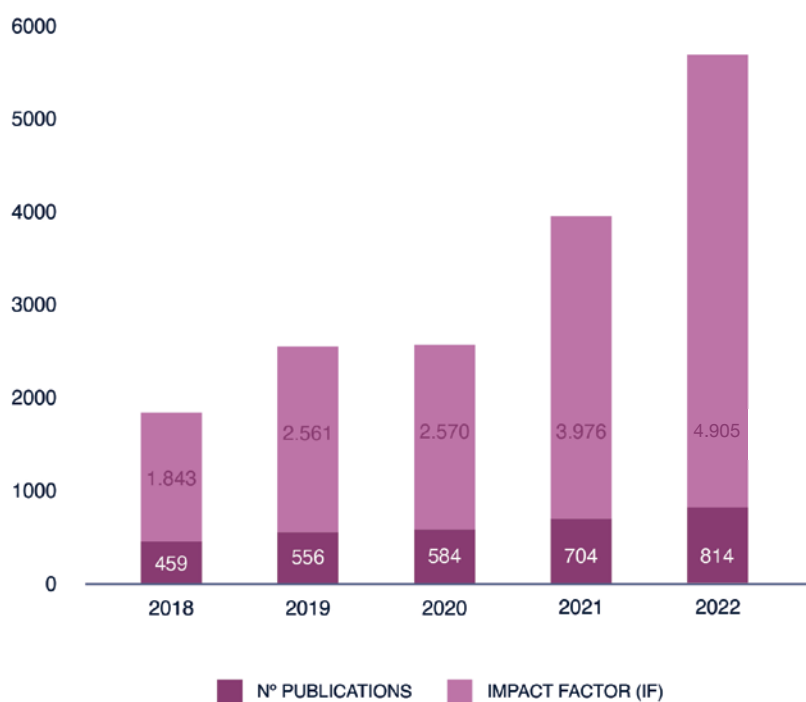
Publications are ranked in quartiles according to journal impact factor

(*) Including D1

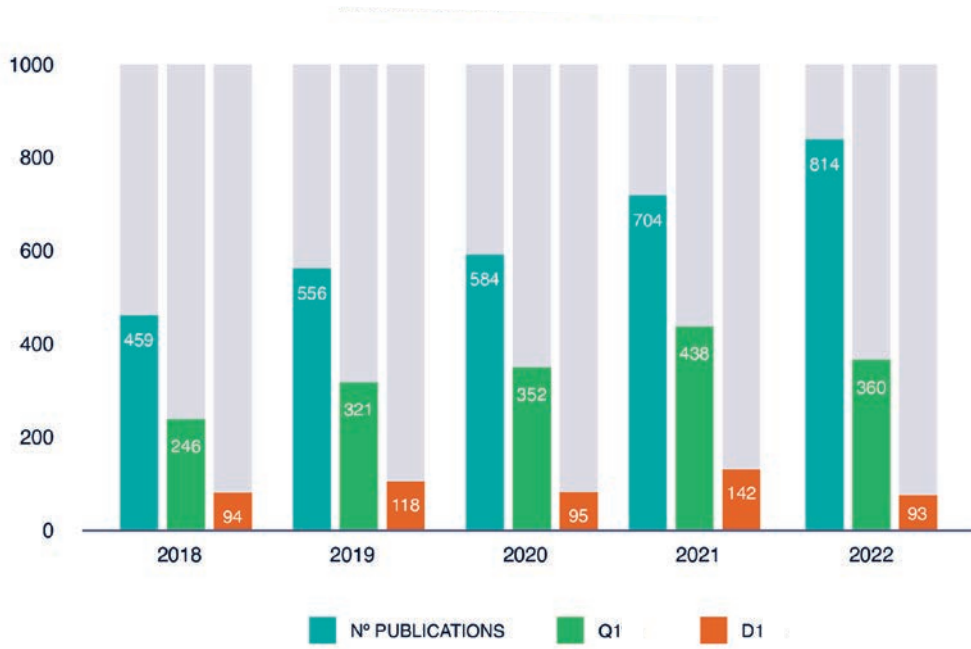
DISTRIBUTION OF PUBLICATIONS IN NATIONAL AND INTERNATIONAL JOURNALS

	NO. OF PUBLICATIONS
INTERNATIONAL JOURNALS	776
ORIGINAL ARTICLES	637
REVIEWS	76
EDITORIAL MATERIAL	35
LETTERS	28
NATIONAL JOURNALS	38
ORIGINAL ARTICLES	24
REVIEWS	1
EDITORIAL MATERIAL	8
LETTERS	5
TOTAL PUBLICATIONS	814

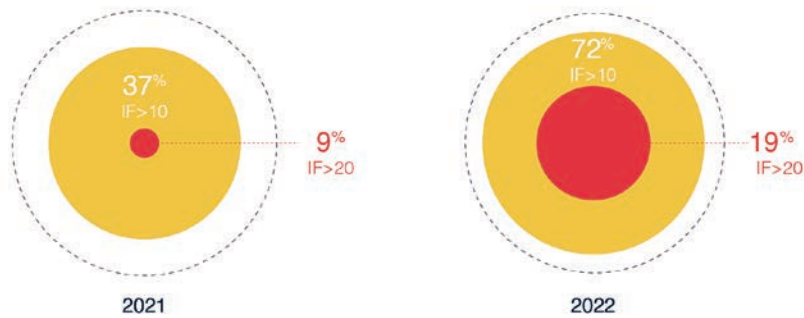
EVOLUTION OF PUBLICATIONS AND TOTAL IMPACT FACTOR



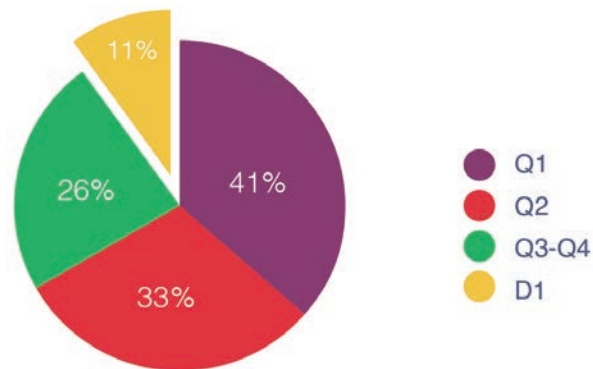
EVOLUTION OF PUBLICATIONS IN QUARTILE 1 & DECILE 1 JOURNALS



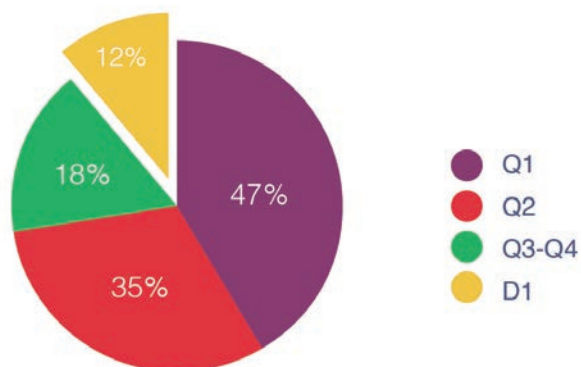
The percentage of articles in D1 journals with IF>10 increased by 35% in 2022 compared to 2021:



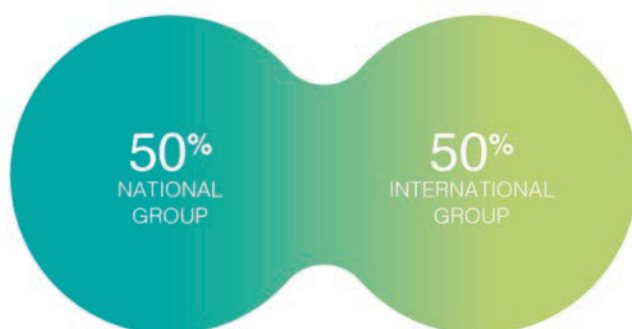
PUBLICATIONS LED BY IMIBIC RESEARCHERS (ORIGINAL ARTICLES + REVIEWS)



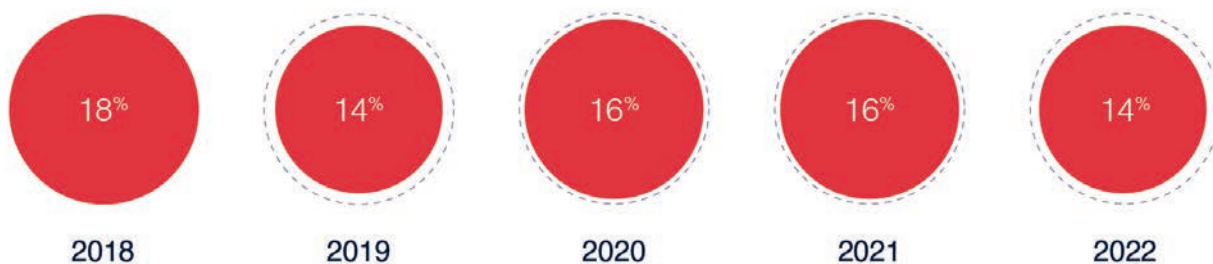
PUBLICATIONS IN COLLABORATION WITH NATIONAL AND INTERNATIONAL GROUPS (ORIGINAL ARTICLES + REVIEWS)



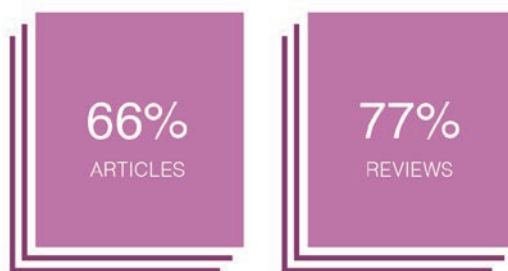
DISTRIBUTION OF PUBLICATIONS IN COLLABORATION WITH NATIONAL AND INTERNATIONAL GROUPS



PUBLICATIONS: INTRAMURAL COLLABORATIONS



AFFILIATION OF ARTICLES AND REVIEWS



BIBLIOGRAPHIC INDICATORS

	2019	2020	2021	2022
FIRST, LAST OR CORRESPONDING AUTHOR	50%	45%	45%	49%
CATEGORY NORMALIZED CITATION IMPACT (CROWN INDICATOR) (**)	1.56	1.83	1.66	1.91
HIGHLY CITED PAPERS (HCP INDICATOR) (***)	19%	23%	22%	23%
PUBLICATIONS LED BY IMIBIC ACCORDING TO HCP INDICATOR	73	82	94	93

(**) CATEGORY NORMALISED CITATION IMPACT (CROWN INDICATOR): Number of citations of publications during the period under analysis in relation to the world average of citations taken from the FIELD BASELINES-CITATION RATES in Essential Science Indicators (Clarivate Analytics).

(***)HIGHLY CITED PAPERS (HCP INDICATOR): Percentage of publications in the top 10% of the most cited publications worldwide in their subject category and year of publication out of the total number of publications in the same category.

7.3 NUMBER OF CLINICAL GUIDELINES, CONSENSUS DOCUMENTS AND PROTOCOLS

IMIBIC researchers have contributed to several international Clinical Guidelines with an outstanding impact on patient care and medical practice.

CLINICAL GUIDELINES AND CONSENSUS DOCUMENTS	TOTAL	%Q1
	19	32%

Total number of Clinical Guidelines and Consensus Documents published in 2022 in journals indexed in the ISI-Web of Science. Journals were ranked by quartiles according to impact factor.

7.4 RESEARCH PROJECTS AND NETWORKS

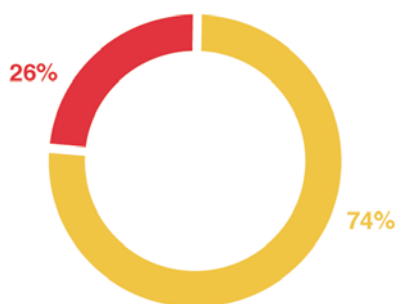
Our researchers contributed to the development of a large number of competitive projects: **137** were ongoing in 2022.



Figures represent the number of ongoing projects financed by national and international funding agencies, both public and private, in 2022.

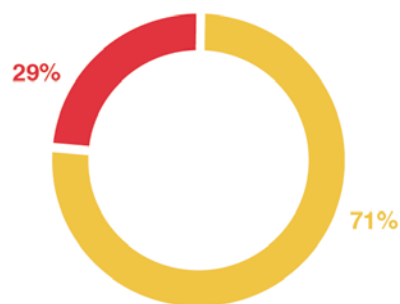
RESEARCH PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR

NATIONAL PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR



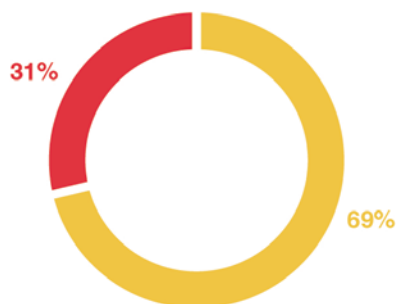
FEMALE MALE

INTERNATIONAL PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR



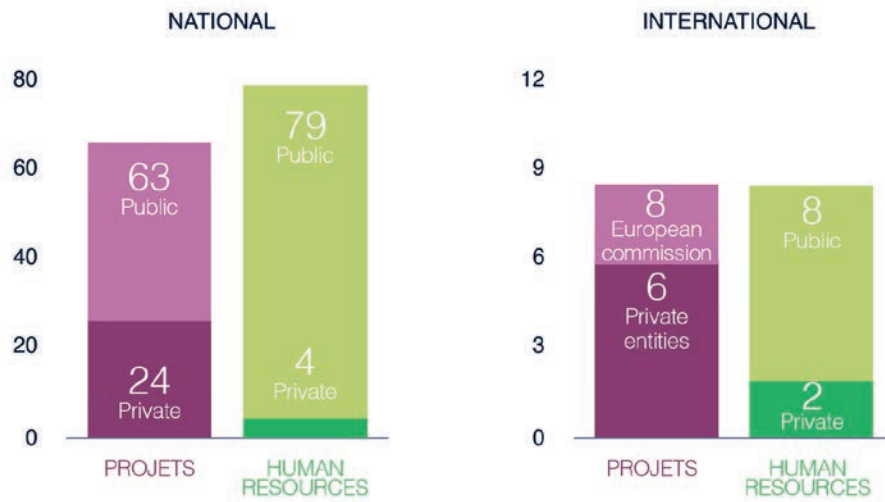
FEMALE MALE

RESEARCH PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR

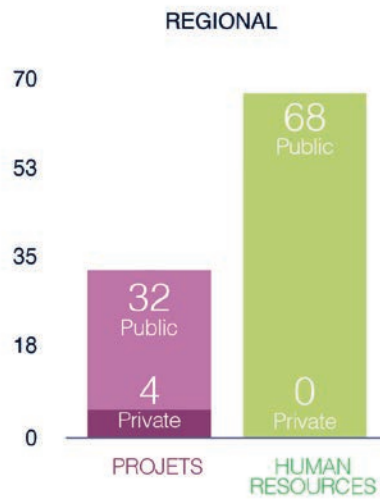


FEMALE MALE

RESEARCH PROJECTS ACCORDING TO SOURCE OF FUNDING:



In addition to national and international grants, our researchers also obtained research grants through competitive calls funded by regional agencies:



ONGOING PROJECTS IN 2022

NATIONAL		NO. OF ONGOING PROJECTS
Public		
Institute of Health Carlos III (ISCIII)		52
Ministry of Economic Affairs and Digital Transformation		0
Ministry of Science and Innovation		11
Private		
Private Funding		24
REGIONAL		
Public		
Regional Ministry of Health and Consumer Affairs		20
Regional Ministry of Universities, Research and Innovation		4
FPS		8
Private		
Private Funding		4
INTERNATIONAL		
Public		
European Commission		8
Private		
Private Funding		6
No. of ONGOING PROJECTS		137

PROJECTS FUNDED BY GRANTS IN 2022

NATIONAL		NO. OF GRANTED PROJECTS
Public		
Institute of Health Carlos III (ISCIII)		16
Ministry of Science and Innovation		4
Private		
Private Funding		5
REGIONAL		
Public		
Regional Ministry of Health and Consumer Affairs		3
Regional Ministry of Universities, Research and Innovation		4
FPS		3
SAS		3
Private		
Private Funding		3

INTERNATIONAL

Public	
European Commission	2
Private	
Private Funding	5
No. of PROJECTS GRANTED	
	48

7.5 CLINICAL TRIALS

The graphs below summarise the number of active clinical trials in 2022.

In 2022, 154 new clinical trials were started and 762 were ongoing. Of all ongoing studies, 450 were initiated within the last 3 years. These include 301 clinical studies with drugs, 122 observational studies and 27 trials of new medical devices.

ONGOING CLINICAL TRIALS IN 2022



OS: Observational Studies / ME: Medical Equipment

Most of the clinical trials were sponsored by Spanish industry and were in the areas of oncology, hematology, neurology, dermatology, rheumatology and internal medicine.

CLINICAL TRIALS BY GENDER OF PRINCIPAL INVESTIGATOR



» CLINICAL TRIALS IN 2022, CLASSIFIED BY SPONSOR TYPE

	CLINICAL TRIALS WITH DRUGS	OBSERVATIONAL STUDIES	MEDICAL EQUIPMENT
PHARMACEUTICAL INDUSTRY	359	89	18
OTHER ENTITIES	100	140	23
SELF-SPONSORED (FIBICO)	8	22	3
TOTAL	467	251	44





**SCIENTIFIC REPORT
IMIBIC 2022**

SCIENTIFIC PRODUCTION



8.1. SCIENTIFIC PROGRAMS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» GENERAL GOALS

The general objective of the Aging and Frailty program is to generate new knowledge to better understand the molecular and cellular basis of healthy aging that can be used to help design psychosocial and nutritional interventions to prevent frailty and age-associated diseases.

Aging is the major risk factor associated with cancer and chronic inflammatory diseases. Even though it is an area of active research worldwide, many aspects of the molecular and cellular basis of aging and age-associated diseases remain unknown. Cumulative evidence in the last decade strongly supports the importance of immunosenescence and inflammaging in these processes. The possibility of preventing or reversing age-associated alterations through the use of new therapies as well as psychosocial or nutritional interventions has also aroused great interest.

One of the main objectives of this program is to take advantage of the diversity of scientific backgrounds in the groups involved to support an interdisciplinary approach to aging ranging from analyses of the molecular and cellular aspects of cellular and system senescence to clinical and interventional approaches. One objective therefore is to integrate clinical and molecular information in order to understand the characteristics of healthy aging versus frailty and to identify mechanisms and pathways that can be used as novel therapy targets.

The research groups primarily involved in Program 1 have conducted a wide range of basic, clinical, and translational studies related to the specific objectives of the program that have resulted in a number of publications and competitive projects financed by regional and national agencies.

» 5 HIGHLIGHTED PUBLICATIONS

1. Mora-Ortiz M, Alcalá-Díaz JF, Rangel-Zuñiga OA, Arenas-de Larriva AP, Abollo-Jimenez F, Luque-Cordoba D, Priego-Capote F, Malagon MM, Delgado-Lista J, Ordovas JM, Perez-Martinez P, Camargo A, Lopez-Miranda J. Metabolomics analysis of type 2 diabetes remission identifies 12 metabolites with predictive capacity: a CORDIOPREV clinical trial study. *BMC Med.* 2022 Oct 27;20(1):373. doi: 10.1186/s12916-022-02566-z. PMID: 36289459; PMCID: PMC9609192.
IF: 11,806 Q1 D2
2. Expósito-Díaz A, Miho H, Ledesma-Escobar CA, Moral J, Díez CM, Priego-Capote F. Influence of genetic and interannual factors on bioactive compounds of olive pomace determined through a germplasm survey. *Food Chem.* 2022 Jun 1;378:132107. doi: 10.1016/j.foodchem.2022.132107. Epub 2022 Jan 10. PMID: 35032800.
IF: 9,231 Q1 D1
3. Castillo-Luna A, Ledesma-Escobar CA, Gómez-Díaz R, Priego-Capote F. The secoiridoid profile of virgin olive oil conditions phenolic metabolism. *Food Chem.* 2022 Nov 30;395:133585. doi: 10.1016/j.foodchem.2022.133585. Epub 2022 Jun 27. PMID: 35779504.
IF: 9,231 Q1 D1
4. Ruiz-Leon B, Navas A, Serrano P, Espinazo M, Guler I, Alonso C, Jurado A, Moreno-Aguilar C. Helios-Negative Regulatory T Cells as a Key Factor of Immune Tolerance in Nonallergic Beekeepers. *J Investig Allergol Clin Immunol.* 2022 Dec 15;32(6):451-459. doi: 10.18176/jiaci.0722. Epub 2022 Jul 2. PMID: 34213416.
IF: 9,185 Q1 D2
5. Blancas-Sánchez IM, Del Rosal Jurado M, Aparicio-Martínez P, Quintana Navarro G, Vaquero-Abellan M, Castro Jiménez RA, Fonseca Pozo FJ. A Mediterranean-Diet-Based Nutritional Intervention for Children with Prediabetes in a Rural Town: A Pilot Randomized Controlled Trial. *Nutrients.* 2022 Sep 1;14(17):3614. doi: 10.3390/nu14173614.
IF: 6,706 Q1 D2

» SUB-PROGRAMS

- Aging of the immune system: Immunosenescence and inflammaging
- Frailty and well-being in the elderly
- Care of chronically ill patients

Following the research lines defined in Scientific Program 1, the various groups have focused their efforts on objectives aimed at:

- i) Defining the biomarkers associated with immunosenescence or inflammation in patients with AML, severe mental disorders, COVID-19, and other inflammatory and allergic diseases.
- ii) Analyzing psychosocial and nutritional factors in elderly individuals, the chronically ill and cancer patients to better stratify their state of health, and to assess the relevance of implementing care-based strategies improve their well-being.
- iii) Conducting metabolomic analysis on different functional nutrients and their potential anti-inflammatory capacity in experimental models.
- iv) Using physical, nutritional, and pharmacological approaches to treat age-associated chronic diseases

These studies have resulted in the award of projects in regional and national competitive calls and the publication of a number of papers in high-impact journals.

» HIGHLIGHTS IN 2022

No. of PUBLICATIONS: 103

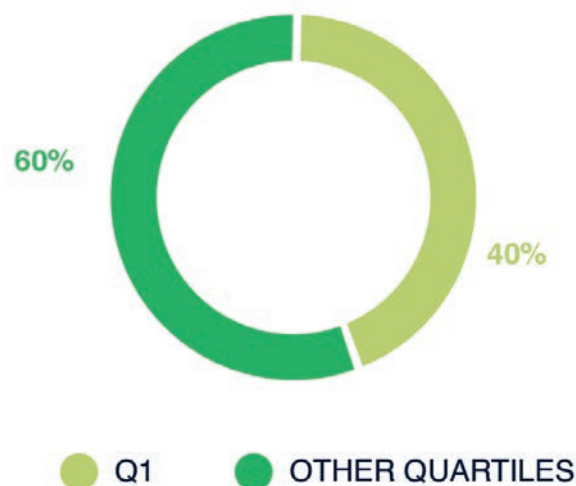
- Own: **68%**
- No. of collaborative publications: **26**
- IF: **416.09**
- Q1 (including D1): **40%**
- D1: **4%**

No. of ONGOING PROJECTS: 45

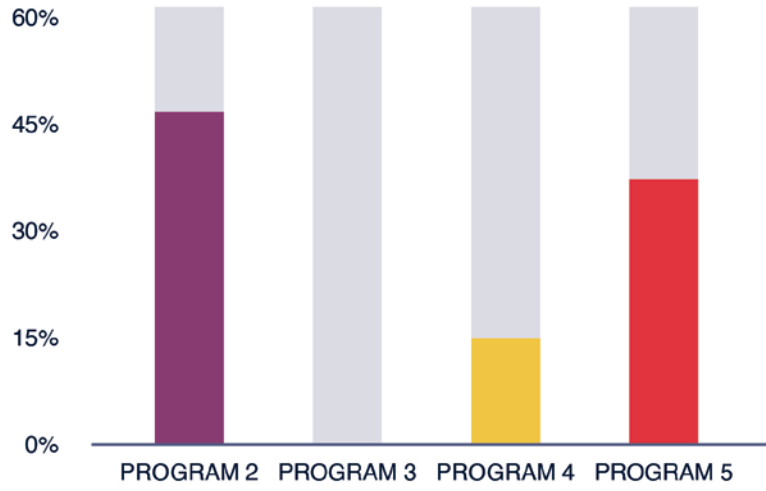
- N° of collaborative projects: **25**

No. of ONGOING CLINICAL TRIALS: 5

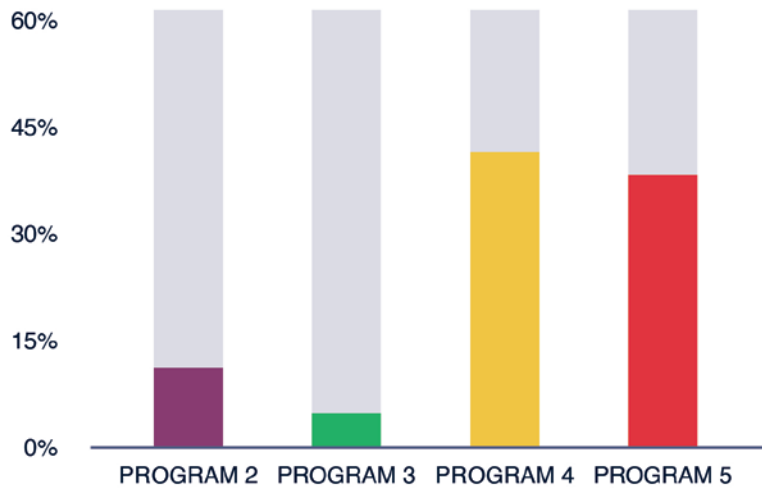
» PROGRAM 1



PUBLICATIONS IN COLLABORATION PROGRAM 1



PROJECTS IN COLLABORATION PROGRAM 1



SCIENTIFIC PROGRAM 2: NUTRITION, ENDOCRINE AND METABOLIC DISEASES

» GENERAL GOALS

The general objective of the Nutrition, Endocrine and Metabolic Diseases program is to generate new knowledge in the field of nutrition, metabolic diseases and neuroendocrinology that will help prevent health problems in these areas and also improve their management. Modern societies face an epidemic of diseases associated with unhealthy diets, with metabolic diseases standing out as particularly important. Metabolic diseases are often associated with obesity and are the subject of active research. Despite considerable advances in our knowledge, we still do not know the exact causes of these diseases, which mechanisms are involved in their development, the nature of all their comorbidities or how to effectively prevent and treat them. These processes are very closely linked to life expectancy and quality of life, the wellbeing of society and the sustainability of public health services, which is why addressing them is a high priority. There is also considerable variability in both individual susceptibility to these diseases and their severity. Some of the factors that contribute to differences in individual susceptibility are already known or suspected, such as the genetic substrate, epigenetic components, neuroendocrine mechanisms in appetite regulation, along with molecular mechanisms in biology, such as oxidative stress, inflammation, fibrosis or the response to hypoxia. Following a multidisciplinary approach based on high precision medical techniques, the key objectives of our program are to integrate clinical and molecular information in order to identify the characteristics that make us unique and thus pave the way for personalized medicine in the future, particularly in the areas of obesity, cardiovascular disease, diabetes, reproductive alterations associated with metabolic disorders and neuroendocrine tumors. We consider it high priority that our scientific efforts foster synergies, promote talent and employability in the National Health System and accelerate the transfer and translation of our developments, thus contributing to the creation of added value in our society.

Since 2020, Scientific Program 2 has been implementing a wide range of basic, clinical, and translational research studies related to the specific objectives of its various sub-programs. These studies have resulted in a large number of publications and other scientific contributions that confirm the increasing trend of previous years. Likewise, the continuity and completion of a significant number of competitive projects funded by national and international agencies, as well as other achievements, such as invitations as guest speakers and awards received by the teams that make up the program, have contributed to building a profile of excellence, which forms the foundation for the development of a highly competitive research program on personalized and precision medicine, focused on dealing with a wide range of highly prevalent diseases, ranging from diabetes and obesity to various reproductive disorders.

» 5 HIGHLIGHTED PUBLICATIONS

1. Delgado-Lista J, Alcalá-Díaz JF, Torres-Peña JD, Quintana-Navarro GM, Fuentes F, García-Ríos A, Ortiz-Morales AM, González-Requero AI, Pérez-Caballero AI, Yubero-Serrano EM, Rangel-Zuñiga OA, Camargo A, Rodríguez-Cantalejo F, López-Segura F, Badimon L, Ordovas JM, Pérez-Jiménez F, Pérez-Martínez P, López-Miranda J; CORDIOPREV Investigators. Long-term secondary prevention of cardiovascular disease with a Mediterranean diet and a low-fat diet (CORDIOPREV): a randomised controlled trial. *Lancet*. 2022 May 14;399(10338):1876-1885. doi: 10.1016/S0140-6736(22)00122-2. **IF: 202,731 Q1 D1.**
2. Roa J, Ruiz-Cruz M, Ruiz-Pino F, Onieva R, Vázquez MJ, Sánchez-Tapia MJ, Ruiz-Rodríguez JM, Sobrino V, Barroso A, Heras V, Velasco I, Perdices-López C, Ohlsson C, Avendaño MS, Prevot V, Poutanen M, Pinilla L, Gaytán F, Tena-Sempere M. Dicer ablation in Kiss1 neurons impairs puberty and fertility preferentially in female mice. *Nat Commun*. 2022 Aug 9;13(1):4663. doi: 10.1038/s41467-022-32347-4. **IF: 17,694 Q1 D1.**
3. Perdices-López C, Avendaño MS, Barroso A, Gaytán F, Ruiz-Pino F, Vázquez MJ, León S, Song YB, Sobrino V, Heras V, Romero-Ruiz A, Roa J, Mayor F Jr, Murga C, Pinilla L, Kaiser UB, Tena-Sempere M. Connecting nutritional deprivation and pubertal inhibition via GRK2-mediated repression of kisspeptin actions in GnRH neurons. *Metabolism*. 2022 Apr;129:155141. doi: 10.1016/j.metabol.2022.155141 **IF: 13,934 Q1 D1.**
4. Mora-Ortiz M, Alcalá-Díaz JF, Rangel-Zuniga OA, Arenas-de Larriva AP, Abollo-Jiménez F, Luque-Córdoba D, Priego-Capote F, Malagón MM, Delgado-Lista J, Ordovas JM, Pérez-Martínez P, Camargo A, López-Miranda J; Metabolomics analysis of type 2 diabetes remission identifies 12 metabolites with predictive capacity: a CORDIOPREV clinical trial study, *BMC MEDICINE*, 2022; -;DOI: 10.1186/s12916-022-02566-z **IF: 11,806 Q1 D2**
5. Vals-Delgado C, Alcalá-Díaz JF, Molina-Abril H, Roncero-Ramos I, Caspers MPM, Schuren FHJ, Van den Broek TJ, Luque R, Pérez-Martínez P, Katsiki N, Delgado-Lista J, Ordovas JM, van Ommen B, Camargo A, López-Miranda J. An altered microbiota pattern precedes Type 2 diabetes mellitus development: From the CORDIOPREV study. *J Adv Res*. 2021 May 13;35:99-108. doi: 10.1016/j.jare.2021.05.001 **IF: 12,822 Q1 D1.**

» SUB-PROGRAMS

- Metabolic syndrome
- Reproductive health
- Pediatric and perinatal diseases
- Neuroendocrine tumors

» METABOLIC SYNDROME

The objectives of this sub-program for 2022 were successfully completed. In general, scientific output increased compared to previous years. More specifically, during 2022, relevant articles were published in first-decile/quartile journals with contributions providing answers to most of the sub-program's specific objectives: establishing possible mechanisms involved in the clinical development and regression of type 2 diabetes in the context of coronary heart disease, and defining the molecular bases for improving dietary intervention strategies, such as following a Mediterranean diet, to prevent recurrent cardiovascular events. Research projects funded in previous years continued to be developed in 2022, and new research projects with national funding, as well as clinical trials, were launched. As further indicators of excellence, some of the main results of its research were presented in the form of guest lectures at various international scientific conferences, and the sub-program has been able to attract and retain highly qualified human resources through highly competitive programs, such as the Marie S. Curie Actions, and Miguel Servet programs.

» REPRODUCTIVE HEALTH

The development of this sub-program has made substantial progress in achieving its specific objectives, which are to obtain a better understanding of the pathophysiology of widespread reproductive disorders frequently associated with metabolic and/or neuroendocrine alterations, as well as to pursue the development of new diagnostic and therapeutic strategies for these disorders. In 2022, this subprogram generated relevant articles published in first-decile/quartile journals, focused on the characterization of novel mechanisms for molecular and metabolic control of the reproductive axis. In addition, translational and clinical studies were conducted, focusing on the identification of novel biomarkers and potential new therapeutic strategies for common reproductive diseases with metabolic implications. These activities were carried out in the framework of up to eight competitive projects funded by international, national and regional agencies. Furthermore, through research agreements with pharmaceutical/biotechnology companies, preclinical studies were carried out to develop some of the contents of this sub-program. As further indicators of excellence, some of the main results of its research were presented in guest lectures at various international scientific conferences, and the sub-group has been able to attract and retain highly qualified human resources through highly competitive programs, such as the Marie S. Curie Actions, Ramon y Cajal and Miguel Servet programs.

» PEDIATRIC AND PERINATAL DISEASES

The activities of this sub-program have made significant progress towards meeting its specific objectives. There have been a considerable number of publications aimed at characterizing the molecular and hormonal bases of childhood obesity, as well as analyzing the impact of certain nutritional interventions in childhood on health promotion. These studies are complemented by others aimed at defining possible associations between metabolic factors and certain pediatric diseases, such as autism, as well as new methods for measuring the physical condition of pre-adolescents. The sub-program has also made significant preclinical contributions to the characterization of novel mechanisms involved in the control of puberty, particularly the basis for alterations in pubertal timing linked to early nutritional alterations, the prevalence of which is increasing. These activities were carried out within the framework of up to four national competitive projects, including a coordinated multicenter project aimed at studying molecular markers of metabolic risk in puberty, a clinical study focused on an analysis of Mediterranean lifestyle dietary habits in the prevention of childhood obesity, and a translational research project aimed at identifying new neuroendocrine mechanisms for controlling puberty and its alterations in conditions of obesity.

» NEUROENDOCRINE TUMORS

A full description of the activities and outputs arising from this sub-program in 2022 can be found in the summary of Scientific Program 4 (Cancer: Oncology and Oncohematology). However, it should be stressed that research groups from this sub-program also actively collaborate with teams mainly attached to Program 2, and contributions in the area of neuroendocrine tumors and related conditions remain an important component of this Program.

» **HIGHLIGHTS IN 2022**

No. of PUBLICATIONS: **160**

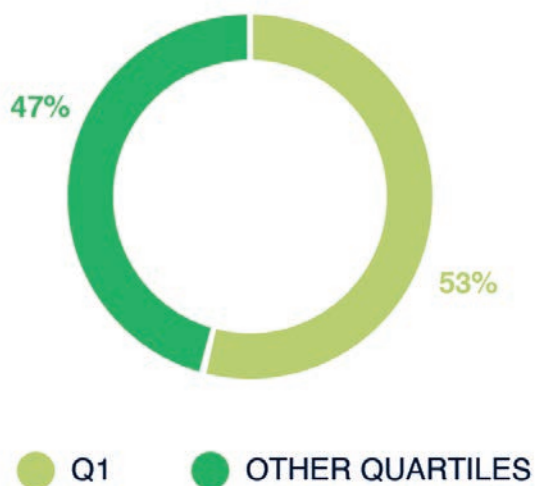
- Own: **49%**
- No. of collaborative publications: **41**
- IF: **1142.31**
- Q1 (including D1): **53%**
- D1: **12%**

No. of ONGOING PROJECTS: **44**

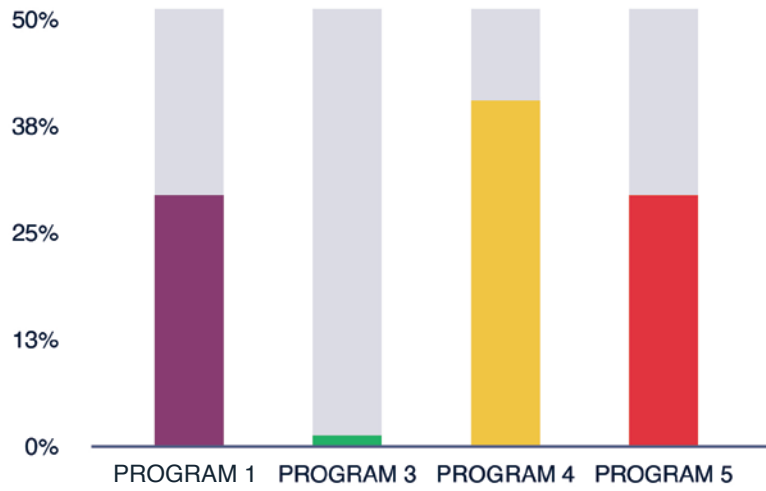
- No. of collaborative projects: **22**

No. of ONGOING CLINICAL TRIALS: **44**

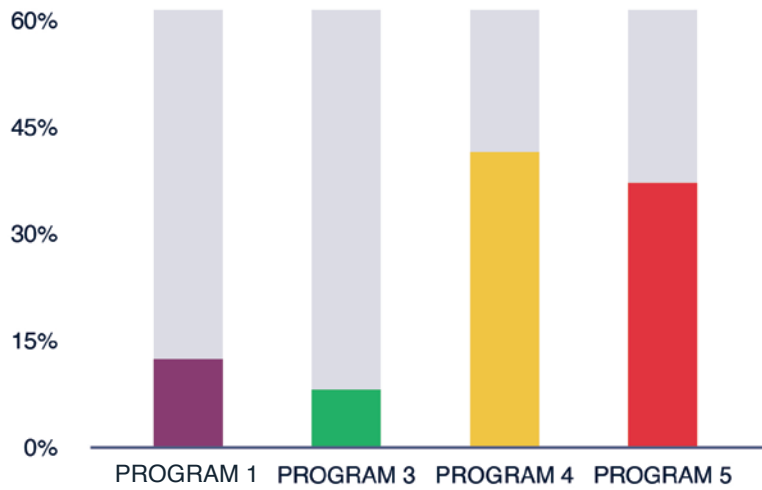
» **PROGRAM 2**



PUBLICATIONS IN COLLABORATION PROGRAM 2



PROJECTS IN COLLABORATION PROGRAM 2



SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» GENERAL GOALS

To follow a common line of high-quality research aimed at health problems related to host-foreign agent interactions, particularly in the fields of study of infectious, zoonotic, immunological and organ transplantation diseases. The aim of this research line is to obtain results that can be applied in and influence clinical practice among health professionals and which will enhance the quality of life of patients and social well-being generally. One key strategy is to strengthen links between research groups at regional, national and international levels and, when possible, with public or private companies. It is also crucial to set targets in research projects that ensure a greater guarantee of success, to help group members create new spin-offs, and to establish a solid foundation to support research training and guarantee stable employment for researchers. The actions adopted to achieve these targets must be specific and effective, using a translational approach that leads to improved quality of patient care, either through technology transfer of the results to industry or by applying them in clinical practice guidelines. In 2022, a total of 8 research groups participated in IMIBIC Program 3 (3 consolidated groups, 1 emerging group and 4 associated groups), which generated 99 publications, 31 active projects and 25 clinical trials during 2022.

» 5 HIGHLIGHTED PUBLICATIONS

1. Rivero-Juarez A, Frias M, Perez AB, Pineda JA, Reina G, Fuentes-Lopez A, Freyre-Carrillo C, Ramirez-Arellano E, Alados JC, Rivero A; Orthohepevirus C infection as an emerging cause of acute hepatitis in Spain: First report in Europe, *JOURNAL OF HEPATOLOGY*, 2022; 326-331;DOI: 10.1016/j.jhep.2022.01.028
IF: 30,083 Q1 D1
2. Fernandez-Martinez NF, Ruiz-Montero R, Briones E, Banos E, Rodriguez-Alarcon LGS, Chaves JA, Abad R, Varela C, Lorusso N; Listeriosis outbreak caused by contaminated stuffed pork, Andalusia, Spain, July to October 2019, *EUROSURVEILLANCE*, 2022; -;DOI: 10.2807/1560-7917.ES.2022.27.43.2200279
IF: 21,286 Q1 D1
3. Paez-Vega A, Gutierrez-Gutierrez B, Aguera ML, Facundo C, Redondo-Pachon D, Suner M, Lopez-Oliva MO, Yuste JR, Montejo M, Galeano-Alvarez C, Ruiz-San Millan JC, Los-Arcos I, Hernandez D, Fernandez-Ruiz M, Munoz P, Valle-Arroyo J, Cano A, Rodriguez-Benot A, Crespo M, Rodelo-Haad C, Lobo-Acosta MA, Garrido-Gracia JC, Vidal E, Guirado L, Cantisan S, Torre-Cisneros J; Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated With Antithymocyte Globulin: A Randomized Clinical Trial, *CLINICAL INFECTIOUS DISEASES*, 2022; 757-765;DOI: 10.1093/cid/ciab574
IF: 20,999 Q1 D1
4. Guzman-Puche J, Perez-Nadales E, Perez-Vazquez M, Causse M, Gracia-Ahufinger I, Mendez-Natera A, Allalou-Ruiz Y, Elias C, Oteo-Iglesias J, Torre-Cisneros J, Martinez-Martinez L; In vivo selection of KPC-94 and KPC-95 in *Klebsiella pneumoniae* isolates from patients treated with ceftazidime/avibactam, *INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS*, 2022; -;DOI: 10.1016/j.ijantimicag.2022.106524
IF: 15,441 Q1 D1
5. Diaz-Lozano M, Guijo-Rubio D, Gutierrez PA, Gomez-Orellana AM, Tunez I, Ortigosa-Moreno L, Romanos-Rodriguez A, Padillo-Ruiz J, Hervas-Martinez C; COVID-19 contagion forecasting framework based on curve decomposition and evolutionary artificial neural networks: A case study in Andalusia, Spain, *EXPERT SYSTEMS WITH APPLICATIONS*, 2022; -;DOI: 10.1016/j.eswa.2022.117977
IF: 8,665 Q1 D2

» SUB-PROGRAMS

- HIV + Hepatitis C
- Transplantation
- Multiresistance

» HIV AND/OR HCV + HEV INFECTION

In the realm of HIV research and treatment, an internationally funded project has recently been launched with the primary aim of assessing the real-world effectiveness of a novel antiretroviral treatment combination. This study specifically targets patients grappling with severe immunosuppression due to HIV. Shifting our focus to hepatotropic viruses, a noteworthy milestone has been achieved with the publication of 19 research papers in this domain. Impressively, 15 of these papers have secured placement in Q1 journals, with a remarkable 14 of them earning a place in the prestigious D1 category. Among these publications, a groundbreaking discovery has been made concerning a zoonotic virus known as Rocahepevirus ratti, which has been identified as a new causal agent of acute hepatitis. This pivotal finding has been officially documented in the Journal of Hepatology, boasting an impressive impact factor of 30.083. Furthermore, within this dynamic research context, a new project sponsored by ISCIII, titled 'Magnitude and Clinical Impact of Orthohepevirus C Infection,' has been set in motion. Meanwhile, the scientific community has been alerted to the presence of the Hepatitis E virus in marine environments through a publication in the esteemed Emerging Infectious Diseases journal, which boasts an impact factor of 16.126. This research highlights the potential for human-source contamination in marine habitats, emphasizing the critical role of water control measures in preventing infections via this novel transmission route

» TRANSPLANTATION/MULTIRESISTANCE

As part of these topics, a total of 22 publications were generated during 2022 (9 in Q1; 4 of them in D1). The clinical trial "Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated with Antithymocyte Globulin: A Randomized Clinical Trial" was published in Clinical Infectious Diseases (D1), with an impact factor of 20,999. This work has been selected as one of the most outstanding publications from Program 3. In the same area, the ISCIII-financed study "Papel de los microRNAs en la respuesta inmune discordante frente a CMV e impacto en la reconstitución inmune y la replicación de CMV en trasplante de progenitores hematopoyéticos" as well as the ISCIII-financed clinical trial "ENSAYO CLÍNICO DE EFICACIA Y SEGURIDAD DE LA COMBINACIÓN DE PROFILAXIS DE DURACIÓN REDUCIDA SEGUIDA DE PROFILAXIS INMUNOGUIADA EN RECEPTORES DE TRANSPLANTE PULMONAR (ESTUDIO CYTOCOR)" were launched.

As regards the specific objectives of the Multiresistance subprogram, which features a close collaboration between the GC03 and GC24 groups, there was a sizeable scientific output in 2022. It is worth highlighting that researchers of Programme 3 coordinate the European project "Combating Bacterial Resistance in Europe" (COMBACTE) within the European programme New Drugs 4 Bad Bugs (ND4BB). Some relevant results have been reported in several manuscripts, with the publication "In vivo selection of KPC-94 and KPC-95 in Klebsiella pneumoniae isolates from patients treated with ceftazidime/avibactam" being the most remarkable manuscript in this area. It has been published in INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS (D1), with an impact factor of 15,441. This work has been selected as one of the most outstanding publications from Program 3.

» HIGHLIGHTS IN 2022

No. of PUBLICATIONS: **99**

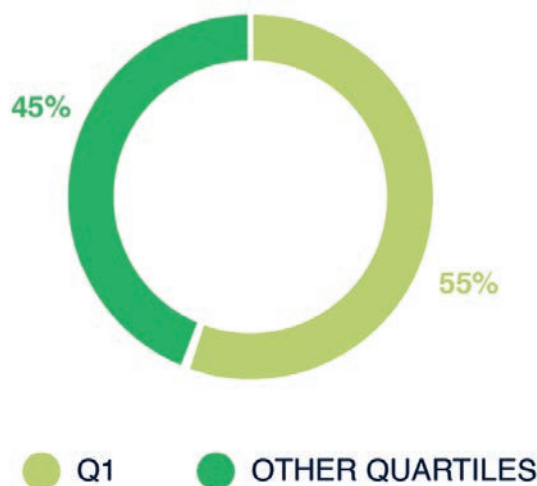
- Own: **47%**
- No. of collaborative publications: **9**
- IF: **591.98**
- Q1 (including D1): **55%**
- D1: **30%**

No. of ONGOING PROJECTS: **31**

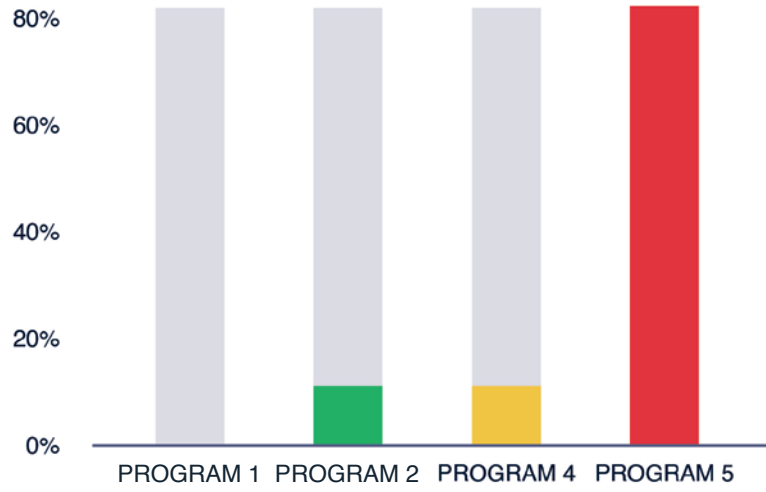
- N° of collaborative projects: **12**

No. of ONGOING CLINICAL TRIALS: **25**

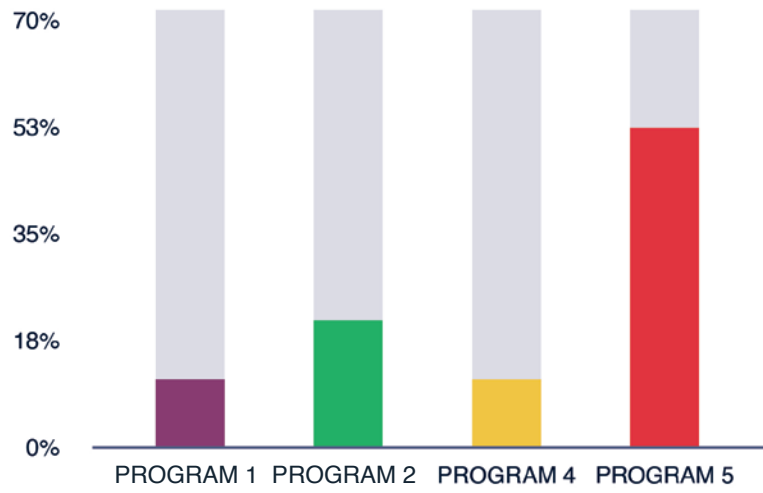
» PROGRAM 3



PUBLICATIONS IN COLLABORATION PROGRAM 3



PROJECTS IN COLLABORATION PROGRAM 3



SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» GENERAL GOALS

Cancer is one of the leading diseases worldwide, with high prevalence and mortality rates. The annual incidence of cancer is also increasing, mainly due to the aging of the population. While the latest advances in research have led to better results in the treatment of some types of tumour, in others, there is an urgent need for improved molecular knowledge, as well as better prevention and diagnostic measures.

For these reasons, the overall goal of Scientific Program 4 is directed at improving the prevention, diagnosis and treatment of cancer in all its aspects, and its more specific efforts are focussed on such crucial objectives as early detection, the search for new therapeutic targets and biomarkers, the development of new therapies, and the improvement of immunotherapy programs. This focus has helped the program to secure top-quality projects in highly competitive calls, as well as a considerable number of publications in high-impact magazines.

As a summary of the program's activity in 2022, its main goals were successfully achieved and significant results were obtained. This was reflected in the publication of 138 scientific articles, both by the program alone and in collaboration with other national and international groups. The program also managed 58 active research projects, all obtained through competitive calls. In the same year, 176 clinical trials, in different phases, were carried out, all of them related to different types of tumours and therapeutic approaches.

» 5 HIGHLIGHTED PUBLICATIONS

1. Ibanez-Costa A, Perez-Sanchez C, Patino-Trives AM, Luque-Tevar M, Font P, de la Rosa IA, Roman-Rodriguez C, Abalos-Aguilera MC, Conde C, Gonzalez A, Pedraza-Arevalo S, del Rio-Moreno M, Blazquez-Encinas R, Segui P, Calvo J, Castro RO, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castano-Fuentes JP, Luque RM, Collantes-Estevez E, Lopez-Pedraza C; Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy, *ANNALS OF THE RHEUMATIC DISEASES*, 2022; 56-67;DOI: 10.1136/annrheumdis-2021-220308
IF: 27,973 Q1 D1
2. Moyano JM, Ventura S; Auto-adaptive Grammar-Guided Genetic Programming algorithm to build Ensembles of Multi-Label Classifiers, *INFORMATION FUSION*, 2022; 1-19;DOI: 10.1016/j.inffus.2021.07.005
IF: 17,564 Q1 D1
3. Fuentes-Fayos AC, Perez-Gomez JM, G-Garcia ME, Jimenez-Vacas JM, Blanco-Acevedo C, Sanchez-Sanchez R, Solivera J, Breunig JJ, Gahete MD, Castano JP, Luque RM; SF3B1 inhibition disrupts malignancy and prolongs survival in glioblastoma patients through BCL2L1 splicing and mTOR/beta-catenin pathways imbalances, *JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH*, 2022; -;DOI: 10.1186/s13046-022-02241-4
IF: 12,658 Q1 D1
4. Lara-Chica M, Correa-Saez A, Jimenez-Izquierdo R, Garrido-Rodriguez M, Ponce FJ, Moreno R, Morrison K, Di Vona C, Arato K, Jimenez-Jimenez C, Morrugares R, Schmitz ML, de la Luna S, de la Vega L, Calzado MA; A novel CDC25A/DYRK2 regulatory switch modulates cell cycle and survival, *CELL DEATH AND DIFFERENTIATION*, 2022; 105-117;DOI: 10.1038/s41418-021-00845-5
IF: 12,067 Q1 D2
5. Herrero-Aguayo V, Saez-Martinez P, Jimenez-Vacas JM, Moreno-Montilla MT, Montero-Hidalgo AJ, Perez-Gomez JM, Lopez-Canovas JL, Porcel-Pastrana F, Carrasco-Valiente J, Anglada FJ, Gomez-Gomez E, Yubero-Serrano EM, Ibanez-Costa A, Herrera-Martinez AD, Sarmiento-Cabral A, Gahete MD, Luque RM; Dysregulation of the miRNome unveils a crosstalk between obesity and prostate cancer: miR-107 as a personalized diagnostic and therapeutic tool, *MOLECULAR THERAPY-NUCLEIC ACIDS*, 2022; 1164-1178;DOI: 10.1016/j.omtn.2022.02.010
IF: 10,183 Q1 D2

» SUB-PROGRAMS

- Lung cancer
- Breast cancer
- Hepatocellular carcinoma
- Leukaemias and lymphomas
- Digestive tumours
- Other tumours

Through various preferred lines of research, the different groups have centred their efforts on key objectives such as the development of new therapies, early detection, the application of an advanced data analysis methodology, as well as the application of new therapeutic approaches by conducting clinical drug response studies.

» **HIGHLIGHTS IN 2022**

No. of PUBLICATIONS: **138**

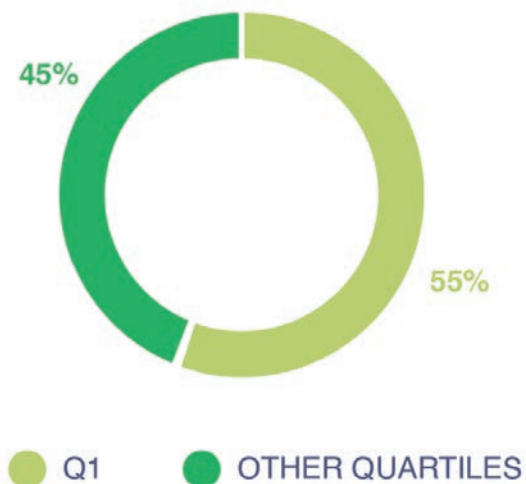
- Own: **40%**
- N° of collaborative publications: **37**
- IF: **879.04**
- Q1 (including D1): **55%**
- D1: **11%**

No. of ONGOING PROJECTS: **67**

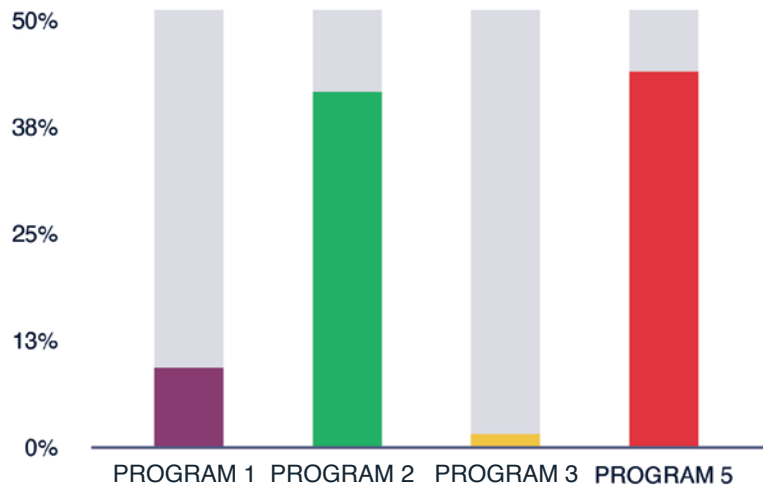
- N° of collaborative projects: **38**

No. of ONGOING CLINICAL TRIALS: **176**

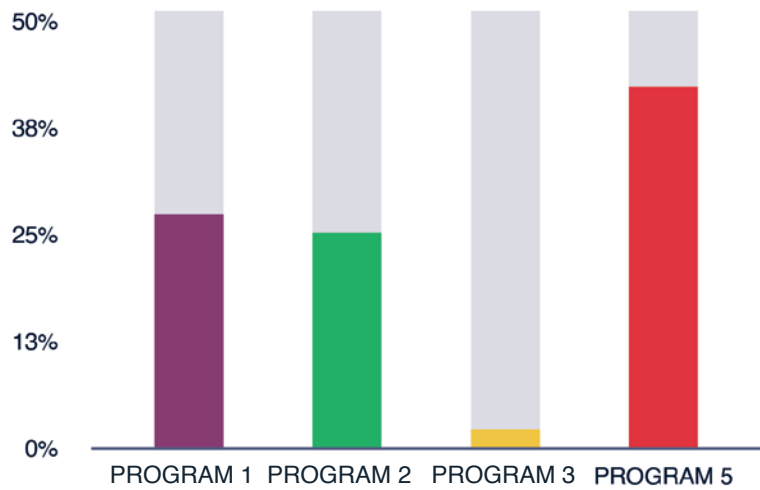
» **PROGRAM 4**



PUBLICATIONS IN COLLABORATION PROGRAM 4



PROJECTS IN COLLABORATION PROGRAM 4



SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» GENERAL GOALS

The extended life expectancy of the general population is directly correlated with the increased incidence of chronic and inflammatory illnesses. This has a significant impact on the well-being of affected individuals and plays a crucial role in their contribution to society. The long-term nature of these conditions also means that a substantial portion of healthcare budgets is allocated to disease management.

With these factors in mind, our program focuses on addressing chronic diseases from three key perspectives:

Improving our understanding of these diseases and characterizing their underlying molecular bases.

Using this new knowledge to design innovative therapeutic approaches that can improve prognosis and disease management.

Developing preventive strategies to delay or avoid the onset and progression of such conditions.

In essence, the primary goal of this program is to compile comprehensive clinical and molecular profiles underpinning the development of chronic diseases and coexisting conditions. We are also working to create novel therapeutic strategies that can be safely and effectively employed for the follow-up and management of these diseases.

In 2022, a total of 12 research groups (8 consolidated, 1 emerging and 3 associated) participated in IMIBIC program 5.

The teams involved in the program published numerous basic, clinical and translational research studies in the different areas of the subprograms, with a notable increase in the number of works published compared to 2021 (which meant almost 60 additional publications), approximately 40% of which appeared in journals belonging to the first quartile and/or decile. As a result, a significant increase in the overall impact factor (around 55%) was achieved.

A fundamental part of the achievement of the objectives for this program in 2022 can also be attributed to the implementation of numerous research projects at international, national or regional level, obtained in competitive calls by the research groups involved. In connection with this, the number of ongoing projects is also underlined, increasing by more than 55%, including several collaborative projects between groups belonging to this program.

Around 20% of the articles published involved close collaboration between 2 or more research groups belonging to the various subprograms. The contribution of emerging and associated groups was also fundamental.

The importance of the quality of the publications can largely be attributed to the successful establishment of national and international multicentre projects. These initiatives involved large groups of patients, paving the way for new clinical trials, and used animal models to study disease and its response to various therapies. These collaborative efforts contributed greatly to advances in research and understanding of the subject.

» HIGHLIGHTED PUBLICATIONS

1. Ibanez-Costa A, Perez-Sanchez C, Patino-Trives AM, Luque-Tevar M, Font P, de la Rosa IA, Roman-Rodriguez C, Abalos-Aguilera MC, Conde C, Gonzalez A, Pedraza-Arevalo S, del Rio-Moreno M, Blazquez-Encinas R, Segui P, Calvo J, Castro RO, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castano-Fuentes JP, Luque RM, Collantes-Estevez E, Lopez-Pedraza C; Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy, *ANNALS OF THE RHEUMATIC DISEASES*, 2022; 56-67;DOI: 10.1136/annrheumdis-2021-220308
IF: 27,973 Q1(D1)
2. de la Rosa IA, Lopez-Montilla MD, Roman-Rodriguez C, Perez-Sanchez C, Gomez-Garcia I, Lopez-Medina C, Ladehesa-Pineda ML, Abalos-Aguilera MD, Ruiz D, Patino-Trives AM, Luque-Tevar M, Anon-Onate I, Perez-Galan MJ, Guzman-Barbarroja R, Malagon MM, Lopez-Pedraza C, Escudero-Contreras A, Collantes-Estevez E, Barbarroja N; The clinical and molecular cardiometabolic fingerprint of an exploratory psoriatic arthritis cohort is associated with the disease activity and differentially modulated by methotrexate and apremilast, *JOURNAL OF INTERNAL MEDICINE*, 2022; 676-693;DOI: 10.1111/joim.13447
IF: 13,068 Q1(D1)
3. Rodriguez-Peralvarez M, Colmenero J, Gonzalez A, Gastaca M, Curell A, Caballero-Marcos A, Sanchez-Martinez A, Di Maira T, Herrero JI, Almohalla C, Lorente S, Cuadrado-Lavin A, Pascual S, Lopez-Garrido MA, Gonzalez-Grande R, Gomez-Orellana A, Alejandro R, Zamora-Olaya J, Bernal-Bellido C; Cumulative exposure to tacrolimus and incidence of cancer after liver transplantation, *AMERICAN JOURNAL OF TRANSPLANTATION*, 2022; 1671-1682;DOI: 10.1111/ajt.17021
IF: 9,369 Q1(D1)
4. Naranjo-Bonilla P, Gimenez-Gomez R, Munoz-Villanueva MD, Jurado-Gamez B; Retinal and Choroidal Effects of Continuous Positive Airway Pressure as Treatment for Sleep Apnea: Results at 12 Months, *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*, 2022; -;DOI: 10.3390/ijerph191912637
IF: 4,614 Q1
5. Ciria R, Ayllon MD, Padial A, Gomez-Serrano J, Garcia-Gaitan C, Gomez-Espana A, Espejo JJ, Briceno J; Totally Laparoscopic Tourniquet ALPPS: Technical Standardization by Combining the Pure Hanging Maneuver and the Approach Through the Sugioka Gates, *ANNALS OF SURGICAL ONCOLOGY*, 2022; 2410-2411;DOI: 10.1245/s10434-021-11005-x
IF: 4,339 Q1

» SUB-PROGRAMS

- » Cardiovascular diseases
- » Diseases of the musculoskeletal system and connective tissue
- » Neurological diseases and mental health
- » Kidney and urological diseases
- » Liver and digestive diseases
- » Chronic inflammation and signalling

» CARDIOVASCULAR DISEASES SUB-PROGRAM IN 2021

Groups involved: GC05, GC15, GA09

- Highlights of the action plans implemented include:
 - Study of the mechanisms of atherothrombosis and liver damage in lupus and rheumatoid arthritis, integrating immunological, cellular, molecular, and epigenetic analyses.
 - Characterization of complex coronary lesions and/or stents.
 - Studies to evaluate the treatment of heart disease by percutaneous and transluminal treatment.
 - Studies related to the care of patients with CV disease.

» DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE

Groups involved: GC05

Action plans implemented:

- Cellular and molecular characterisation of systemic autoimmune diseases (systemic lupus erythematosus, rheumatoid arthritis and antiphospholipid syndrome): Analysis of mechanisms underlying the development of organ damage and cardiovascular disease and identification of biomarkers of response to new therapeutic modalities.
- Characterization of clinical profiles in patients with spondylarthritis and psoriatic arthritis.
- Molecular mechanisms involved in metabolic comorbidities in psoriatic arthritis.

» NEUROLOGICAL DISEASES AND MENTAL HEALTH

Groups involved: GC28

Among the action plans implemented, the highlights were:

- Investigation of the mechanisms of neuromodulation underlying neurodegenerative processes such as multiple sclerosis, and study of the effect of different antioxidant agents, as well as transcranial magnetic stimulation, on neuroplasticity, cell death, oxidative stress and behavioural phenotype in these pathologies.
- Investigation of the role of oxidative status in neurodegenerative processes and other chronic pathologies.

» KIDNEY AND UROLOGICAL DISEASES

Groups involved: GC07, GC13

The highlights of the action plans implemented included:

- A search for innovative therapies in CKD, including cell therapy with mesenchymal cells and the development of a bioartificial kidney.
- Study of the relationship between extracellular vesicles, miRNA production and hemodialysis techniques.
- A study of the underlying basis of vascular calcification in chronic kidney disease. Role of the calcium-sensing receptor.
- Evaluation of inflammation and calcified vascular disease in uremia.
- Identification of biomarkers of kidney damage and vascular calcification.
- Vascular effects of elevated levels of FGF23 associated with chronic kidney disease.
- Comorbidities associated with chronic kidney disease; cardiovascular disease/cognitive impairment.
- Influence of phosphorus burden on chronic kidney disease progression: Role of Mg.

It should be noted that in recent years a new emerging group (GE06: Physiopathology of renal and vascular damage) has been involved in this sub-program, which has contributed both to expanding its scientific and strategic objectives and to improving its quality.

» LIVER AND DIGESTIVE DISEASES

Groups involved: GC02

Highlighted action plans include:

- Identification of clinical, molecular and cellular biomarkers of diagnostic and/or prognostic value, and effective therapeutic approaches in liver cancer and inflammatory bowel disease.
- End-stage liver disease and liver transplantation

» CHRONIC INFLAMMATION AND SIGNALLING

Groups involved: GC29, GA03

Highlights of the action plans implemented were:

- Transcriptome studies to characterize the involvement of immune system cells in dermatological pathologies such as atopic dermatitis, granuloma annulare and frontal fibrosing alopecia.
- Association between sleep-disordered breathing and prostate cancer.

- Development of clinical trials in patients with obstructive sleep apnoea syndrome.
- Serum markers in COVID-19 disease.
- Effectiveness and safety of calcifediol in the treatment of respiratory diseases.

Complementing work in the different subprograms, a transversal group played a key role by actively collaborating in the development of several subprograms:

Group GA08: Radiodiagnosis

Research conducted in 2022 focused mainly on:

- The study of cerebral vascular pathology
- Use of carotid echo-doppler (ultrasound) for detection of early atherosclerosis in autoimmune and chronic inflammatory diseases, and its association with therapeutic efficacy.
- Analysis of therapeutic efficacy in breast, prostate and other urological tumours.
- Artificial intelligence in breast cancer screening programs.

This research activity led to the publication of a number of articles produced as part of the group's own research projects or collaboratively with other IMIBIC groups in the areas of cancer, cardiovascular disease and kidney disease, funded by the Consejería de Salud de la Junta de Andalucía (Andalusian Regional Department of Health) and the Fondo de Investigación Sanitaria (Health Research Fund).

» HIGHLIGHTS IN 2022

No. of PUBLICATIONS: 241

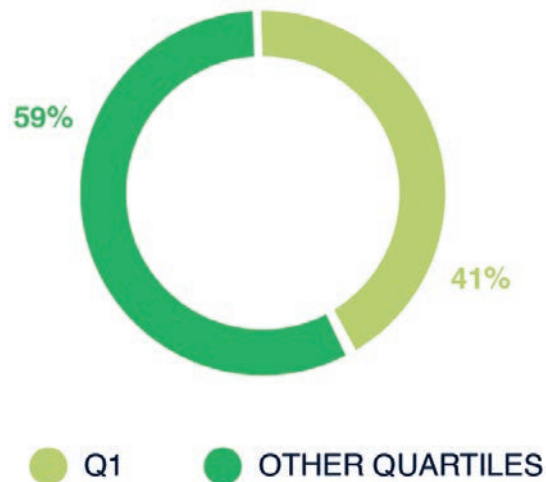
- Own: **30%**
- No. of collaborative publications: **47**
- IF: **1604.21**
- Q1 (including D1): **41%**
- D1: **10%**

No. of ONGOING PROJECTS: 68

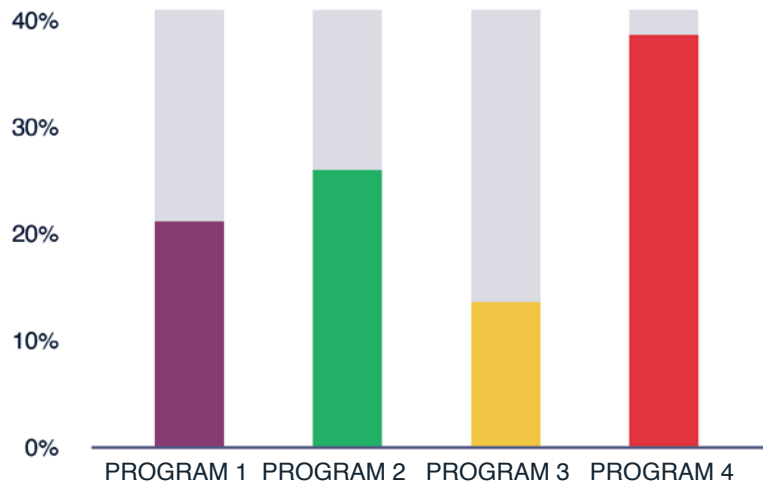
- N° of collaborative projects: **41**

No. of ONGOING CLINICAL TRIALS: 140

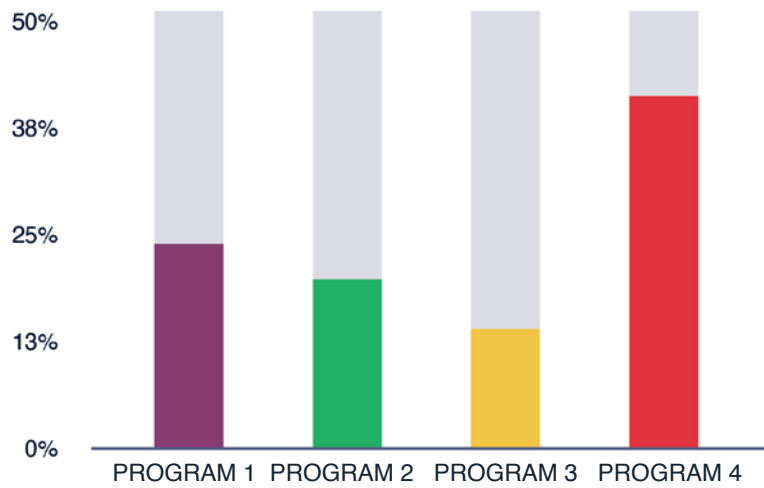
» PROGRAM 5



PUBLICATIONS IN COLLABORATION PROGRAM 5



PROJECTS IN COLLABORATION PROGRAM 5



8.2. SCIENTIFIC GROUPS

GC01:

IMMUNOLOGY AND ALLERGY

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Solana	Lara	Rafael	R4	0000-0001-8985-0295
Alonso	Díaz	Corona	R3	
Batista	Duharte	Alexander	R3	
Espinazo	Romeu	M ^a Luisa	R3	
Jurado	Roger	Aurora	R3	
Moreno	Aguilar	Carmen	R3	
Pera	Rojas	Alejandra	R3	
Ruiz	León	Berta	R3	
Serrano	Delgado	M ^a del Pilar	R3	
Aguado	Álvarez	Rocío	R2	
Barasona	Villarejo	M ^a José	R2	
González	Fernández	Rafael	R2	
Hassouneh		Fakhri	R2	
Manzanares	Martín	Bárbara	R2	
Molina	Alcaide	Juan Eduardo	R2	
Navas	Romo	Ana María	R2	
Saiz	Sánchez	Vanessa	R2	
Álvarez	Heredia	Pablo	R1	
Álvarez	Romero	Paula	R1	
Bernardo	Serrano	Raquel	R1	
Costa	Anzola	Antonio	R1	
Reina	Alfonso	Ester Irene	R1	
Trujillo	Aguilera	Antonio	R1	
Velarde	Martínez	M ^a Luisa	ADM	
Cañones	Castello	M ^a Estrella	N	
Guerra	González	Mercedes	N	
Gutiérrez	González	Carmen María	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Immunosenescence	Cardiovascular disease
Aging	Pro-inflammatory cells
Melanoma	Allergy
NK cells	Anaphylaxis
NKT cells	Pollen
NK receptors	Hymenoptera
CMV	Food
Cytotoxic T lymphocytes (CTL)	Mite
Exhaustion	Drugs
Regulatory T cells	Vaccines
Antisense oligonucleotides	Immunoregulation

» HIGHLIGHTED PUBLICATIONS:

1. Ruiz-Leon B, Navas A, Serrano P, Espinazo M, Guler I, Alonso C, Jurado A, Moreno-Aguilar C; Helios-Negative Regulatory T Cells as a Key Factor of Immune Tolerance in Nonallergic Beekeepers; JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY; 2022; 451-459; DOI: 10.18176/jiaci.0722
IF: 8,185 Q1 D2
2. B Ruiz-León , M Martínez San Ireneo , F de la Roca, L Arenas, T Alfaya Arias, C Cordobés, L Marqués, A Vega, C Moreno-Aguilar. The Lights and the Shadows of Controlled Sting Challenge With Hymenoptera. J Investig Allergol Clin Immunol. 2022 Oct 11;32(5):357-366. doi: 10.18176/jiaci.0838.
IF: 8,185 Q1 D2
3. Ruiz-Leon B, Serrano P, Vidal C, Moreno-Aguilar C; Management of Double Sensitization to Vespids in Europe; TOXINS; 2022; -; DOI: 10.3390/toxins14020126
IF: 5,175 Q1 D3
4. Navas A, Ruiz-Leon B, Serrano P, Marti M, Espinazo ML, Blanco N, Molina J, Alonso C, Jurado A, Moreno-Aguilar C; Natural and Induced Tolerance to Hymenoptera Venom: A Single Mechanism?; TOXINS; 2022; -; DOI: 10.3390/toxins14070426
IF: 5,075 Q1 D3
5. Fernandez-Delgado M, Sendra L, Herrero MJ, Olivera-Pasquini GG, Batista-Duharte A, Alino SF; Study of Oligonucleotides Access and Distribution in Human Peripheral Blood Mononuclear Cells; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES; 2022; -; DOI: 10.3390/ijms23105839
IF: 6,208 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 9
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. Spanish Network for asthma, adverse and allergic reactions (ARADYAL)
 2. REIPI - Spanish Network for Research in Infectious Diseases (Collaborator)
 3. PAIDI CTS-208 Molecular Immunology
 4. CA17103 - Delivery of Antisense RNA Therapeutics (DARTER). COST (European Cooperation in Science and Technology) Action Network (Collaborator)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. SAS_ACCIÓN A- (SERVICIO ANDALUZ DE SALUD)- AURORA JURADO ROGER
 2. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS RÍO HORTEGA 2021- (INSTITUTO DE SALUD CARLOS III) - ANA MARÍA NAVAS ROMO
 3. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - FAKHRI HASSOUNEH
 4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2020- (INSTITUTO DE SALUD CARLOS III) - PABLO ALVAREZ HEREDIA

5. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - BÁRBARA MANZANARES MARTÍN
6. CO-FINANCIACIÓN PROYECTO P2Med-IMIBIC- (UNIVERSIDAD DE CORDOBA) - ALEXANDER BATISTA DUHARTE
 - 4 AGREEMENTS WITH COMPANIES
 - 1 INTERNATIONAL PROJECTS
1. ALEXANDER BATISTA DUHARTE FluVag-Tregs – Immunosenescence and immune responses to influenza vaccination. Use of antisense oligonucleotides targeting regulatory T cells to improve vaccine efficacy in old mice. Marie Skłodowska-Curie “grant agreement No 847468 (European Union’s Horizon 2020

GC02:

OXIDATIVE AND NITROSATIVE STRESS IN ACUTE AND CHRONIC LIVER DISEASE

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
De La Mata	García	Manuel	R4	0000-0002-5353-2188
Bárcena	Ruiz	José Antonio	R4	0000-0002-5626-5943
Barrera	Baena	Pilar	R3	
Costán	Rodero	Guadalupe	R3	
Ferrín	Sánchez	Gustavo	R3	
Montero	Álvarez	Jose Luis	R3	
Padilla	Peña	Alicia	R3	
Peinado	Peinado	José	R3	
Poyato	González	Antonio	R3	
Requejo	Aguilar	Raquel	R3	
Rodríguez	Perálvarez	Manuel Luis	R3	
González	Rubio	Sandra	R2	
Linares	Luna	Clara Isabel	R2	
Vida	Pérez	Luis	R2	
Amado	Torres	Víctor	R1	
Benítez	Cantero	José Manuel	R1	
Espejo	Cruz	M ^a Lola	R1	
Fernández	González	Rocío	R1	
Guerrero	Misas	Marta	R1	
Iglesias	Flores	Eva	R1	
Medina	Medina	Rosario	R1	
Zamora	Olaya	Javier Manuel	R1	
Gómez	Núñez	M ^a Isabel	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Livertransplant	Cholestasis
Hepatocellular carcinoma	Liquid biopsy
Crohn'sdisease	Redox regulation
Ulcerative colitis	Anti-TNF

» HIGHLIGHTED PUBLICATIONS:

1. Rodriguez-Peralvarez M, Colmenero J, Gonzalez A, Gastaca M, Curell A, Caballero-Marcos A, Sanchez-Martinez A, Di Maira T, Herrero JI, Almohalla C, Lorente S, Cuadrado-Lavin A, Pascual S, Lopez-Garrido MA, Gonzalez-Grande R, Gomez-Orellana A, Alejandro R, Zamora-Olaya J, Bernal-Bellido C; Cumulative exposure to tacrolimus and incidence of cancer after liver transplantation; AMERICAN JOURNAL OF TRANSPLANTATION; 2022; 1671-1682; DOI: 10.1111/ajt.17021
IF: 9,369 Q1 D1
2. Montalva E, Rodriguez-Peralvarez M (Co-First)*, Blasi A, Bonanad S, Gavin O, Hierro L, Llado L, Llop E, Pozo-Laderas JC, Colmenero J; Consensus Statement on Hemostatic Management, Anticoagulation, and Antiplatelet Therapy in Liver Transplantation; TRANSPLANTATION; 2022; 1123-1131; DOI: 10.1097/TP.0000000000004014.
IF: 5,385 Q1 D3
3. Tellez L, Rodriguez ES, de Santiago ER, Llovet L, Gomez-Outomuro A, Diaz-Fontenla F, Lopez PA, Garcia-Eliz M, Amaral C, Sanchez-Torrijos Y, Fortea JI, Ferre-Aracil C, Rodriguez-Peralvarez M, Abadia M, Gomez-Camarero J, Oliveira A, Calleja JL, Crespo J, Romero M, Hernandez-Guerra M, Berenguer M, Riveiro-Braciela M, Salcedo M, Rodriguez M, Londono MC, Albillos A; Early predictors of corticosteroid response in acute severe autoimmune hepatitis: A nationwide multicenter study; ALIMENTARY PHARMACOLOGY & THERAPEUTICS; 2022; 131-143; DOI: 10.1111/apt.16926
IF: 9,524 Q1 D2
4. Casado-Llombart S, Velasco-de Andres M, Catala C, Leyton-Pereira A, Gutierrez-Cozar R, Suarez B, Armiger N, Carreras E, Esteller M, Ricart E, Ordas I, Gisbert JP, Chaparro M, Esteve M, Marquez L, Busquets D, Iglesias E, Garcia-Planella E, Martin-Arranz MD, Lohmann J, Ayata CK, Niess JH, Engel P, Panes J, Salas A, Domenech E, Lozano F; Experimental and genetic evidence for the impact of CD5 and CD6 expression and variation in inflammatory bowel disease; FRONTIERS IN IMMUNOLOGY; 2022; -; DOI: 10.3389/fimmu.2022.966184
IF: 8,787 Q1 D3
5. Lopez-Canovas JL, Herman-Sanchez N, Moreno-Montilla MT, Del Rio-Moreno M, Alors-Perez E, Sanchez-Frias ME, Amado V, Ciria R, Briceno J, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD; Spliceosomal profiling identifies EIF4A3 as a novel oncogene in hepatocellular carcinoma acting through the modulation of FGFR4 splicing; CLINICAL AND TRANSLATIONAL MEDICINE; 2022; -; DOI: 10.1002/ctm2.1102
IF: 8,554 Q1 D2

» CLINICAL GUIDES:

1. Eva Montalvá, Manuel Rodríguez-Perálvarez (Co-first)*, Annabel Blasi, Santiago Bonanad, Olga Gavín, Loreto Hierro, Laura Lladó, Elba Llop, Juan Carlos Pozo-Laderas, and Jordi Colmenero; Consensus Statement on Haemostatic management, Anticoagulation and Antiplatelet therapy in Liver Transplantation; Transplantation; Año: 2022; DOI: 10.1097/TP.0000000000004014
2. Colmenero J, Tabrizian P, Bhangui P, Pinato DJ, Rodriguez-Peralvarez ML, Sapisochin G, Bhoori S, Pascual S, Senzolo M, Al-Adra D, Herrero JI, Petrowsky H, Dawson LA, Hosni A, Kutzke JL, Gastaca M, Watt KD; De Novo Malignancy After Liver Transplantation: Risk Assessment, Prevention, and Management-Guidelines From the ILTS-SETH Consensus Conference; TRANSPLANTATION; 2022; E30-E45; DOI: 10.1097/TP.0000000000003998

» ACTIVITY:

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 31
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. CIBER on Liver and Digestive Diseases (CIBERehd)
 2. Grupo Español de Trabajo de Enfermedad de Crohn y Colitis Ulcerosa (GETECCU)
 3. PAIDI CTS-273
 4. PAIDI BIO-216
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 7
 1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS RÍO HORTEGA 2019- (INSTITUTO DE SALUD CARLOS III) - MARTA GUERRERO MISAS
 2. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2019- (INSTITUTO DE SALUD CARLOS III) - MARIA LOLA ESPEJO CRUZ
 3. CONVOCATORIA PLAN PROPIO DEL IMIBIC 2020- (FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA) - GUSTAVO FERRÍN SÁNCHEZ
 4. CONVOCATORIA PLAN PROPIO DEL IMIBIC 2020- (FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA) - JOSÉ ANTONIO BÁRCENA RUIZ
 5. CONVOCATORIA PLAN PROPIO DEL IMIBIC 2021- (FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA) - MANUEL DE LA MATA GARCÍA
 6. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - CLARA ISABEL LINARES LUNA
 7. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - SANDRA GONZALEZ RUBIO
- 4 AGREEMENTS WITH COMPANIES

GC03:

INFECTIOUS DISEASES

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
De La Torre	Cisneros	Julián Carlos	R4	0000-0003-1529-6302
Cantisán	Bohórquez	Sara	R3	
Castón	Osorio	Juan José	R3	
Pérez	Nadales	Elena	R3	
Doblas	Delgado	Antonio	R2	
Machuca	Sánchez	Isabel	R2	
Natera	Kindelán	Clara	R2	
Rumbao	Aguirre	José Manuel	R2	
Vidal	Verdú	Elisa	R2	
Cano	Yuste	Ángela	R2	
De La Torre	Giménez	Álvaro	R1	
Fernández	Moreno	Raquel	R1	
Gálvez	Soto	Víctor	R1	
López-Viñau	López	Teresa	R2	
Méndez	Natera	Alejandra	R1	
Páez	Vega	Aurora	R2	
Recio	Rufián	Manuel	R1	
Ruiz	Sánchez de Puerta	Lourdes	N	
Añón	Gámez	M ^a Teresa	ADM	
Cantueso	Méndez	Inmaculada	ADM	
Del Hoyo	Navarro	Antonio Jesús	ADM	
De la Torre	Giménez	Julián	T	
Salinas	Gavilán	Ana	T	

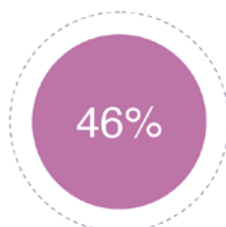
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cytomegalovirus	Transplantation
Multidrug-resistant microorganisms	Specific immune response
Immunopathology	

» HIGHLIGHTED PUBLICATIONS:

1. Paéz-Vega A, Gutierrez-Gutierrez B, Aguera ML, Facundo C, Redondo-Pachon D, Suner M, López-Oliva MO, Yuste JR, Montejo M, Galeano-Alvarez C, Ruiz-San Millan JC, Los-Arcos I, Hernández D, Fernández-Ruiz M, Muñoz P, Valle-Arroyo J, Cano A, Rodríguez-Benot A, Crespo M, Rodelo-Haad C, Lobo-Acosta MA, Garrido-Gracia JC, Vidal E, Guirado L, Cantisan S, Torre-Cisneros J; Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated With Antithymocyte Globulin: A Randomized Clinical Trial; *CLINICAL INFECTIOUS DISEASES*; 2022; 75:757-765; DOI: 10.1093/cid/ciab574

IF: 20,999 Q1 D1

2. Cano A, Gutierrez-Gutierrez B, Machuca I, Torre-Giménez J, Gracia-Ahufinger I, Natera AM, Pérez-Nadales E, Castón JJ, Rodríguez-Bano J, Martínez-Martínez L, Torre-Cisneros J; Association between Timing of Colonization and Risk of Developing *Klebsiella pneumoniae* Carbapenemase-Producing *K. pneumoniae* Infection in Hospitalized Patients; *MICROBIOLOGY SPECTRUM*; 2022; -; DOI: 10.1128/spectrum.01970-21

IF: 9,043 Q1 D2

» CLINICAL GUIDES:

1. Rúa-Figueroa Fernández de Larrinoa Í, Carreira PE, Brito García N, Díaz Del Campo Fontecha P, Pego Reigosa JM, Gómez Puerta JA, Ortega-Castro R, Tejera Segura B, Aguado García JM, Torre-Cisneros J, Valencia-Martín JL, Pereda CA, Nishishinya-Aquino MB, Otón Sánchez MT, Silva Fernández L, Maese Manzano J, Chamizo Carmona E, Correyero Plaza M. Recommendations for prevention of infection in systemic autoimmune rheumatic diseases. *Reumatol Clin (Engl Ed)*. Jun-Jul 2022;18(6):317-330.

doi: 10.1016/j.reumae.2021.04.003. PMID: 34607782

IF: 0,34 4º Cuartil RHEUMATOLOGY 39/48

» ACTIVITY:

- Nº ONGOING PROJECTS: 9
- Nº GRANTED PROJECTS IN 2022: 2
- Nº CLINICAL TRIALS: 13
- Nº PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 9

1. COMBACTE-NET (combatting bacterial resistance in Europe – networks)
2. COMBACTE-CARE (combatting bacterial resistance in Europe – carbapenem-resistance),
3. INCREMENT-SOT, an international consortium for the clinical study of blood stream infections caused by multi-drug resistant Enterobacteriales in solid organ transplantation (SOT). We promote and coordinate this international network, which includes 40 centers specialised in SOT from 16 countries worldwide.

4. PROACTIVE group

5. PAIDI CTS-647

6. Spanish Network for Research in Infectious Diseases (REIPI)

7. RECOVER (Rapid European COVID-19 Emergency Response research)

8. ANCRAID (Andalusian Network for Clinical Research in Infectious Diseases)

9. CIBER-EI ENFERMEDADES INFECCIOSAS

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 8

1. INTENSIFICACIÓN (ISCI) – JULIÁN DE LA TORRE CISNEROS

2. ACCIÓN B - CLÍNICOS INVESTIGADORES. REFUERZO ANUAL DE LA ACTIVIDAD INVESTIGADORA EN LAS UGC DEL SAS 2017- (SERVICIO ANDALUZ DE SALUD) - SARA CANTISAN BOHORQUEZ

3. ACCIÓN A. REFUERZO ANUAL DE LA ACTIVIDAD INVESTIGADORA EN LAS UNIDADES CLÍNICAS DEL SAS 2021- (SERVICIO ANDALUZ DE SALUD) - JULIAN CARLOS DE LA TORRE CISNEROS

4. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - ELENA PÉREZ NADALES

5. FPU18/01970. FORMACIÓN Y MOVILIDAD DENTRO DEL PROGRAMA ESTATAL DE PROMOCIÓN DEL TALENTO Y SU EMPLEABILIDAD; Alejandra Méndez Natera. 2019-2023

6. Contrato Predoctoral de Investigación en Formación del Plan Propio de la Universidad de Córdoba - Raquel Fernández Moreno

7. Contrato Profesor Sustituto Interino - Elena Pérez Nadales
 8. Contrato Predoctoral CIBER INFEC: Víctor Gálvez Soto
- 4 AGREEMENTS WITH COMPANIES
 - INTERNATIONAL PROJECTS: 4
1. JULIAN CARLOS DE LA TORRE CISNEROS; COMBACTE-NET - Combatting Bacterial Resistance in Europe Funding Agency: COMISIÓN EUROPEA; Reference: IMI-2012-001
 2. JULIAN CARLOS DE LA TORRE CISNEROS; COMBACTE-CARE - Combatting Bacterial Resistance in Europe – Carbapenem Resistance Funding Agency: COMISIÓN EUROPEA; Reference: IMI-2013-001
 3. JULIAN CARLOS DE LA TORRE CISNEROS; ECRAID-Base - A pan-European network against infectious diseases Funding Agency: COMISIÓN EUROPEA; Reference: SC1-BHC-35-2020-01
 4. REVERSE: pREvention and management tools for rEducing antibiotic Resistance in high prevalence Settings
- AWARDS:1
1. Premio Iñigo Álvarez de Toledo a la Investigación Clínica en Nefrología correspondiente al año 2022: “Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated with Antithymocyte Globulin: A Randomized Clinical Trial. Páez-Vega A”. Clin Infect Dis. 2022 Mar 9;74(5):757-765. doi: 10.1093/cid/ciab574. PMID: 34228099 IF: 20,999 D1/Q1

GC04:

INFLAMMATION AND CANCER

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Muñoz	Blanco	Eduardo	R4	0000-0001-8478-5842
Calzado	Canale	Marco Antonio	R4	0000-0002-5338-535X
García	Martínez	Adela	R2	
Navarrete	Rueda	Carmen	R2	
Prados	González	M ^a Eugenia	R2	
Correa	Sáez	Alejandro	R1	
Jiménez	Izquierdo	Rafael	R1	
Suanes	Cobos	Lucía	R1	
Lastres	Cubillo	Isabel	R1	
Ponce	Díaz	Francisco	R1	
Torres	Ramos	Miguel	R1	
Cerero	Tejero	Laura	T	
Collado	Rojas	Juan Antonio	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Inflammation	Endocannabinoid system
Cancer	Pharmacology
Hypoxia	Cell signaling

» HIGHLIGHTED PUBLICATIONS:

1. Navarrete C, Garcia-Martin A, Correa-Saez A, Prados ME, Fernandez F, Pineda R, Mazzone M, Alvarez-Benito M, Calzado MA, Munoz E; A cannabidiol aminoquinone derivative activates the PP2A/B55 alpha/HIF pathway and shows protective effects in a murine model of traumatic brain injury; JOURNAL OF NEUROINFLAMMATION; 2022; -; DOI: 10.1186/s12974-022-02540-9
IF: 9,589 Q1 D1
2. Lara-Chica M, Correa-Saez A, Jimenez-Izquierdo R, Garrido-Rodriguez M, Ponce FJ, Moreno R, Morrison K, Di Vona C, Arato K, Jimenez-Jimenez C, Morrugares R, Schmitz ML, de la Luna S, de la Vega L, Calzado MA; A novel CDC25A/DYRK2 regulatory switch modulates cell cycle and survival; CELL DEATH AND DIFFERENTIATION; 2022; 105-117; DOI: 10.1038/s41418-021-00845-5
IF: 12,073 Q1 D1

3. Appendino G, Tagliatela-Scafati O, Munoz E; Cannabidiol (CBD) From Non-Cannabis Plants: Myth or Reality?; NATURAL PRODUCT COMMUNICATIONS; 2022; -; DOI: 10.1177/1934578X221098843

IF: 1,496 Q4 D

4. del Rio C, Ruiz-Pino F, Prados ME, Fiebich BL, Tena-Sempere M, Munoz E; Cannabidiol markedly alleviates skin and liver fibrosis; FRONTIERS IN PHARMACOLOGY; 2022; -; DOI: 10.3389/fphar.2022.981817

IF: 5,988 Q1 D2

5. Caprioglio D, Amin HIM, Tagliatela-Scafati O, Munoz E, Appendino G; Minor Phytocannabinoids: A Misleading Name but a Promising Opportunity for Biomedical Research; BIOMOLECULES; 2022; -; DOI: 10.3390/biom12081084

IF: 6,064 Q2 D3

» **ACTIVITY:**

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2022: 2
- N° PHD THESES: 2

» **ADDITIONAL INFORMATION:**

- NETWORKS: 2

1. PAIDI BIO-304

2. Grupo Español de Hipoxia y RedHYPOX

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4

1. AYUDAS PARA LA FORMACIÓN DE PROFESORADO UNIVERSITARIO (FPU), MINISTERIO DE UNIVERSIDADES – ALEJANDRO CORREA SÁEZ

2. AYUDAS PARA LA FORMACIÓN DE PROFESORADO UNIVERSITARIO (FPU), MINISTERIO DE UNIVERSIDADES – LUCÍA SUANES COBOS

3. AYUDAS PARA LA FORMACIÓN DE PROFESORADO UNIVERSITARIO (FPU), MINISTERIO DE UNIVERSIDADES – MIGUEL TORRES RAMOS

4. AYUDAS PARA LA FORMACIÓN DE PERSONAL INVESTIGADOR (FPI), MINISTERIO DE CIENCIA Y TECNOLOGIA – FRANCISCO JOSÉ PONCE DIAZ

- 5 AGREEMENTS WITH COMPANIES

- AWARDS: 1

1. LUCIA SUANES COBOS; Premio a la mejor comunicación de la SESSION I. Cáncer I- Lucía Suanes Cobos; FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA

GC05:

SYSTEMIC AND CHRONIC INFLAMMATORY AUTOIMMUNE DISEASES OF THE LOCOMOTOR SYSTEM AND CONNECTIVE TISSUE

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
López	Pedreira	Rosario	R4	0000-0003-2067-4603
Collantes	Estévez	Eduardo	R4	0000-0002-7647-6289
Aguirre	Zamorano	Mª Ángeles	R3	
Alburquerque	Sendín	Francisco	R3	
Barbarroja	Puerto	Nuria	R3	
Escudero	Contreras	Alejandro	R3	
Font	Ugalde	Pilar	R3	
López	Medina	Clementina	R3	
Pérez	Sánchez	Carlos	R3	
Rodrigues-de-Souza		Daiana Priscila	R3	
Aranda	Valera	Concepción	R2	
Arias	de la Rosa	Iván	R2	
Calvo	Gutiérrez	Jerusalem	R2	
Caracuel	Ruiz	Miguel Ángel	R2	
Cerdó	Ráez	Tomás	R2	
Ladehesa	Pineda	Mª Lourdes	R2	
López	Montilla	Mª Dolores	R2	
Ortega	Castro	Rafaela	R2	
Pérez	Guijo	Verónica	R2	
Puche	Larrubia	Mª de los Ángeles	R2	
Rojas	Giménez	Marta	R2	
Garrido	Castro	Juan Luis	R2	
Armenteros	Ortiz	Pedro José	R1	
Cuesta	López	Laura	R1	
Gómez	García	Ignacio	R1	
Granados		Raquel María Ena	R1	
Muñoz	Barrera	Laura	R1	
Ruiz	Vilchez	Desireé	R1	
Ruiz	Ponce	Miriam	R1	
Sánchez	Pareja	Ismael	R1	
Ábalos	Aguilera	Mª Carmen	T	
Cepas	Gutiérrez	Francisco José	T	
Merlo	Ruiz	Christian	T	
Ortiz	Buitrago	Pedro	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Autoimmune diseases	Metabolic syndrome
Spondyloarthropathies	Epigenetics
Inflammation and organ damage	Biomarkers
Atherothrombosis	New therapies

» HIGHLIGHTED PUBLICATIONS:

- Ibanez-Costa A, Perez-Sanchez C, Patino-Trives AM, Luque-Tevar M, Font P, de la Rosa IA, Roman-Rodriguez C, Abalos-Aguilera MC, Conde C, Gonzalez A, Pedraza-Arevalo S, del Rio-Moreno M, Blazquez-Encinas R, Segui P, Calvo J, Castro RO, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castano-Fuentes JP, Luque RM, Collantes-Estevez E, Lopez-Pedrerera C; Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy; ANNALS OF THE RHEUMATIC DISEASES; 2022; 56-67; DOI: 10.1136/annrheumdis-2021-220308
IF: 27,973 Q1 D1
- Perez-Sanchez C, Betancourt AB, Lyons PA, Zhang ZA, Suo CQ, Lee JC, McKinney EF, Modis LK, Ellson C, Smith KGC; miR-374a-5p regulates inflammatory genes and monocyte function in patients with inflammatory bowel disease; JOURNAL OF EXPERIMENTAL MEDICINE; 2022; -; DOI: 10.1084/jem.20211366
IF: 17,579 Q1 D1
- de la Rosa IA, Lopez-Montilla MD, Roman-Rodriguez C, Perez-Sanchez C, Gomez-Garcia I, Lopez-Medina C, Ladehesa-Pineda ML, Abalos-Aguilera MD, Ruiz D, Patino-Trives AM, Luque-Tevar M, Anon-Onate I, Perez-Galan MJ, Guzman-Barbarroja R, Malagon MM, Lopez-Pedrerera C, Escudero-Contreras A, Collantes-Estevez E, Barbarroja N; The clinical and molecular cardiometabolic fingerprint of an exploratory psoriatic arthritis cohort is associated with the disease activity and differentially modulated by methotrexate and apremilast; JOURNAL OF INTERNAL MEDICINE; 2022; 676-693; DOI: 10.1111/joim.13447
IF: 13,068 Q1 D1
- Barbarroja N, Ruiz-Ponce M, Cuesta-Lopez L, Perez-Sanchez C, Lopez-Pedrerera C, Arias-de La Rosa I, Collantes-Estevez E; Nonalcoholic fatty liver disease in inflammatory arthritis: Relationship with cardiovascular risk; FRONTIERS IN IMMUNOLOGY; 2022; -; DOI: 10.3389/fimmu.2022.997270
IF: 8,787 Q1 D3
- Arias-de la Rosa I, Escudero-Contreras A, Ruiz-Ponce M, Cuesta-Lopez L, Roman-Rodriguez C, Perez-Sanchez C, Ruiz-Limon P, Guzman-Ruiz R, Leiva-Cepas F, Alcaide J, Segui P, Plasencia C, Martinez-Feito A, Font P, Abalos MC, Ortega R, Malagon MM, Tinahones FJ, Collantes-Estevez E, Lopez-Pedrerera C, Barbarroja N; Pathogenic mechanisms involving the interplay between adipose tissue and auto-antibodies in rheumatoid arthritis; ISCIENCE; 2022; -; DOI: 10.1016/j.isci.2022.104893
IF: 6,107 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 11
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 23
- N° PHD THESES: 2

» ADDITIONAL INFORMATION:

• NETWORKS: 4

1. PAIDI CTS-1004
2. The Research Network for Inflammation and Rheumatic Diseases (RIER)
3. APS ACTION. Anti-Phospholipid Syndrome Alliance For Clinical Trials and International Networking
4. REDES DE INVESTIGACIÓN COOPERATIVA ORIENTADAS A RESULTADOS EN SALUD (RICORS; RD21/0002/0033)

• COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 12

1. INTENSIFICACIÓN ACCIÓN A (SAS) – EDUARDO COLLANTES ESTÉVEZ
2. CLINICO-INVESTIGADOR ACCIÓN B (SAS) – JERUSALEM CALVO GUTIÉRREZ
3. RAMÓN Y CAJAL (MICINN) – NURIA BARBARROJA PUERTO
4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2021- (INSTITUTO DE SALUD CARLOS III) - TOMAS CERDO RAEZ
5. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS RÍO HORTEGA 2021- (INSTITUTO DE SALUD CARLOS III) - MARÍA LOURDES LADEHESA PINEDA
6. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - CARLOS PEREZ SANCHEZ
7. Ayudas para facultativos investigadores 2021-2024- (FUNDACIÓN ESPAÑOLA DE REUMATOLOGÍA) - INMACULADA CONCEPCIÓN ARANDA VALERA
8. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2021- (INSTITUTO DE SALUD CARLOS III) - MIRIAM RUIZ PONCE
9. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS JUAN RODÉS 2021- (INSTITUTO DE SALUD CARLOS III) - CLEMENTINA LÓPEZ MEDINA
10. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LOS AGENTES DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - IVAN ARIAS DE LA ROSA
11. RENOVACIÓN ACCIÓN C (PROGRAMA NICOLÁS MONARDES) DE LA CONVOCATORIA 2012- (SERVICIO ANDALUZ DE SALUD) - ROSARIO LOPEZ PEDRERA
12. FORMACIÓN DE PROFESORADO UNIVERSITARIO - LAURA CUESTA

• 18 AGREEMENTS WITH COMPANIES

• INTERNATIONAL PROJECTS: 3

1. EDUARDO COLLANTES ESTEVEZ; 3TR - Identification of the Molecular Mechanisms of non-response to Treatments, Relapses and Remission in Autoimmune, Inflammatory, and Allergic Conditions Funding Agency: COMISIÓN EUROPEA; Reference: IMI2-2018-14-01-F2
2. ROSARIO LOPEZ PEDRERA; CHARACTERIZATION OF BARICITINIB EFFECTS ON THE PRO-THROMBOTIC AND CARDIOVASCULAR RISK PROFILE OF RHEUMATOID ARTHRITIS PATIENTS Funding Agency: ELI LILLY AND COMPANY; Reference: Lilly-IIR-2020-001
3. NURIA BARBARROJA PUERTO; IMPACT OF JAK-STAT INHIBITION ON THE METABOLIC SYNDROME AND CARDIOVASCULAR RISK ASSOCIATED WITH RHEUMATOID ARTHRITIS Funding Agency: PFIZER, S.A; Reference: Pfizer-ISR-2019-01

• AWARDS: 2

1. CARLOS PEREZ SANCHEZ; Medicina Personalizada en Artritis Reumatoide.; ROCHE FARMA, S.A.
2. Rosario Lopez Pedrera: Premio 'Enrique Aguilar Benitez de Lugo' a la publicación más relevante por el trabajo: Splicing Machinery is impaired in Rheumatoid Arthritis, associated with disease activity and modulated by anti-TNF therapy. Lecion Conmemorativa Maimonides y Premios IMIBIC-2022.

NEW THERAPIES IN CANCER

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Aranda	Aguilar	Enrique	R4	0000-0002-5471-2842
De La Haba	Rodríguez	Juan Rafael	R4	0000-0001-5111-1702
Rodríguez	Ariza	Antonio	R4	0000-0001-5304-5745
Gómez	España	M ^a Auxiliadora	R3	
Güil	Luna	Silvia	R3	
Barneto	Aranda	Isidoro C	R2	
García	Ortiz	M ^a Victoria	R2	
Martínez	Peinado	Antonio	R2	
Méndez	Vidal	M ^a José	R2	
Morales	Estévez	Cristina	R2	
Serrano	Blanch	Raquel	R2	
Toledano	Fonseca	Marta	R2	
Villar	Pastor	Carlos	R2	
Cano	Osuna	M ^a Teresa	R1	
Crespo	Rivas	Aurora	R1	
Mantrana	Soldado	Ana	R1	
Navarrete	Sirvent	Carmen	R1	
Ortiz	Morales	M ^a José	R2	
Porras	Quintela	Ignacio	R1	
Rodríguez	Alonso	Beatriz	R1	
Rodríguez	Alonso	Rosa María	R1	
Rubio	Pérez	M ^a Jesús	R2	
Sánchez	Mauriño	Pedro	R1	
Montero	Gómez	Marina	R1	
Inga	Saavedra	Elizabeth	R1	
López	González	Javier	R1	
Pulido	Cortijo	Gema	R1	
Salguero	Segura	Joseba	R1	
Sánchez	Mauriño	Pedro	R1	
Sánchez	Montero	M ^a Teresa	R1	
Vázquez	Ibáñez	Pilar	ADM	
Aranda	Aguilar	Asunción	ADM	
Campón	Montilla	Daniel José	T	
Díaz	Díaz	M ^a Ángeles	T	
Leña	Barranco	Amalia	T	
Marín	Serrano	Jacinta	T	
Marín	Serrano	M ^a José	T	
Moral	Garófano	Virginia	T	
Bernal	García	Gonzalo	T	
Kindelan	Segador	Lara	T	
Sánchez	Ostos	Manuel	T	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Pavón	Gómez	Rebeca	T
Rodríguez	De Julián	Sonia	T
Rodríguez	De Julián	Carlos	T
Cuestas	Venteo	Remedios	T
Márquez	Gómez-Lama	Nieves	T
Arenas	Criado	Sofía	T

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Colorectal cancer	Prognosis
Breast cancer	Prediction of response
Nitric oxide	Liquid biopsy
Proteomics	Targeted therapy
Biomarkers	Precision oncology

» HIGHLIGHTED PUBLICATIONS:

1. Elez E, Gomez-Espana MA, Gravalos C, Garcia-Alfonso P, Ortiz-Morales MJ, Losa F, Diaz IA, Grana B, Toledano-Fonseca M, Valladares-Ayerbes M, Polo E, Salgado M, De Castro EM, Safont MJ, Salud A, Ruiz-Casado A, Tabernero J, Riesco MD, Rodriguez-Ariza A, Aranda E; Effect of aflibercept plus FOLFIRI and potential efficacy biomarkers in patients with metastatic colorectal cancer: the POLAF trial; BRITISH JOURNAL OF CANCER; 2022; 874-880; DOI: 10.1038/s41416-021-01638-w
IF: 9,075 Q1 D2
2. Ortiz-Morales MJ, Toledano-Fonseca M, Mena-Osuna R, Cano MT, Gomez-Espana A, De la Haba-Rodriguez JR, Rodriguez-Ariza A, Aranda E; Basal VEGF-A and ACE Plasma Levels of Metastatic Colorectal Cancer Patients Have Prognostic Value for First-Line Treatment with Chemotherapy Plus Bevacizumab; CANCERS; 2022; -; DOI: 10.3390/cancers14133054
IF: 6,575 Q1 D3
3. Garcia-Torres F, Gomez-Solis A, Garcia SR, Castillo-Mayen R, Ruiz-Ruano VG, Moreno E, Moriana JA, Luque-Salas B, Jaen-Moreno MJ, Cuadrado-Hidalgo F, Galvez-Lara M, Jablonski M, Rodriguez-Alonso B, Aranda E; Efficacy of a Combined Acceptance and Commitment Intervention to Improve Psychological Flexibility and Associated Symptoms in Cancer Patients: Study Protocol for a Randomized Controlled Trial; FRONTIERS IN PSYCHOLOGY; 2022; -; DOI: 10.3389/fpsyg.2022.871929
IF: 4,232 Q1 D3
4. Albanell J, Perez-Garcia JM, Gil-Gil M, Curigliano G, Ruiz-Borrego M, Comerma L, Gibert J, Bellet M, Bermejo B, Calvo L, de la Haba J, Espinosa E, Minisini AM, Quiroga V, Bertran AS, Mina L, Bellosillo B, Rojo F, Menendez S, Sampayo-Cordero M, Popa C, Malfettone A, Cortes J, Llombart-Cussac A; Palbociclib Rechallenge for Hormone Receptor- Positive/HER-Negative Advanced Breast Cancer: Findings from the Phase II BioPER Trial; CLINICAL CANCER RESEARCH; 2022; 67-80; DOI: 10.1158/1078-0432.CCR-22-1281
IF: 13,801 Q1 D1
5. Motzer R, Porta C, Alekseev B, Rha SY, Choueiri TK, Mendez-Vidal MJ, Hong SH, Kapoor A, Goh JC, Eto M, Bennett L, Wang JY, Pan JJ, Saretsky TL, Perini RF, He CS, Mody K, Cella D; Health-related quality-of-life outcomes in patients with advanced renal cell carcinoma treated with lenvatinib plus pembrolizumab or everolimus versus sunitinib (CLEAR) a randomised, phase 3 study; LANCET ONCOLOGY; 2022; 768-780; DOI: 10.1016/S1470-2045(22)00212-1
IF: 54,433 Q1 D1

» CLINICAL GUIDES:

1. Barretina-Ginesta MP, Quindos M, Alarcon JD, Esteban C, Gaba L, Gomez C, Fidalgo JAP, Romero I, Santaballa A, Rubio-Perez MJ; SEOM-GEICO clinical guidelines on endometrial cancer (2021); CLINICAL & TRANSLATIONAL ONCOLOGY; 2022; 625-634; DOI: 10.1007/s12094-022-02799-7
2. Capdevila J, Gomez MA, Guillot M, Paez D, Pericay C, Safont MJ, Tarazona N, Vera R, Vidal J, Sastre J; SEOM-GEMCAD-TTD clinical guidelines for localized rectal cancer (2021); CLINICAL & TRANSLATIONAL ONCOLOGY; 2022; 646-657; DOI: 10.1007/s12094-022-02816-9
3. de la Haba-Rodriguez J, Lloret FF, Salgado MAV, Arce MO, Gutierrez AC, Jimenez JGD, Zambrano CB, Alonso RMR, Lopez RL, Salas NR; SEOM-GETTHI clinical guideline for the practical management of molecular platforms (2021); CLINICAL & TRANSLATIONAL ONCOLOGY; 2022; 693-702; DOI: 10.1007/s12094-022-02817-8

» ACTIVITY:

- N° ONGOING PROJECTS: 9
- N° GRANTED PROJECTS IN 2022: 3
- N° CLINICAL TRIALS: 137
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 10
 1. CIBER (CIBERONC: Mama y Tumores Colorectales)
 2. PAIDI CTS-234
 3. Alianza Andalucía-Roche, Oncología Médica de Precisión
 4. GEICAM FUNDACIÓN GRUPO ESPAÑOL DE INVESTIGACIÓN EN CÁNCER DE MAMA
 5. TTD GRUPO DE TRATAMIENTO DE LOS TUMORES DIGESTIVOS
 6. GEICO GRUPO ESPAÑOL DE INVESTIGACIÓN EN CÁNCER DE OVARIO
 7. GECF GRUPO ESPAÑOL DE CÁNCER DE PULMÓN
 8. GEIS GRUPO ESPAÑOL DE INVESTIGACIÓN DE SARCOMAS
 9. SOGUG SPANISH ONCOLOGY GENITO URINARY GROUP
 10. GETNE GRUPO ESPAÑOL DE TUMORES NEUROENDOCRINOS Y ENDOCRINOS
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 7
 1. INTENSIFICACIÓN (SAS) – ENRIQUE ARANDA AGUILAR
 2. JUNTA PROVINCIAL SEVILLA PREDOCTORAL AECC 2019- (ASOCIACIÓN ESPAÑOLA CONTRA EL CÁNCER) - ENRIQUE ARANDA AGUILAR
 3. INTENSIFICACIÓN (ISCIII) – JUAN DE LA HABA RODRÍGUEZ
 4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2021- (INSTITUTO DE SALUD CARLOS III) - CARMEN NAVARRETE SIRVENT
 5. NICOLÁS MONARDES (SAS) – ANTONIO RODRÍGUEZ ARIZA
 6. AYUDAS PARA CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES 2020- (AGENCIA ESTATAL DE INVESTIGACIÓN) - MARIA TERESA SANCHEZ MONTERO
 7. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - MARIA VICTORIA GARCÍA ORTIZ
- 15 AGREEMENTS WITH COMPANIES

GC07:

NEPHROLOGY. CELL DAMAGE IN CHRONIC INFLAMMATION

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Martín	Malo	Alejandro	R4	0000-0002-8010-7187
Agüera	Morales	M ^a Luisa	R3	
Espinosa	Hernández	Mario	R3	
Guerrero	Pavón	Fátima	R3	
Navarro	Cabello	M ^a Dolores	R3	
Rodríguez	Benot	Alberto	R3	
Santamaría	Olmo	Rafael	R3	
Soriano	Cabrera	Sagrario	R3	
Ariza	Fuentes	Francisco Javier	R2	
Carmona	Muñoz	Andrés	R2	
Crespo	Montero	Rodolfo	R2	
García	Montemayor	Victoria Eugenia	R2	
Amaral	Neiva	Francisco	R1	
López	Andreu	María	R1	
López	López	Isabel	R1	
Moyano	Peregrín	Cayetana	R1	
Ojeda	López	Raquel	R1	
Rabasco	Ruiz	Cristina	R1	
Rosa	Guerrero	Pedro	R1	
Torres	De Rueda	José Álvaro	R1	
Valdés	Díaz	Karen Cecilia	R1	
Jiménez	Moral	M ^a José	T	
Obrero	Sojo	Teresa	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cell activation	Renal Transplantation
Chronic renal failure	Inflammation
Microinflammation	Cellular stress
Cell therapy	Genomic damage
Hemodialysis	Endothelium

» HIGHLIGHTED PUBLICATIONS:

1. Guerrero F, Pulido V, Hamad S, Aljama P, Martín-Malo A, Carrillo-Carrion C; Incorporating zeolitic-imidazolate framework-8 nanoparticles into kidney scaffolds: a first step towards innovative renal therapies; NANOSCALE; 2022; 17543-17549; DOI: 10.1039/d2nr04246k
IF: 8,307 Q1
2. Sanchez-Agosta M, Rabasco C, Soler MJ, Shabaka A, Canllavi E, Fernández SJ, Cazorla JM, Lopez-Rubio E, Romera A, Barroso S, Huerta A, Calle L, Sierra M, Domínguez-Torres P, Moreno-Ramírez M, Alfonso S, Mascaros V, Coca A, Espinosa M; Anti-glomerular Basement Membrane Glomerulonephritis: A Study in Real Life; FRONTIERS IN MEDICINE; 2022; -; DOI: 10.3389/fmed.2022.889185
IF: 5,058 Q1
3. Naranjo J, Borrego F, Rocha JL, Salgueira M, Martín-Gomez MA, Orellana C, Morales A, Vallejo F, Hidalgo P, Rodríguez F, Garofano R, Gonzalez I, Esteban R, Espinosa M; Real clinical experience after one year of treatment with tolvaptan in patients with autosomal dominant polycystic kidney disease; FRONTIERS IN MEDICINE; 2022; -; DOI: 10.3389/fmed.2022.987092
IF: 5,058 Q1
4. Páez-Vega A, Gutierrez-Gutierrez B, Aguera ML, Facundo C, Redondo-Pachón D, Suner M, Lopez-Oliva MO, Yuste JR, Montejo M, Galeano-Alvarez C, Ruiz-San Millán JC, Los-Arcos I, Hernandez D, Fernandez-Ruiz M, Munoz P, Valle-Arroyo J, Cano A, Rodriguez-Benot A, Crespo M, Rodelo-Haad C, Lobo-Acosta MA, Garrido-Gracia JC, Vidal E, Guirado L, Cantisan S, Torre-Cisneros J; Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated With Antithymocyte Globulin: A Randomized Clinical Trial; CLINICAL INFECTIOUS DISEASES; 2022; 757-765; DOI: 10.1093/cid/ciab574
IF: 20,999 Q1 D1
5. Ocak G, Boenink R, Noordzij M, Bos WJW, Vikse BE, Cases A, Kerschbaum J, Helve J, Nordio M, Arici M, Mercadal L, Wanner C, Palsson R, Hommel K, De Meester J, Kostopoulou M, Santamaria R, Rodrigo E, Rydell H, Bell S, Massy ZA, Jager KJ, Kramer A; Trends in Mortality Due to Myocardial Infarction, Stroke, and Pulmonary Embolism in Patients Receiving Dialysis; JAMA NETWORK OPEN; 2022; -; DOI: 10.1001/jamanetworkopen.2022.7624
IF: 13,353 Q1 D1

» CLINICAL GUIDES:

1. José-Vicente Torregrosa, Jordi Bover, Mariano Rodríguez Portillo, Emilio González Parra, María Dolores Arenas, Francisco Caravaca, Marialuisa González Casaus, Alejandro Martín-Malo, Juan Francisco Navarro-González, Víctor Lorenzo, Pablo Molina, Minerva Rodríguez, Jorge Cannata Andia. RECOMENDACIONES DE LA SOCIEDAD ESPAÑOLA DE NEFROLOGÍA PARA EL MANEJO DE LAS ALTERACIONES DEL METABOLISMO ÓSEO-MINERAL EN LOS PACIENTES CON ENFERMEDAD RENAL CRÓNICA. 2021 (SEN-MM). Nefrologia. 2022;42 Supl 3:1-37. DOI: 10.1016/j.nefro.2022.03.007

» ACTIVITY:

- N° ONGOING PROJECTS: 7
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 22
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 5
 1. RICORS 040
 2. PAIDI CTS-260
 3. Medtronic PSP-RCS
 4. Hyperphosphatemia and CKD
 5. Calidad de las Unidades ERCA (ACERCA)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. INTENSIFICACIÓN (SAS) – ALEJANDRO MARTÍN MALO / SAGRARIO SORIANO CABRERA
 2. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- 2023 (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - ANDRÉS CARMONA MUÑOZ.
 3. Beca predoctoral de la Secretaría General de Universidades, Investigación y Tecnología, en régimen de concurrencia competitiva. Karen Cecilia Valdés Díaz 2021-2024
- 6 AGREEMENTS WITH COMPANIES

GC08:

HORMONES AND CANCER

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Castaño	Fuentes	Justo Pastor	R4	0000-0002-3145-7287
Gracia	Navarro	Francisco	R4	0000-0003-2128-4228
Agraz	Doblas	Antonio Manuel	R2	
Fuentes	Fayos	Antonio Carlos	R2	
Ibáñez	Costa	Alejandro	R2	
Pedraza	Arévalo	Sergio	R2	
Blanco	Acevedo	Cristóbal José	R1	
Blázquez	Encinas-Rey	Ricardo	R1	
Caro	Cuenca	M ^a Teresa	R1	
García	Vioque	Víctor	R1	
González	Pérez	Clara	R1	
Moreno	Montilla	M. ^a Trinidad	R1	
Moreno	Moreno	Paloma	R1	
Padillo	Cuenca	José Carlos	R1	
Sánchez	Frías	Marina Esther	R1	

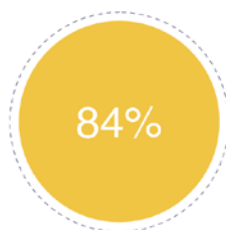
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cellular and molecular endocrine oncology

Spliceosome

Pancreatic cancer

Somatostatin

Neuroendocrine tumors

Somatostatin-receptors

Pituitary tumors

Cortistatin

Alternative splicing

Ghrelin

Splice-variants

Signaling

» HIGHLIGHTED PUBLICATIONS:

1. Pedraza-Arevalo S, Ibanez-Costa A, Blazquez-Encinas R, Branco MR, Vazquez-Borrego MC, Herrera-Martinez AD, Venegas-Moreno E, Serrano-Blanch R, Arjona-Sanchez A, Galvez-Moreno MA, Korbonits M, Soto-Moreno A, Gahete MD, Charalambous M, Luque RM, Castaño JP; Epigenetic and post-transcriptional regulation of somatostatin receptor subtype 5 (SST5) in pituitary and pancreatic neuroendocrine tumors; MOLECULAR ONCOLOGY; 2022; 764-779; DOI: 10.1002/1878-0261.13107

IF: 7,449 Q1 D3

2. Moreno-Moreno P, Ibanez-Costa A, Venegas-Moreno E, Fuentes-Fayos AC, Alhambra-Exposito MR, Fajardo-Montanana C, Garcia-Martinez A, Dios E, Vazquez-Borrego MC, Remon-Ruiz P, Camara R, Lamas C, Padillo-Cuenca JC, Solivera J, Cano DA, Gahete MD, Herrera-Martinez AD, Pico A, Soto-Moreno A, Galvez-Moreno MA, Castaño JP, Luque RM; Integrative Clinical, Radiological, and Molecular Analysis for Predicting Remission and Recurrence of Cushing Disease; JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM; 2022; E2938-E2951; DOI: 10.1210/clinem/dgac172

IF: 6,134 Q1 D3

3. Ibáñez-Costa A, Perez-Sanchez C, Patino-Trives AM, Luque-Tevar M, Font P, de la Rosa IA, Roman-Rodriguez C, Abalos-Aguilera MC, Conde C, Gonzalez A, Pedraza-Arevalo S, del Rio-Moreno M, Blazquez-Encinas R, Segui P, Calvo J, Castro RO, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castano-Fuentes JP, Luque RM, Collantes-Estevez E, Lopez-Pedraza C; Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy; ANNALS OF THE RHEUMATIC DISEASES; 2022; 56-67; DOI: 10.1136/annrheumdis-2021-220308

IF: 27,973 Q1 D1

» ACTIVITY:

- Nº ONGOING PROJECTS: 5
- Nº GRANTED PROJECTS IN 2022: 4
- Nº PHD THESES: 1
- Nº PATENTS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 13
 1. CIBER Physiopathology of Obesity and Nutrition – CIBERobn
 2. PAIDI BIO-139
 3. COST – CA21116 – Identification of biological markers for prevention and translational medicine in pancreatic cancer (TRANSPAN)
 4. TransBioNet – Spanish Bioinformatics Network for Clinical Research
 5. European Neuroendocrine Tumor Society (ENETS): Advisory Board and Educational and Lung NET task forces
 6. European Society of Endocrinology (ESE). Pituitary and Neuroendocrinology Focus Area.
 7. Spanish Group on Endocrine and Neuroendocrine Tumors (GETNE)
 8. Spanish Molecular Registry of Hypophyseal Adenomas (REMAH)
 9. Agrifood Campus of International Excellence (ceiA3)
 10. Rare Cancer Genomics (IARC, WHO)
 11. Spanish Society of Endocrinology and Nutrition (SEEN). Area of Knowledge of Neuroendocrinology
 12. Andalusian Society of Endocrinology, Diabetes and Nutrition (SAEDYN). Area of Knowledge of Neuroendocrinology
 13. Red Bioinformática Traslacional TransBioNet.
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 9
 1. FPU (MEC) – ANTONIO CARLOS FUENTES FAYOS.
 2. FPU (MEC) – RICARDO BLÁZQUEZ ENCINAS REY.
 3. FPU (UCO) – MARÍA TRINIDAD MORENO MONTILLA.
 4. FPU (MEC) – VÍCTOR GARCÍA VIOQUE.
 5. UNDERGRADUATE STUDENT LABORATORY EXPERIENCE GRANT 2022- (BRITISH SOCIETY FOR NEUROENDOCRINOLOGY) - ÁNGELA MARÍA SUÁREZ
 6. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2019- (INSTITUTO DE SALUD CARLOS III) - ALEJANDRO IBAÑEZ COSTA
 7. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2017- (INSTITUTO DE SALUD CARLOS III) - EMILIA MARIA ALORS PEREZ
 8. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - ANTONIO MANUEL AGRAZ DOBLAS.
 9. CONVOCATORIA COMPLEMENTARIA DE AYUDAS PARA LA RECUALIFICACIÓN DEL SISTEMA UNIVERSITARIO ESPAÑOL. AYUDAS MARÍA ZAMBRANO PARA LA ATRACCIÓN DE TALENTO INTERNACIONAL. MINISTERIO DE UNIVERSIDADES-UNIVERSIDAD DE CORDOBA-FEDER. SERGIO PEDRAZA AREVALO
- 2 AGREEMENTS WITH COMPANIES
- INTERNATIONAL PROJECTS: 2
 1. ALEJANDRO IBAÑEZ COSTA; Neuroendocrine tumour patient-derived xenografts: tools for pre-clinical testing. Funding Agency: SOCIETY FOR ENDOCRINOLOGY; Reference: BSE-ECG-2021-01
 2. ALEJANDRO IBAÑEZ COSTA; Detection of small nuclear RNA mutations in neuroendocrine tumours. Funding Agency: BRITISH SOCIETY FOR NEUROENDOCRINOLOGY; Reference: BSN-Und-2022-01
- AWARDS: 1
 1. ANTONIO CARLOS FUENTES FAYOS; “Caracterización clínico-molecular de tumores hipofisarios para la mejora del manejo del paciente; SOCIEDAD ANDALUZA DE ENDOCRINOLOGÍA, DIABETES Y NUTRICIÓN

NUTRIGENOMICS. METABOLIC SYNDROME**SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES****» TEAM**

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
López	Miranda	José	R4	0000-0002-8844-0718
Delgado	Lista	Francisco Javier	R4	0000-0002-2982-2716
Pérez	Jiménez	Francisco	R4	0000-0001-9808-1280
Pérez	Martínez	Pablo	R4	0000-0001-7716-8117
Yubero	Serrano	Elena	R4	0000-0002-2733-5359
Alcalá	Díaz	Juan Francisco	R3	
Blanco	Molina	M ^a Ángeles	R3	
Camargo	García	Antonio	R3	
Fernández	De La Puebla	Rafael Ángel	R3	
Fuentes	Jiménez	Francisco	R3	
García	Ríos	Antonio	R3	
López	Jiménez	Luciano	R3	
Montero	Pérez-Barquero	Manuel	R3	
Pérez	Caballero	Anabel	R3	
Rangel	Zuñiga	Oriol Alberto	R3	
Arenas	De Larriva	Antonio Pablo	R2	
Criado	García	Juan	R2	
De La Cruz	Ares	Silvia	R2	
Díaz	Cáceres	Alberto	R1	
Gómez	Delgado	Francisco	R2	
Gómez	Luna	Purificación	R2	
Gutiérrez	Mariscal	Francisco Miguel	R2	
Jiménez	Morales	Anabel	R2	
León	Acuña	Ana	R2	
López	Moreno	Javier	R2	
Martín	Piedra	Laura	R2	
Mora	Ortiz	Marina	R2	
Ojeda	Rodríguez	Ana	R2	
Pino	Ángeles	Almudena	R2	
Rivas	García	Lorenzo	R2	
Torres	Peña	José David	R2	
Vaquero	Álvarez	Manuel	R2	
Fernández	Gándara	Carolina	R1	
García	Fernández	Helena	R1	
Millán	Orge	Marta	R1	
Molero	Payán	Rafael	R1	
Podadera	Herreros	Alicia	R1	
Porras	Pérez	Esther	R1	
Romero	Cabrera	Juan Luis	R1	
Arenas	Montes	Javier	R1	
Vega	Rojas	Ana María	R1	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Villasanta	González	Alejandro	R1
Morillo-Velarde	Castro	Blanca	N
Romero	Monterroso	Margarita	N
Lopez	Moreno	Alejandro	R1
Perez	Cardelo	María Magdalena	R1
Carreras	Calero	Rosario	T
Castro	Montero	Sofía	T
Morales	Martínez	Jose Andrés	T
Peña	Orihuela	Patricia Judith	T
Quintana	Navarro	Gracia María	T

» SCIENTIFIC PRODUCTION



PUBLICATIONS

PUBLICATIONS
IN FIRST DECILE

PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Atherosclerosis	Inflammation
Endothelial dysfunction	Oxidative stress
Metabolic syndrome	Cholesterol
Type 2 diabetes mellitus	Gene expression
Mediterranean diet	Proteomics
Olive oil	Nutrigenetics
Polyphenols	Nutrigenomics
Antioxidants	Gut microbiota

» HIGHLIGHTED PUBLICATIONS:

- Delgado-Lista J, Alcalá-Díaz JF, Torres-Pena JD, Quintana-Navarro GM, Fuentes F, García-Ríos A, Ortiz-Morales AM, González-Requero AI, Pérez-Caballero AI, Yubero-Serrano EM, Rangel-Zuniga OA, Camargo A, Rodríguez-Cantalejo F, López-Segura F, Badimon L, Ordovas JM, Pérez-Jiménez F, Pérez-Martínez P, López-Miranda J; Long-term secondary prevention of cardiovascular disease with a Mediterranean diet and a low-fat diet (CORDIOPREV) a randomised controlled trial; LANCET; 2022; 1876-1885; DOI: 10.1016/S0140-6736(22)00122-2
IF: 202,731 Q1 D1
- Vals-Delgado C, Alcalá-Díaz JF, Molina-Abril H, Roncero-Ramos I, Caspers MPM, Schuren FHJ, Van den Broek TJ, Luque R, Pérez-Martínez P, Katsiki N, Delgado-Lista J, Ordovas JM, van Ommen B, Camargo A, López-Miranda J; An altered microbiota pattern precedes Type 2 diabetes mellitus development: From the CORDIOPREV study; JOURNAL OF ADVANCED RESEARCH; 2022; 99-108; DOI: 10.1016/j.jare.2021.05.001
IF: 12,822 Q1 D2
- Mora-Ortiz M, Alcalá-Díaz JF, Rangel-Zuniga OA, Arenas-de Larriva AP, Abollo-Jiménez F, Luque-Córdoba D, Priego-Capote F, Malagón MM, Delgado-Lista J, Ordovas JM, Pérez-Martínez P, Camargo A, López-Miranda J; Metabolomics analysis of type 2 diabetes remission identifies 12 metabolites with predictive capacity: a CORDIOPREV clinical trial study; BMC MEDICINE; 2022; -; DOI: 10.1186/s12916-022-02566-z
IF: 11,806 Q1 D2

4. Romero-Cabrera JL, Garaulet M, Jimenez-Torres J, Alcalá-Díaz JF, Navarro GMQ, Martín-Piedra L, Torres-Pena JD, Rodríguez-Cantalejo F, Rangel-Zuniga OA, Yubero-Serrano EM, Luque RM, Ordovas JM, Lopez-Miranda J, Perez-Martinez P, Garcia-Rios A; Chronodisruption and diet associated with increased cardiometabolic risk in coronary heart disease patients: the CORDIOPREV study; TRANSLATIONAL RESEARCH; 2022; 79-92; DOI: 10.1016/j.trsl.2021.11.001
IF: 10,171 Q1 D2

5. Podadera-Herreros A, Alcalá-Díaz JF, Gutierrez-Mariscal FM, Jimenez-Torres J, De La Cruz-Ares S, Arenas-de Larriva AP, Cardelo MP, Torres-Pena JD, Luque RM, Ordovas JM, Delgado-Lista J, Lopez-Miranda J, Yubero-Serrano EM; Long-term consumption of a mediterranean diet or a low-fat diet on kidney function in coronary heart disease patients: The CORDIOPREV randomized controlled trial; CLINICAL NUTRITION; 2022; 552-559; DOI: 10.1016/j.clnu.2021.12.041
IF: 7,643 Q1 D2

» ACTIVITY:

- Nº ONGOING PROJECTS: 12
- Nº GRANTED PROJECTS IN 2022: 4
- Nº CLINICAL TRIALS: 27
- Nº PHD THESES: 5

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. CIBER Physiopathology of Obesity and Nutrition (CIBERObn)
 2. PAIDI CTS-212: NUTRITION AND DISEASE
 3. PAIDI CTS-525: INTERACTION GENES AND ENVIRONMENT
 4. NUTRIEPIGEN (NutriEpiGen is a working group of Spanish researchers specialized in the area of lifestyle and epigenetics; Funded by the Ministry of Science, Innovation and Universities of Spain (reference AGL 2017-90623-RED)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 17
 1. INTENSIFICACIÓN (SAS) – JOSÉ LÓPEZ MIRANDA
 2. PFIS (ISCIII) – MAGDALENA PÉREZ CARDELO
 3. ACCIÓN B - CLÍNICOS INVESTIGADORES. REFUERZO ANUAL DE LA ACTIVIDAD INVESTIGADORA EN LAS UGC DEL SAS 2017- (SERVICIO ANDALUZ DE SALUD) - JUAN FRANCISCO ALCALÁ DÍAZ
 4. ACCIÓN C. IMPULSO DE LA INVESTIGACIÓN TRASLACIONAL DE LAS UGC (PROGRAMA NICOLÁS MONARDES) 2019- (SERVICIO ANDALUZ DE SALUD) - ELENA YUBERO SERRANO
 5. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2021- (INSTITUTO DE SALUD CARLOS III) - LORENZO RIVAS GARCIA
 6. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2021- (INSTITUTO DE SALUD CARLOS III) - ANA OJEDA RODRIGUEZ
 7. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS RÍO HORTEGA 2020- (INSTITUTO DE SALUD CARLOS III) - ANTONIO PABLO ARENAS DE LARRIVA
 8. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS RÍO HORTEGA 2021- (INSTITUTO DE SALUD CARLOS III) - JUAN LUIS ROMERO CABRERA
 9. AMPLIACIÓN - MIGUEL SERVET TIPO II 2019- (INSTITUTO DE SALUD CARLOS III) - ANTONIO CAMARGO GARCÍA
 10. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2019- (INSTITUTO DE SALUD CARLOS III) - ALICIA PODADERA HERREROS
 11. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2020- (INSTITUTO DE SALUD CARLOS III) - HELENA MARIA GARCIA FERNANDEZ
 12. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2021- (INSTITUTO DE SALUD CARLOS III) - ESTHER PORRAS PEREZ
 13. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS JUAN RODÉS 2019- (INSTITUTO DE SALUD CARLOS III) - ANA LEÓN ACUÑA
 14. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS MIGUEL SERVET 2019- (INSTITUTO DE SALUD CARLOS III) - ORIOL ALBERTO RANGEL ZUÑIGA
 15. AYUDAS PARA CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES 2020- (AGENCIA ESTATAL DE INVESTIGACIÓN) - ANA LESMES ORTEGA
 16. CO-FINANCIACIÓN PROYECTO P2Med-IMIBIC- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - MARINA MORA ORTIZ
 17. CO-FINANCIACIÓN PROYECTO P2Med-IMIBIC- (UNIVERSIDAD DE CORDOBA) - ALMUDENA PINO ANGELES
- o 17 AGREEMENTS WITH COMPANIES

GC10:

HORMONAL REGULATION OF ENERGY BALANCE, PUBERTY AND REPRODUCTION

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Tena	Sempere	Manuel	R4	0000-0002-4741-5567
Avendaño	Herrador	M ^a Soledad	R3	
Castellano	Rodríguez	Juan Manuel	R3	
Gaytán	Luna	Francisco	R3	
Pinilla	Jurado	Leonor	R3	
Roa	Rivas	Juan	R3	
Sánchez-Garrido	Nogueras	Miguel	R3	
Vázquez	Villar	M ^a Jesús	R3	
Barroso	Romero	Alexia	R2	
García	Galiano	David	R2	
León	Téllez	Silvia	R2	
Pineda	Reyes	Rafael	R2	
Sobrino	Cabello	Verónica	R2	
Torres	Jiménez	Encarnación	R2	
Velasco	Aguayo	Inmaculada	R2	
Aranda	Torrecillas	Álvaro	R1	
Daza	Dueñas	Silvia	R1	
Jiménez	Puyer	Manuel	R1	
Perdices	López	Cecilia María	R1	
Rodríguez	Vázquez	Elvira	R1	
Ruiz	Cruz	Miguel	R1	
Serrano	López	Víctor Manuel	R1	
Torres	Granados	Carmen	R1	
Uceda	Rodríguez	Esperanza	R1	
Cerero	Tejero	Laura	T	
Espejo	Cordero	Azahara	T	
Rodríguez	Sánchez	Ana Belén	T	
Sánchez	Tapia	M ^a Jesús	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Puberty	Gonadotropins
Fertility	Gonads
Obesity	Polycystic ovary syndrome
Metabolism	Endometriosis
Energy sensors	Hypogonadism
Kisspeptins	MicroRNAs
Neuropeptides	Epigenetics

» HIGHLIGHTED PUBLICATIONS:

1. Roa J, Ruiz-Cruz M, Ruiz-Pino F, Onieva R, Vazquez MJ, Sanchez-Tapia MJ, Ruiz-Rodriguez JM, Sobrino V, Barroso A, Heras V, Velasco I, Perdices-Lopez C, Ohlsson C, Avendano MS, Prevot V, Poutanen M, Pinilla L, Gaytan F, Tena-Sempere M; Dicer ablation in Kiss1 neurons impairs puberty and fertility preferentially in female mice; NATURE COMMUNICATIONS; 2022; -; DOI: 10.1038/s41467-022-32347-4
IF: 17,694 Q1 D1
2. Perdices-Lopez C, Avendano MS, Barroso A, Gaytan F, Ruiz-Pino F, Vazquez MJ, Leon S, Song YB, Sobrino V, Heras V, Romero-Ruiz A, Roa J, Mayor F, Murga C, Pinilla L, Kaiser UB, Tena-Sempere M; Connecting nutritional deprivation and pubertal inhibition via GRK2-mediated repression of kisspeptin actions in GnRH neurons; METABOLISM-CLINICAL AND EXPERIMENTAL; 2022; -; DOI: 10.1016/j.metabol.2022.155141
IF: 13,934 Q1 D1
3. Ruohonen ST, Gaytan F, Gaudi AU, Velasco I, Kukoricza K, Perdices-Lopez C, Franssen D, Guler I, Mehmood A, Elo LL, Ohlsson C, Poutanen M, Tena-Sempere M; Selective loss of kisspeptin signaling in oocytes causes progressive premature ovulatory failure; HUMAN REPRODUCTION; 2022; 806-821; DOI: 10.1093/humrep/deab287
IF: 6,353 Q1 D2
4. Sanchez-Garrido MA, Garcia-Galiano D, Tena-Sempere M; Early programming of reproductive health and fertility: novel neuroendocrine mechanisms and implications in reproductive medicine; HUMAN REPRODUCTION UPDATE; 2022; 346-375; DOI: 10.1093/humupd/dmac005
IF: 17,179 Q1 D1
5. Manfredi-Lozano M, Leysen V, Adamo M, Paiva I, Rovera R, Pignat JM, Timzoura FE, Candlish M, Eddarkaoui S, Malone SA, Silva MSB, Trova S, Imbernon M, Decoster L, Cotellessa L, Tena-Sempere M, Claret M, Paoloni-Giacobino A, Plassard D, Paccou E, Vionnet N, Acierno J, Maceski AM, Lutti A, Pfrieger F, Rasika S, Santoni F, Boehm U, Ciofi P, Buee L, Haddjeri N, Boutillier AL, Kuhle J, Messina A, Draganski B, Giacobini P, Pitteloud N, Prevot V; GnRH replacement rescues cognition in Down syndrome; SCIENCE; 2022; 1064-+; DOI: 10.1126/science.abq4515
IF: 63,832 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 7
- N° GRANTED PROJECTS IN 2022: 1
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. CIBEROBN (CIBER on Obesity and Nutrition)
 2. PAIDI BIO-310
 3. Theme Area: Reproductive Endocrinology (European Society of Endocrinology)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 10
 1. MARIE SKLODOWSKA-CURIE: INDIVIDUAL FELLOWSHIPS- EUROPEAN FELLOWSHIPS 2018- (COMISIÓN EUROPEA) - DAVID GARCÍA GALIANO
 2. MARIE SKLODOWSKA-CURIE: INDIVIDUAL FELLOWSHIPS- EUROPEAN FELLOWSHIPS 2019- (COMISIÓN EUROPEA) - SILVIA LEON TELLEZ
 3. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS MIGUEL SERVET 2019- (INSTITUTO DE SALUD CARLOS III) - MARIA SOLEDAD AVENDAÑO HERRADOR
 4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2020- (INSTITUTO DE SALUD CARLOS III) - CARMEN TORRES GRANADOS
 5. AYUDAS PARA LA PROMOCIÓN DE EMPLEO JOVEN E IMPLANTACIÓN DE LA GARANTÍA JUVENIL EN I+D+I- (MINISTERIO DE ASUNTOS ECONÓMICOS Y TRANSFORMACIÓN DIGITAL) - ISMAEL LUNA ALVAREZ

6. MARIE SKLODOWSKA-CURIE: CO-FUNDING OF REGIONAL, NATIONAL AND INTER-NATIONAL PROGRAMMES 2018- (COMISIÓN EUROPEA) - SILVIA LEON TELLEZ
 7. Programa Formación Profesorado Universitario – Contrato FPU – MIGUEL RUIZ CRUZ.
 8. Programa de Formación de Doctores – Programa FPI – ELVIRA RODRÍGUEZ VÁZQUEZ.
 9. Agencia Estatal de Investigación – Programa JUAN DE LA CIERVA (FORMACIÓN) – VERÓNICA SOBRINO CABELLO.
 10. Programa Formación Profesorado Universitario – Contrato FPU – SILVIA DAZA MAÑAS.
- 2 AGREEMENTS WITH COMPANIES
 - INTERNATIONAL PROJECTS: 3
1. DAVID GARCÍA GALIANO; CRISPR/Cas9 technology for conditional (cell-specific) genome editing in somatic cells. Funding Agency: BRITISH SOCIETY FOR NEUROENDOCRINOLOGY; Reference: BSE-PSG-2021-02
 2. MANUEL TENA SEMPERE / DAVID GARCÍA GALIANO; Challenging the KNDy Hypothesis Using CRISPR-Cas9 Genome Editing: Evaluation of the Role of Neurokinin B and Dynorphin in Kiss1 neurons in the Control of Fertility. Funding Agency: EUROPEAN UNION – MSCA PROGRAM; Reference: MSCA-2018-841482
 3. MANUEL TENA SEMPERE / SILVIA LEÓN TÉLLEZ; Addressing the Roles of Tachykinins in the Control of Ovulation: Focus on the Substance-P/Tachykinin Receptor Type 1 (Tac1/Tacr1) System. Funding Agency: EUROPEAN UNION – MSCA PROGRAM; Reference: MSCA-2019-895420

GC11:

METABOLISM AND ADIPOCYTE DIFFERENTIATION-METABOLIC SYNDROME

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Malagón	Poyato	M ^a del Mar	R4	0000-0002-2419-2727
Gordon	Bermúdez-Coronel	Ana	R3	
Guzmán	Ruiz	Rocío	R3	
Clemente	Postigo	M ^a Mercedes	R2	
Soler	Vázquez	M ^a del Carmen	R2	
Garrido	Rascón	Elena	R1	
Ruiz	Garcia	Olga	R1	
López	Alcalá	Jaime	R1	
Tercero	Alcázar	Carmen	R1	
Salido	Martínez	Elena	T	

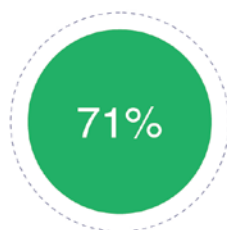
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Adipose tissue	Insulin signaling/Insulin resistance
Adipocytes	Intracellular traffic
Adipogenesis	Lipid droplets
Bariatric surgery	Lipid metabolism
Cellular stress	Microscopy
Extracellular matrix	Obesity
Fibrosis	Omics
Cell imaging	Protein networks

» HIGHLIGHTED PUBLICATIONS:

1. Navarro-Ruiz MC, Lopez-Alcala J, Diaz-Ruiz A, Del Moral SD, Tercero-Alcazar C, Nieto-Calonge A, Lopez-Miranda J, Tinahones FJ, Malagon MM, Guzman-Ruiz R; Understanding the adipose tissue acetylome in obesity and insulin resistance; TRANSLATIONAL RESEARCH; 2022; 15-32; DOI: 10.1016/j.trsl.2022.02.008

IF: 10,171 Q1 D1

2. Navarro-Ruiz MC, Soler-Vazquez MC, Diaz-Ruiz A, Peinado JR, Calonge AN, Sanchez-Ceinos J, Tercero-Alcazar C, Lopez-Alcala J, Rangel-Zuniga OA, Membrives A, Lopez-Miranda J, Malagon MM, Guzman-Ruiz R; Influence of Protein Carbonylation on Human Adipose Tissue Dysfunction in Obesity and Insulin Resistance; BIOMEDICINES; 2022; -; DOI: 10.3390/biomedicines10123032

IF: 4,757 Q2 D5

3. de la Rosa IA, Lopez-Montilla MD, Roman-Rodriguez C, Perez-Sanchez C, Gomez-Garcia I, Lopez-Medina C, Ladehesa-Pineda ML, Abalos-Aguilera MD, Ruiz D, Patino-Trives AM, Luque-Tevar M, Anon-Onate I, Perez-Galan MJ, Guzman-Barbarroja R, Malagon MM, Lopez-Pedrerera C, Escudero-Contreras A, Collantes-Estevez E, Barbarroja N; The clinical and molecular cardiometabolic fingerprint of an exploratory psoriatic arthritis cohort is associated with the disease activity and differentially modulated by methotrexate and apremilast; JOURNAL OF INTERNAL MEDICINE; 2022; 676-693; DOI: 10.1111/joim.13447

IF: 13,068 Q1 D1

4. Mora-Ortiz M, Alcalá-Díaz JF, Rangel-Zuniga OA, Arenas-de Larriva AP, Abollo-Jimenez F, Luque-Cordoba D, Priego-Capote F, Malagon MM, Delgado-Lista J, Ordovas JM, Perez-Martinez P, Camargo A, Lopez-Miranda J; Metabolomics analysis of type 2 diabetes remission identifies 12 metabolites with predictive capacity: a CORDIOPREV clinical trial study; BMC MEDICINE; 2022; -; DOI: 10.1186/s12916-022-02566-z

IF: 11,806 Q1 D2

5. Ortiz-Alvarez L, Xu HW, Di XY, Kohler I, Osuna-Prieto FJ, Acosta FM, Vilchez-Vargas R, Link A, Plaza-Diaz J, van der Stelt M, Hankemeier T, Clemente-Postigo M, Tinahones FJ, Gil A, Rensen PCN, Ruiz JR, Martinez-Tellez B; Plasma Levels of Endocannabinoids and Their Analogues Are Related to Specific Fecal Bacterial Genera in Young Adults: Role in Gut Barrier Integrity; NUTRIENTS; 2022; 14(10):2143. DOI: 10.3390/nu14102143

IF: 6,706 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. CIBER Physiopathology of Obesity and Nutrition (CIBERObn), Instituto de Salud Carlos III. [<http://www.ciberobn.es/en>]
 2. PAIDI BIO 139 (Junta de Andalucía)
 3. Research Network on Adipose Plasticity and Related Pathologies. Adipoplast. Ministry of Economy and Competitiveness, Spain.
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - MARIA DEL MAR MALAGÓN POYATO
 2. ALBERT RENOLD TRAVEL FELLOWSHIP PROGRAMME 2022- (EUROPEAN FOUNDATION FOR THE STUDY OF DIABETES) - MARIA MERCEDES CLEMENTE POSTIGO
 3. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - ANA GORDON BERMUDEZ-CORONEL
 4. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - ROCIO GUZMAN RUIZ
 5. AYUDAS MARGARITA SALAS PARA LA FORMACIÓN DE JÓVENES DOCTORES- (MINISTERIO DE UNIVERSIDADES)- M^a CARMEN SOLER VÁZQUEZ
- AWARDS:1
 1. ANA GORDON BERMUDEZ-CORONEL. PREMIO A LA MEJOR COMUNICACIÓN ORAL. 63º CONGRESO DE LA SOCIEDAD ESPAÑOLA DE ENDOCRINOLOGÍA Y NUTRICIÓN (SEEN).

GC12:

CLINICAL AND EPIDEMIOLOGICAL RESEARCH IN PRIMARY CARE (GICEAP)

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Pérula	De Torres	Luis Ángel	R4	0000-0002-8784-4905
Aguado	Taberne	Cristina	R3	
Aparicio	Martínez	Pilar	R3	
Arias	Blanco	M ^a del Carmen	R3	
Arias	Vega	M ^a Raquel	R3	
Blanco	Hungría	Antonio	R3	
Castro	Jiménez	Rafael Ángel	R3	
Fernández	García	José Ángel	R3	
Fonseca	Del Pozo	Francisco Javier	R3	
González	Carretero	Juan Ignacio	R3	
González	Lama	Jesús	R3	
Hidalgo	Requena	Antonio	R3	
Jiménez	García	Celia	R3	
Martín	Rioboo	Enrique	R3	
Montero	Monterroso	José Luis	R3	
Muñoz	Del Castillo	Francisco	R3	
Olaya	Caro	Inmaculada	R3	
Parras	Rejano	Juan Manuel	R3	
Pérula	De Torres	Carlos	R3	
Carrera	González	M ^a del Pilar	R3	
Ramírez	Baena	Miguel	R3	
Ranchal	Sánchez	Antonio	R3	
Redondo	Sánchez	Juana	R3	
Rich	Ruiz	Manuel	R3	
Roldán	Villalobos	Ana	R3	
Ruiz	Moral	Roger	R3	
Ruiz	Moruno	Francisco Javier	R3	
Serrano	Merino	Jesús	R3	
Silva	Aycaguer	Luis Carlos	R3	
Vaquero	Abellán	Manuel	R3	
Villegas	Becerril	Enrique	R3	
Hernández	Ascanio	José	R2	
Leiva	Cepas	Fernando	R2	
Moscoso	Jara	Alicia	R2	
Muñoz	Alcaraz	M ^a Nieves	R2	
Portero	De La Cruz	Silvia	R2	
Romero	Rodríguez	Esperanza María	R2	
Gracia	Rodríguez	Raquel	R1	
Castro	Moreno	Jaime Jesús	R1	
López	Ruiz	María Victoria	R1	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
López	Ruiz	Victoria	R1
Marín	González	Beatriz	R1
Muñoz	Gómez	Rafaela	R1
Navarrete	Martínez	Esther	R1
Sánchez	Cañete	Eva María	R1
Padilla	Maestre	Jorge Rafael	N
Pérula	Jiménez	Celia	N
Carretero	Anibarro	Enrique	ADM
De la Barrera	Aranda	Elena	T
Montes	Redondo	Gertrudis	T

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Primary Care	Communication and health
Epidemiology	Community Health
Preventive Medicine	Public Health
Applied Research	Environment
Family and Community Medicine	

» HIGHLIGHTED PUBLICATIONS:

- Munoz-Gomez R, Navarrete-Martinez E, Serrano-Merino J, Silva-Gil F, Roldan-Villalobos A, Martin-Rioboo E, Ruiz-Moruno J, Romero-Rodriguez E, Gonzalez-Lama J, Vaquero-Abellan M, Perula-de-Torres LA; The usefulness of the Spanish version of the STOP-Bang questionnaire for screening for moderate or severe sleep apnea syndrome in primary care; *FRONTIERS IN PUBLIC HEALTH*; 2022; -; DOI: 10.3389/fpubh.2022.975114
IF: 6,461 Q1 D1
- Naranjo-Rojas, A ; Perula-de-Torres, LA ; Molina-Recio, G; Patients, caregivers, and healthcare professionals' needs when designing the content of a mobile application for the clinical monitoring of patients with chronic obstructive pulmonary disease and home oxygen therapy: A user-centered design; *INTERNET INTERVENTIONS-THE APPLICATION OF INFORMATION TECHNOLOGY IN MENTAL AND BEHAVIOURAL HEALTH*; 2022 DOI: 10.1016/j.invent.2022.100552
IF 5.358 Q1
- Jurado-Castro JM, Munoz-Lopez M, Ledesma AST, Ranchal-Sanchez A; Effectiveness of Exercise in Patients with Overweight or Obesity Suffering from Knee Osteoarthritis: A Systematic Review and Meta-Analysis; *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*; 2022; -; DOI: 10.3390/ijerph191710510
IF: 4,614 Q1 D3
- Jimenez-Merida R, Romero-Saldana M, De-Pedro-Jimenez D, Alcaide-Leyva JM, Canton-Habas V, Alvarez-Fernandez C, Vaquero-Abellan M; Lifestyle, Type of Work, and Temporary Disability: An Incidence Study of the Working Population; *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*; 2022; -; DOI: 10.3390/ijerph192214932
IF: 4,614 Q1 D3

5. Romero-Rodriguez E, Amezcua-Prieto C, Suarez-Varela MM, Ayan-Perez C, Mateos-Campos R, Martin-Sanchez V, Ortiz-Moncada R, Redondo-Martin S, Ojeda JA, Delgado-Rodriguez M, Abellan GB, Alonso-Molero J, Cancela-Carral JM, Juan LFV, Fernandez-Villa T; Patterns of Alcohol Consumption and Use of Health Services in Spanish University Students: UniHcos Project; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph19106158
IF: 4,614 Q1 D3

» **CLINICAL GUIDES:**

1. Plaza V, Albid I, Alvarez C, Blanco M, Ferreira J, Garcia G, Gomez-Outes A, Gomez F, Hidalgo A, Korta J, Molina J, Pellegrini FJ, Perez M, Plaza J, Praena M, Quirce S, Sanz J; Spanish Asthma Management Guidelines (GEMA) VERSION 5.1. Highlights and Controversies; ARCHIVOS DE BRONCONEUMOLOGIA; 2022; 150-158; DOI: 10.1016/j.arbres.2021.05.010

» **ACTIVITY:**

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 6
 1. CIBERFES: CIBER on Fragility and Healthy Aging
 2. Primary Care Prevention and Health Promotion Network (Rediapp), ISCIII
 3. Healthcare Research Unit (Investén-ISCIII)
 4. PAIDI CTS-452
 5. Global Burden of Diseases Collaborator Network
 6. RICAPPRed de investigación en cronicidad, atención primaria y promoción de la salud. Grupo RICORS (Redes de investigación cooperativa orientadas a resultados en salud). Instituto de Salud Carlos III (RD21/0016/0001).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - ESPERANZA ROMERO RODRIGUEZ.
 2. INTENSIFICACIÓN (SAS) – JESÚS GONZÁLEZ LAMA
- 6 AGREEMENTS WITH COMPANIES
- 1 INTERNATIONAL PROJECTS
 1. ESPERANZA ROMERO RODRIGUEZ; VACCELERATE - European Corona Vaccine Trial Accelerator Platform Funding Agency: COMISIÓN EUROPEA; Reference: SC1-CORONAVIRUS-01

GC13:

CALCIUM METABOLISM. VASCULAR CALCIFICATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Rodríguez	Portillo	Mariano	R4	0000-0002-9380-6614
Muñoz	Castañeda	Juan Rafael	R4	0000-0002-9341-0724
Aguilera	Tejero	Escolástico	R4	0000-0002-3357-3142
Canalejo	Raya	Antonio Luis	R3	
López	Villalba	Ignacio	R3	
Martínez	Moreno	Julio Manuel	R2	
Pendón	Ruiz de Mier	M ^a Victoria	R2	
Pineda	Martos	Carmen María	R2	
Raya	Bermúdez	Ana Isabel	R2	
Rodelo	Haad	Cristian Roberto	R2	
Rodríguez	Ortiz	M ^a Encarnación	R2	
Vergara	Segura	Noemi	R2	
López	Baltanás	Rodrigo	R1	
Rios	Varo	Rafael	R1	
Vidal	Carrascosa	Ángela	R1	
Membrives	González	Cristina	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Calcium	Vascular calcification
Phosphorus	Renal failure
Mineral metabolism	Bone mineral disease
Parathyroid glands	VDR
PTH	CaSR
Calcification	Mesenchymal stem cells
Uremia	Wnt/ beta-catenin
HPTH2°	FGF23

» HIGHLIGHTED PUBLICATIONS:

1. Vidal A, Pineda C, Raya AI, Rios R, Espartero A, Munoz-Castaneda JR, Rodriguez M, Aguilera-Tejero E, Lopez I; Oral Acid Load Down-Regulates Fibroblast Growth Factor 23; NUTRIENTS; 2022; -; DOI: 10.3390/nu14051041
IF: 6,706 Q1 D2
2. Paez-Vega A, Gutierrez-Gutierrez B, Aguera ML, Facundo C, Redondo-Pachon D, Suner M, Lopez-Oliva MO, Yuste JR, Montejo M, Galeano-Alvarez C, Ruiz-San Millan JC, Los-Arcos I, Hernandez D, Fernandez-Ruiz M, Munoz P, Valle-Arroyo J, Cano A, Rodriguez-Benot A, Crespo M, Rodelo-Haad C, Lobo-Acosta MA, Garrido-Gracia JC, Vidal E, Guirado L, Cantisan S, Torre-Cisneros J; Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated With Antithymocyte Globulin: A Randomized Clinical Trial; CLINICAL INFECTIOUS DISEASES; 2022; 757-765; DOI: 10.1093/cid/ciab574
IF: 20,999 Q1 D1
3. Aljuraibah F, Bacchetta J, Brandi ML, Florenzano P, Javaid MK, Makitie O, Raimann A, Rodriguez M, Siggelkow H, Tiosano D, Vervloet M, Wagner CA; An Expert Perspective on Phosphate Dysregulation With a Focus on Chronic Hypophosphatemia; JOURNAL OF BONE AND MINERAL RESEARCH; 2022; 12-20; DOI: 10.1002/jbmr.4486
IF: 6,39 Q1 D3

» CLINICAL GUIDES:

» ACTIVITY:

- N° ONGOING PROJECTS: 6
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 5
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 6
 1. The Spanish Renal Research Network (REDinREN)
 2. PAIDI CTS-179
 3. European Uremic Toxic (EUTOX)
 4. CKD-MBD GROUP (ERA-EDTA)
 5. PerMediK- Personalized medicine in chronic kidney disease: improved outcome based on Big Data
 6. Redes de Investigación Cooperativa Orientadas a Resultados en Salud (RICORS)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 9
 1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS MIGUEL SERVET 2021- (INSTITUTO DE SALUD CARLOS III) - M^a ENCARNACIÓN RODRÍGUEZ ORTIZ
 2. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - JULIO MANUEL MARTÍNEZ MORENO
 3. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2019- (INSTITUTO DE SALUD CARLOS III) - RODRIGO LOPEZ BALTANAS
 4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2021- (INSTITUTO DE SALUD CARLOS III) - TERESA OBRERO SOJO
 5. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PARA LA INTENSIFICACIÓN DE LA ACTIVIDAD INVESTIGADORA EN EL SNS 2021- (INSTITUTO DE SALUD CARLOS III) - JUAN MARIANO RODRÍGUEZ PORTILLO
 6. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS JUAN RODÉS 2020- (INSTITUTO DE SALUD CARLOS III) - MARIA VICTORIA PENDON RUIZ DE MIER
 7. ACCIÓN C. IMPULSO DE LA INVESTIGACIÓN TRASLACIONAL DE LAS UGC (PROGRAMA NICOLÁS MONARDES) 2019- (SERVICIO ANDALUZ DE SALUD) - JUAN RAFAEL MUÑOZ CASTAÑEDA
 8. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - JULIO MANUEL MARTÍNEZ MORENO
 9. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - CRISTIAN ROBERTO RODELO HAAD
- 7 AGREEMENTS WITH COMPANIES
- INTERNATIONAL PROJECTS:1
 1. IP; MARIANO RODRIGUEZ PORTILLO; Personalized medicine in chronic kidney disease: improved outcome based on Big Data (PerMediK). CA21165 – COST (European Cooperation in Science and Technology)

GC14:

CELLULAR THERAPY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Herrera	Arroyo	Inmaculada Concepción	R4	0000-0003-0055-2270
Carmona	Luque	M ^a Dolores	R2	
Centeno	Haro	Macarena	R2	
Jiménez	Moreno	Rosario	R2	
Martín	Palanco	Vanesa	R2	
Nogueras	Martín	Sonia	R2	
Ortiz	Espejo	Lourdes	R1	
Pavlovic	Pavlovic	Kristina	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Stem cells	Stem cells
Cell therapy	Cell-gene therapy
Regenerative medicine	CAR-T cells
Myocardial regeneration	

» HIGHLIGHTED PUBLICATIONS:

- Guerrero-Orriach JL (AC), Carmona-Luque MD-Gonzalez-Alvarez L. Heart Failure after Cardiac Surgery: The Role of Halogenated Agents, Myocardial Conditioning and Oxidative Stress. *Int J Mol Sci.* 2022 Jan 25;23(3):1360. doi: 10.3390/ijms23031360. PMID: 35163284; PMCID: PMC8836224.
IF: 6,208. Q1. D3.
- Maldonado-Perez N, Tristan-Manzano M, Justicia-Lirio P, Martinez-Planes E, Munoz P, Pavlovic K, Cortijo-Gutierrez M, Blanco-Benitez C, Castella M, Juan M, Wenes M, Romero P, Molina-Estevez FJ, Maranon C, Herrera C, Benabdellah K, Martin F. Efficacy and safety of universal (TCRKO) ARI-0001 CAR-T cells for the treatment of B-cell lymphoma; *FRONTIERS IN IMMUNOLOGY*; 2022; DOI: 10.3389/fimmu.2022.1011858
IF: 8,787. Q1. D3
- Tristan-Manzano M, Maldonado-Perez N, Justicia-Lirio P, Munoz P, Cortijo-Gutierrez M, Pavlovic K, Jimenez-Moreno R, Nogueras S, Carmona MD, Sanchez-Hernandez S, Aguilar-Gonzalez A, Castella M, Juan M, Maranon C, Marchal JA, Benabdellah K, Herrera C, Martin F. Physiological lentiviral vectors for the generation of improved CAR-T cells; *MOLECULAR THERAPY-ONCOLYTICS*; 2022; 335-349; DOI: 10.1016/j.omto.2022.05.003.
IF: 6,311. Q2 D3

4. Carmona MD, Paco-Meza LM, Ortega R, Canadillas S, Caballero-Villarraso J, Blanco A, Herrera C (AC). Hypoxia preconditioning increases the ability of healthy but not diabetic rat-derived adipose stromal/stem cells (ASC) to improve histological lesions of streptozotocin-induced diabetic nephropathy; Pathology Research and Practice; 2022. DOI: 10.1016/j.prp.2021.153756.

IF: 3,309. Q2. D5

5. Munoz BF, Lopez-Navas L, Bermejo MG, Romero IML, Aguilera MAM, Cuerva RC, Arribas BA, Nogueras S, Sanchez GC, Gonzalez MS; A PROPRIETARY GMP HUMAN PLATELET LYSATE FOR THE EXPANSION OF DERMAL FIBROBLASTS FOR CLINICAL APPLICATIONS; PLATELETS; 2022; 98-109; DOI: 10.1080/09537104.2020.1856356

IF: 4,236. Q2. D5

» **ACTIVITY:**

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 1
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 4
 1. EATRIS ATMP platform (European Infrastructure for Translational Medicine)
 2. RADyTTA (Andalusian Network for the design and translation of Advanced Therapies)
 3. RANTECAR (Andalusian network of CAR therapy)
 4. RICORS-TERAV (Redes de Investigación Cooperativa Orientadas a Resultados en Salud-Terapias Avanzadas)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. VINCULACIÓN DE TÉCNICOS A ECAI. RENOVACIÓN CONVOCATORIA 2015.- (SERVICIO ANDALUZ DE SALUD) - ROSARIO JIMENEZ MORENO
 2. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - MARÍA DOLORES CARMONA LUQUE
 3. NICOLAS MONARDES (SAS). KARIM BENABDELLAH
- 19 AGREEMENTS WITH COMPANIES
- AWARDS: 1
 1. Zinkkin Awards to the best health innovation project with high social impact, in the Technological Innovation category. Roche-Foundation & Public Andalusian Progress and Health Foundation. Awarded project: PECART-0057-2020. IPs: Karim Benabdellah (eGATA-GENYO)-María Dolores Carmona Luque (GC14-IMIBIC)

GC15:

CARDIOVASCULAR DISEASES

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Pan	Álvarez-Ossorio	Manuel	R4	0000-0003-0356-9051
Anguita	Sánchez	Manuel Pablo	R3	
Arizón	del Prado	José María	R3	
Castillo	Domínguez	Juan Carlos	R3	
Delgado	Ortega	Mónica María	R3	
López	Granados	Amador	R3	
Mazuelos	Bellido	Francisco	R3	
Mesa	Rubio	M ^a Dolores	R3	
Ojeda	Pineda	Soledad	R3	
Pavlovic	Djurovic	Djordje	R3	
Romero	Moreno	Miguel Ángel	R3	
Ruiz	Ortiz	Martín	R3	
Segura	Saint-Gerons	José María	R3	
Suarez de Lezo	Herreros de Tejada	Javier	R3	
González	Manzanares	Rafael	R2	
Hidalgo	Lesmes	Francisco José	R2	
Alvarado		Marco Antonio	R1	
Dueñas	Pérez	Guillermo Miguel	R1	
Flores	Vergara	Gisela María	R1	
Luque	Moreno	Aurora	R1	
Cebrián	Salgado	Eva	ADM	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cardiac interventions	Percutaneous aortic valves
Interventional cardiology	Coronary stent implantation
Structural heart disease	Congenital heart disease
Complex coronary lesions	

» HIGHLIGHTED PUBLICATIONS:

1. Gonzalez-Manzanares R, Castillo JC, Molina JR, Ruiz-Ortiz M, Mesa D, Ojeda S, Anguita M, Pan M; Automated Global Longitudinal Strain Assessment in Long-Term Survivors of Childhood Acute Lymphoblastic Leukemia; *CANCERS*; 2022;14(6) 1513 -; DOI: 10.3390/cancers14061513
IF: 6,575 Q1 D3
2. Flores G, Mesa D, Ojeda S, de Lezo JS, Gonzalez-Manzanares R, Duenas G, Pan M; Complications of the Percutaneous Mitral Valve Edge-To-Edge Repair: Role of Transesophageal Echocardiography; *JOURNAL OF CLINICAL MEDICINE*; 2022;11(16):4747 ; DOI: 10.3390/jcm11164747
IF: 4,964 Q2
3. Cabeza JF, Aristizabal-Duque CH, Sanchez IMB, Ortiz MR, Almodovar AR, Ortega MD, Martinez FE, Saldana MR, del Pozo FJF, Alvarez-Ossorio MP, Rubio MDM; Relationship between overweight and obesity and cardiac dimensions and function in a paediatric population; *EUROPEAN JOURNAL OF PEDIATRICS*; 2022; 1943-1949; DOI: 10.1007/s00431-022-04384-0
IF: 3,86 Q1 D3
4. Aktaa S, Polovina M, Rosano G, Abdin A, Anguita M, Lainscak M, Lund LH, McDonagh T, Metra M, Mindham R, Piepoli M, Stork S, Tokmakova MP, Seferovic P, Gale CP, Coats AJS; European Society of Cardiology quality indicators for the care and outcomes of adults with heart failure. Developed by the Working Group for Heart Failure Quality Indicators in collaboration with the Heart Failure Association of the European Society of Cardiology; *EUROPEAN JOURNAL OF HEART FAILURE*; 2022; 132-142; DOI: 10.1002/ehjhf.2371
IF: 17,349 Q1 D1
5. Romaguera R, Salinas P, Gomez-Lara J, Brugaletta S, Gomez-Menchero A, Romero MA, Garcia-Blas S, Ocaranza R, Bordes P, Kockar MJ, Salvatella N, Jimenez-Diaz VA, Alameda M, Trillo R, Lee DH, Martin P, Lopez-Benito M, Freitas A, Pascual-Tejerina V, Hernandez-Hernandez F, Del Blanco BG, Mohandes M, Bosa F, Pinar E, Roura G, Comin-Colet J, Fernandez-Ortiz A, Macaya C, Rossello X, Sabate M, Pocock SJ, Gomez-Hospital JA; Amphilimus- vs. zotarolimus-eluting stents in patients with diabetes mellitus and coronary artery disease: the SUGAR trial; *EUROPEAN HEART JOURNAL*; 2022; 1320-1330; DOI: 10.1093/eurheartj/ehab790
IF: 35,855 Q1 D1

» CLINICAL GUIDES:

1. Albiero R, Burzotta F, Lassen JF, Lefevre T, Banning AP, Chatzizisis YS, Johnson TW, Ferenc M, Pan M, Daremont O, Hildick-Smith D, Chieffo A, Louvard Y, Stankovic G; Treatment of coronary bifurcation lesions, part I: implanting the first stent in the provisional pathway. The 16th expert consensus document of the European Bifurcation Club; *EUROINTERVENTION*; 2022; E362-E376; DOI: 10.4244/EIJ-D-22-00165
2. Lassen JF, Albiero R, Johnson TW, Burzotta F, Lefevre T, Iles TL, Pan M, Banning AP, Chatzizisis YS, Ferenc M, Dzavik V, Milasinovic D, Darremont O, Hildick-Smith D, Louvard Y, Stankovic G; Treatment of coronary bifurcation lesions, part II: implanting two stents. The 16th expert consensus document of the European Bifurcation Club; *EUROINTERVENTION*; 2022; 457-470; DOI: 10.4244/EIJ-D-22-0016

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° CLINICAL TRIALS: 25
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. European Bifurcation Club
 2. European Society of Cardiology
 3. Spanish Society of Cardiology
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. AYUDAS PARA LA CONTRATACIÓN PREDOCTORAL DE PERSONAL INVESTIGADOR EN FORMACIÓN POR LOS AGENTES DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - FRANCISCO JOSE SANCHEZ-PORRO SANZ
- 6 AGREEMENTS WITH COMPANIES
- AWARDS: 3

GC16:

CELLULAR BIOLOGY IN HEMATOLOGY. HYPERCOAGULABILITY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Sánchez	García	Joaquín	R4	0000-0001-9345-456X
Velasco	Gimena	Francisco	R4	0000-0002-1908-0894
Álvarez	Rivas	Miguel Ángel	R3	
Arqueros	Martínez	Víctor	R3	
Casaño	Sánchez	Javier	R3	
Fernández	de la Mata	Margarita	R3	
Fernández	Sánchez de Mora	M ^a del Carmen	R3	
García	Torres	Estefanía	R3	
Martín	Calvo	Carmen	R3	
Martínez	Losada	Carmen	R3	
Molina	Hurtado	José Ramón	R3	
Rodríguez	Villa	Antonia	R3	
Rojas	Contreras	Rafael	R3	
Serrano	López	Josefina	R3	
Tabares	Carrasco	Salvador	R3	
Yébenes	Ramírez	Manuel	R1	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Acute leukemia

Allogenic stem cell transplantation

Lymphoma

Hypercoagulability

» HIGHLIGHTED PUBLICATIONS:

1. Ruiz-Llobet A, Gassiot S, Sarrate E, Zubicaray J, Dapena JL, Rives S, Sevilla J, Lopez AM, Romero MP, Montoya C, Vagace JM, Hurtado JRM, Garcia-Morin M, Abos MG, Sanchez MCM, Lendinez F, Moraleda PP, Tallon M, Gonzalez B, Urrutia E, Serna JV, Pleguezuelos IP, Merino MM, Elbal ER, Orellana E, Munoz HB, Berrueto R; Venous thromboembolism in pediatric patients with acute lymphoblastic leukemia under chemotherapy treatment. Risk factors and usefulness of thromboprophylaxis. Results of LAL-SEHOP-PETHEMA-2013; JOURNAL OF THROMBOSIS AND HAEMOSTASIS; 2022; 1390-1399; DOI: 10.1111/jth.15699.

IF: 16,036 Q1 D1

2. Recher C, Rollig C, Berard E, Bertoli S, Dumas PY, Tavitian S, Kramer M, Serve H, Bornhauser M, Platzbecker U, Muller-Tidow C, Baldus CD, Martinez-Cuadron D, Serrano J, Martinez-Sanchez P, Arbolí ER, Gil C, Bergua J, Bernal T, Burguera AD, Delabesse E, Bidet A, Pigneux A, Montesinos P; Long-term survival after intensive chemotherapy or hypomethylating agents in AML patients aged 70 years and older: a large patient data set study from European registries; LEUKEMIA; 2022; 913-922; DOI: 10.1038/s41375-021-01425-9.

IF: 12,883 Q1 D1

3. Berard E, Rollig C, Bertoli S, Pigneux A, Tavitian S, Kramer M, Serve H, Bornhauser M, Platzbecker U, Muller-Tidow C, Baldus CD, Martinez-Cuadron D, Serrano J, Martinez-Sanchez P, Arbolí ER, Gil C, Bergua J, Bernal T, Burguera AD, Delabesse E, Bidet A, Dumas PY, Montesinos P, Recher C; A scoring system for AML patients aged 70 years or older, eligible for intensive chemotherapy: a study based on a large European data set using the DATAML, SAL, and PETHEMA registries; BLOOD CANCER JOURNAL; 2022; -; DOI: 10.1038/s41408-022-00700-x.

IF: 9,812 Q1 D2

4. Martinez-Cuadron D, Megias-Vericat JE, Serrano J, Martinez-Sanchez P, Rodriguez-Arboli E, Gil C, Aguiar E, Bergua J, Lopez-Lorenzo JL, Bernal T, Espadana A, Colorado M, Rodriguez-Medina C, Lopez-Pavia M, Tormo M, Algarra L, Amigo ML, Sayas MJ, Labrador J, Rodriguez-Gutierrez JI, Benavente C, Costilla-Barriga L, Garcia-Boyero R, Lavilla-Rubira E, Vives S, Herrera P, Garcia-Belmonte D, Herraes MM, Esteves GV, Gomez-Roncero MI, Cabello A, Bautista G, Balerdi A, Mariz J, Boluda B, Sanz MA, Montesinos P; Treatment patterns and outcomes of 2310 patients with secondary acute myeloid leukemia: a PETHEMA registry study; BLOOD ADVANCES; 2022; 1278-1295; DOI: 10.1182/bloodadvances.2021005335.

IF: 7,637 Q1 D3

5. Macias-Sanchez MD, Morata-Tarifa C, Cuende N, Cardesa-Gil A, Cuesta-Casas MA, Pascual-Cascon MJ, Pascual A, Martin-Calvo C, Jurado M, Perez-Simon JA, Espigado I, Lopez SG, Sanchez GC, Mata-Alcazar-Caballero R, Sanchez-Pernaute R; Mesenchymal Stromal Cells for Treating Steroid-Resistant Acute and Chronic Graft Versus Host Disease: A Multicenter Compassionate Use Experience; STEM CELLS TRANSLATIONAL MEDICINE; 2022; 343-355; DOI: 10.1093/stcltm/szac003.

IF: 7,655 Q1 D3

» **ACTIVITY:**

- Nº ONGOING PROJECTS: 1
- Nº CLINICAL TRIALS: 33

» **ADDITIONAL INFORMATION:**

- NETWORKS: 5
 1. Programa Español de Tratamientos en Hematología (PETHEMA)
 2. Grupo Español de Síndromes Mielodisplásicos (GESMD)
 3. European Society for Blood and Marrow Transplantation (EBMT)
 4. Observational Immune Tolerance Induction research programme (IbsITI)
 5. PAIDI CTS-620
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. BECAS DE INVESTIGACIÓN FEHH 2019- (FUNDACIÓN ESPAÑOLA DE HEMATOLOGÍA Y HEMOTERAPIA) - JOAQUIN SÁNCHEZ GARCÍA
- 7 AGREEMENTS WITH COMPANIES

GC17:

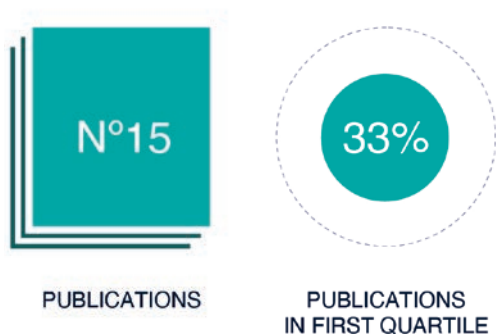
PHYSIOPATHOLOGY OF ENDOCRINE VITAMIN D SYSTEM BIOTECHNOLOGY AND AGING

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Quesada	Gomez	José Manuel	R4	0000-0003-0990-5650
Casado	Díaz	Antonio	R4	0000-0002-8520-8278
Carrera	González	M ^a del Pilar	R3	
Camacho	Cardeñosa	Marta	R2	
Cantón	Habas	Vanesa	R2	
Pulido	Escribano	Victoria María	R1	
Rodríguez	Ramos	Ángel	R1	
Torrecillas	Baena	Bárbara	R1	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Osteoporosis	Proteomics
Vitamin D	Nutrigenetics
Carotenoids	Nutrigenomics
Fatty acids	Endothelial Progenitor Cells
Human mesenchymal stem cells (MScH) of bone marrow and umbilical cord	Exosomes
Osteoblasts	Aging
Polyphenols	Regenerative medicine

» HIGHLIGHTED PUBLICATIONS:

1. Casado-Díaz A, Moreno-Rojas JM, Verdu-Soriano J, Lazaro-Martinez JL, Rodriguez-Manas L, Tunez I, La Torre M, Perez MB, Priego-Capote F, Pereira-Caro G; Evaluation of Antioxidant and Wound-Healing Properties of EHO-85, a Novel Multifunctional Amorphous Hydrogel Containing Olea europaea Leaf Extract; PHARMACEUTICS; 2022; -; DOI: 10.3390/pharmaceutics14020349.

IF: 6,525 Q1 D2

2. Jimenez-Merida R, Romero-Saldana M, De-Pedro-Jimenez D, Alcaide-Leyva JM, Canton-Habas V, Alvarez-Fernandez C, Vaquero-Abellan M; Lifestyle, Type of Work, and Temporary Disability: An Incidence Study of the Working Population; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph192214932.

IF: 4,614 Q1 D3

3. Quesada-Gomez JM, Lopez-Miranda J, Entrenas-Castillo M, Casado-Diaz A, Solans XNY, Mansur JL, Bouillon R; Vitamin D Endocrine System and COVID-19: Treatment with Calcifediol; NUTRIENTS; 2022; -; DOI: 10.3390/nu14132716.
IF: 6,706 Q1 D2
4. Torrecillas-Baena B, Galvez-Moreno MA, Quesada-Gomez JM, Dorado G, Casado-Diaz A; Influence of Dipeptidyl Peptidase-4 (DPP4) on Mesenchymal Stem-Cell (MSC) Biology: Implications for Regenerative Medicine - Review; STEM CELL REVIEWS AND REPORTS; 2022; 56-76; DOI: 10.1007/s12015-021-10285-w.
IF: 6,692 Q2 D4
5. Casado-Diaz A, La Torre M, Priego-Capote F, Verdu-Soriano J, Lazaro-Martinez JL, Rodriguez-Manas L, Perez MB, Tunez I; EHO-85: A Multifunctional Amorphous Hydrogel for Wound Healing Containing Olea europaea Leaf Extract: Effects on Wound Microenvironment and Preclinical Evaluation; JOURNAL OF CLINICAL MEDICINE; 2022; -; DOI: 10.3390/jcm11051229.
IF: 4,964 Q2 D4

» **ACTIVITY:**

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2022: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 2
 1. Centro de Investigación Biomédica en Red Fragilidad y Envejecimiento Saludable (CIBERFES)
 2. PAIDI CTS-413 “Sistema Endocrino de la Vitamina D. Biotecnología y Envejecimiento”
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. NICOLÁS MONARDES (SAS) – ANTONIO CASADO DÍAZ
 2. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LOS AGENTES DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - MARTA CAMACHO CARDEÑOSA
- 2 AGREEMENTS WITH COMPANIES

GC18:

TRANSLATIONAL RESEARCH IN SURGERY OF SOLID ORGAN TRANSPLANTATION

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Briceño	Delgado	Francisco Javier	R4	0000-0001-7027-7898
Ciria	Bru	Rubén	R3	
López	Cillero	Pedro	R3	
Calleja	Lozano	Rafael	R2	
Durán	Martínez	Manuel	R2	
Jiménez	Gómez	Jesús	R2	
Leva	Vallejo	Manuel	R2	
Navarro	Rodríguez	Elena	R2	
Padial	Aguado	Ana Cristina	R2	
Pleguezuelo	Navarro	María	R2	
Pozo	Laderas	Juan Carlos	R2	
Regueiro	López	Juan Carlos	R2	
Gómez	Dueñas	Gonzalo	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Liver transplant	Pediatric transplantation
Pancreas transplant	Split transplantation
Kidney transplant	Expanded criteria donors
Lung transplant	Donor-Recipient Matching
Heart transplant	Perfusion Machines
Living donor transplantation	Artificial Intelligence in organ transplantation

» HIGHLIGHTED PUBLICATIONS:

1. Ciria R, Berardi G, Nishino H, Chan ACY, Chanwat R, Chen KH, Chen YJ, Cheung TT, Fuks D, Geller DA, Iwashita Y, Liu R, Lopez-Ben S, Yamamoto M, Wakabayashi G; A snapshot of the 2020 conception of anatomic liver resections and their applicability on minimally invasive liver surgery. A preparatory survey for the Expert Consensus Meeting on Precision Anatomy for Minimally Invasive HBP Surgery; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 41-50; DOI: 10.1002/jhbp.959.
IF: 3,149 Q2 D4
2. Ciria R, Ayllon MD, Padial A, Gomez-Serrano J, Garcia-Gaitan C, Gomez-Espana A, Espejo JJ, Briceno J; Totally Laparoscopic Tourniquet ALPPS: Technical Standardization by Combining the Pure Hanging Maneuver and the Approach Through the Sugioka Gates; ANNALS OF SURGICAL ONCOLOGY; 2022; 2410-2411; DOI: 10.1245/s10434-021-11005-x.
IF: 4,339 Q1 D2
3. Ciria R, Padial A, Ayllon MD, Garcia-Gaitan C, Briceno J; Fast-track protocols in laparoscopic liver surgery: Applicability and correlation with difficulty scoring systems; WORLD JOURNAL OF GASTROINTESTINAL SURGERY; 2022; 211-220; DOI: 10.4240/wjgs.v14.i3.211.
IF: 2,505 Q2 D5
4. Ciria R, Padial A, Ayllon MD, Garcia-Gaitan C, Briceno J; Fast-track protocols in laparoscopic liver surgery: Applicability and correlation with difficulty scoring systems; WORLD JOURNAL OF GASTROINTESTINAL SURGERY; 2022; 211-220; DOI: 10.4240/wjgs.v14.i3.211.
IF: 2,505 Q2 D5
5. Hessheimer AJ, Rosa G, Gastaca M, Ruiz P, Otero A, Gomez M, Alconchel F, Ramirez P, Bosca A, Lopez-Andujar R, Atutxa L, Royo-Villanova M, Sanchez B, Santoyo J, Marin LM, Gomez-Bravo MA, Mosteiro F, Herrera MTV, del Moral JV, Gonzalez-Abos C, Vidal B, Lopez-Dominguez J, Llado L, Roldan J, Justo I, Jimenez C, Lopez-Monclus J, Sanchez-Turrion V, Rodriguez-Laiz G, Sanchez EV, Lopez-Baena JA, Caralt M, Charco R, Tome S, Varo E, Marti-Cruchaga P, Rotellar F, Varona MA, Barrera M, Rodriguez-Sanjuan JC, Briceno J, Lopez D, Blanco G, Nuno J, Pacheco D, Coll E, Dominguez-Gil B, Fondevila C; Abdominal normothermic regional perfusion in controlled donation after circulatory determination of death liver transplantation: Outcomes and risk factors for graft loss; AMERICAN JOURNAL OF TRANSPLANTATION; 2022; 1169-1181; DOI: 10.1111/ajt.16899.
IF: 9,369 Q1 D1

» CLINICAL GUIDES:

1. Gotohda N, Cherqui D, Geller DA, Abu Hilal M, Berardi G, Ciria R, Abe Y, Aoki T, Asbun HJ, Chan ACY, Chanwat R, Chen KH, Chen YJ, Cheung TT, Fuks D, Han HS, Hasegawa K, Hatano E, Honda G, Itano O, Iwashita Y, Kaneko H, Kato Y, Kim JH, Liu R, Lopez-Ben S, Morimoto M, Monden K, Rotellar F, Sakamoto Y, Sugioka A, Yoshiizumi T, Akahoshi K, Alconchel F, Ariizumi S, Cacciaguerra AB, Duran M, Vazquez AG, Golse N, Miyasaka Y, Mori Y, Ogiso S, Shirata C, Tomassini F, Urade T, Wakabayashi T, Nishino H, Hibi T, Kokudo N, Ohtsuka M, Ban D, Nagakawa Y, Ohtsuka T, Tanabe M, Nakamura M, Yamamoto M, Tsuchida A, Wakabayashi G; Expert Consensus Guidelines: How to safely perform minimally invasive anatomic liver resection; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 16-32; DOI: 10.1002/jhbp.1079
2. Ciria R, Padial A, Ayllon MD, Garcia-Gaitan C, Briceno J; Fast-track protocols in laparoscopic liver surgery: Applicability and correlation with difficulty scoring systems; WORLD JOURNAL OF GASTROINTESTINAL SURGERY; 2022; 211-220; DOI: 10.4240/wjgs.v14.i3.211
3. Ciria R, Berardi G, Nishino H, Chan ACY, Chanwat R, Chen KH, Chen YJ, Cheung TT, Fuks D, Geller DA, Iwashita Y, Liu R, Lopez-Ben S, Yamamoto M, Wakabayashi G; A snapshot of the 2020 conception of anatomic liver resections and their applicability on minimally invasive liver surgery. A preparatory survey for the Expert Consensus Meeting on Precision Anatomy for Minimally Invasive HBP Surgery; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 41-50; DOI: 10.1002/jhbp.959
4. Montalva E, Rodriguez-Peralvarez M, Blasi A, Bonanad S, Gavin O, Hierro L, Llado L, Llop E, Pozo-Laderas JC, Colmenero J; Consensus Statement on Hemostatic Management, Anticoagulation, and Antiplatelet Therapy in Liver Transplantation; TRANSPLANTATION; 2022; 1123-1131; DOI: 10.1097/TP.00000000000004014
5. Ban D, Nishino H, Ohtsuka T, Nagakawa Y, Abu Hilal M, Asbun HJ, Boggi U, Goh BKP, He J, Honda G, Jang JY, Kang CM, Kendrick ML, Kooby DA, Liu R, Nakamura Y, Nakata K, Palanivelu C, Shrikhande SV, Takaori K, Tang CN, Wang SE, Wolfgang CL, Yiengpruksawan A, Yoon YS, Ciria R, Berardi G, Garbarino GM, Higuchi R, Ikenaga N, Ishikawa Y, Kozono S, Maekawa A, Murase Y, Watanabe Y, Zimmitti G, Kunzler F, Wang ZZ, Sakuma L, Osakabe H, Takishita C, Endo I, Tanaka M, Yamaue H, Tanabe M, Wakabayashi G, Tsuchida A, Nakamura M; International Expert Consensus on Precision Anatomy for minimally invasive distal pancreatectomy: PAM-HBP Surgery Project; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 161-173; DOI: 10.1002/jhbp.1071

6. Nagakawa Y, Nakata K, Nishino H, Ohtsuka T, Ban DS, Asbun HJ, Boggi U, He J, Kendrick ML, Palanivelu C, Liu R, Wang SE, Tang CN, Takaori K, Abu Hilal M, Goh BKP, Honda G, Jang JY, Kang CM, Kooby DA, Nakamura Y, Shrikhande SV, Wolfgang CL, Yiengpruksawan A, Yoon YS, Watanabe Y, Kozono S, Ciria R, Berardi G, Garbarino GM, Higuchi R, Ikenaga N, Ishikawa Y, Maekawa A, Murase Y, Zimmitti G, Kunzler F, Wang ZZ, Sakuma L, Takishita C, Osakabe H, Endo I, Tanaka M, Yamaue H, Tanabe M, Wakabayashi G, Tsuchida A, Nakamura M; International expert consensus on precision anatomy for minimally invasive pancreatoduodenectomy: PAM-HBP surgery project; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 124-135; DOI: 10.1002/jhbp.1081
7. Wakabayashi T, Cacciaguerra AB, Ciria R, Ariizumi S, Duran M, Golse N, Ogiso S, Abe Y, Aoki T, Hatano E, Itano O, Sakamoto Y, Yoshizumi T, Yamamoto M, Wakabayashi G; Landmarks to identify segmental borders of the liver: A review prepared for PAM-HBP expert consensus meeting 2021; JOURNAL OF HEPATO-BILIARY-PANCREATIC SCIENCES; 2022; 82-98; DOI: 10.1002/jhbp.899

» **ACTIVITY:**

- N° ONGOING PROJECTS: 1
- N° CLINICAL TRIALS: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 2
- 1. CIBER on Liver and Digestive Diseases (CIBERehd).
- 2. PAIDI CTS-273
- 2 AGREEMENTS WITH COMPANIES

GC19:

ARTIFICIAL VISION APPLICATIONS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Medina	Carnicer	Rafael	R4	0000-0003-4481-0614
Carmona	Poyato	Ángel	R3	
Fernández	García	Nicolás Luis	R3	
Garrido	Castro	Juan Luis	R3	
Madrid	Cuevas	Francisco José	R3	
Marín	Jiménez	Manuel Jesús	R3	
Muñoz	Salinas	Rafael	R3	
Yeguas	Bolivar	Enrique	R3	
Jurado	Rodríguez	David	R1	
Romero	Ramírez	Francisco José	R2	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Computer Vision	Augmented Reality
Image Processing	Human recognition
Pattern Recognition	Human pose estimation
3D Reconstruction	Virtual Reality

» HIGHLIGHTED PUBLICATIONS:

1. Marin-Jimenez, M.J., Kalogeiton, V., Medina-Suarez, P., Zisserman, A. LAEO-Net++: Revisiting People Looking at Each Other in Videos (2022) IEEE Transactions on Pattern Analysis and Machine Intelligence, 44 (6), pp. 3069-3081. DOI: 10.1109/TPAMI.2020.3048482
IF: 24,314 Q1 D1
2. Garrido-Jurado, S., Garrido, J., Jurado-Rodríguez, D., Vázquez, F., Muñoz-Salinas, R. Reflection-Aware Generation and Identification of Square Marker Dictionaries (2022) Sensors, 22 (21), art. no. 8548, DOI: 10.3390/s22218548
IF: 3,847 Q2
3. Fuentes-Alventosa A, Gomez-Luna J, Gonzalez-Linares JM, Guil N, Medina-Carnicer R; CAVLCU: an efficient GPU-based implementation of CAVLC; JOURNAL OF SUPERCOMPUTING; 2022; 7556-7590; DOI: 10.1007/s11227-021-04183-8
IF: 2,557 Q2

4. Fuentes-Alventosa A, Gomez-Luna J, Medina-Carnicer R; GUD-Canny: a real-time GPU-based unsupervised and distributed Canny edge detector; JOURNAL OF REAL-TIME IMAGE PROCESSING; 2022; 591-605; DOI: 10.1007/s11554-022-01208-0

IF: 2,293 Q3

5. Alcaraz-Clariana S, Garcia-Luque L, Garrido-Castro JL, Carmona-Perez C, Rodrigues-de-Souza DP, Fernandez-de-las-Penas C, Albuquerque-Sendin F; Influence of Spinal Movements Associated with Physical Evaluation on Muscle Mechanical Properties of the Lumbar Paraspinal in Subjects with Acute Low Back Pain; DIAGNOSTICS; 2022; DOI: 10.3390/diagnostics12020302

IF: 3,992 Q2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 4
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 1
- 1. PAIDI TIC-161
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
- 1. Contrato FPI Proyecto Nacional ROMERO RAMIREZ FRANCISCO.
- 2. Contrato Doctorado Industrial UCO-Seabery JURADO RODRIGUEZ DAVID.

GENETICS AND BEHAVIOURAL DISEASES**SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)****» TEAM**

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Ruiz	Rubio	Manuel	R4	0000-0001-8733-4377
Moriana	Elvira	Juan Antonio	R4	0000-0003-0577-821X
Alos	Cívico	Francisco José	R3	
Antoli	Cabrera	Adoración	R3	
Burgos	Marín	Rafael	R3	
Cuadrado	Hidalgo	Fátima	R3	
Gálvez	Lara	Mario	R3	
Gámez	Granados	Juan Carlos	R3	
Gámez	Martínez	Antonio Matías	R3	
García	Sancho	Esperanza	R3	
García	Torres	Francisco Mariano	R3	
Guijarro	Granados	Teresa	R3	
Martín	Borreguero	Pilar	R3	
Moreno	Osella	Eliana	R3	
Pérez	Dueñas	Carolina	R3	
Romero	Balsera	M ^a Auxiliadora	R3	
Sánchez	Raya	M ^a Araceli	R3	
Soto	Hidalgo	Jose Manuel	R3	
Corpas	López	Jorge	R2	
Maldonado	Herves	Miguel Ángel	R2	
Vacas	Ruiz	Julia	R2	
Aguilera	Martín	Ángel	R1	
Espejo	Durán	Carmen	R1	
González	Mantilla	Ramón	R1	
Jurado	González	Francisco Javier	R1	
Sanmartín	Litran	Francisco Javier	R1	
Tejero	Perea	Adrián	R1	
Velasco	Rodríguez	Judith	R1	
Vencesla	Martínez	José Fernando	R1	
Acedo	Galán	Elena María	T	
Camacho	Alcaide	Araceli	T	
Carranza	Franco	Beatriz	T	
Ruiz	Fernández	Ana Cristina	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Behaviour genetic	Primary care
Autism spectrum disorder	Depression
C. Elegans	Anxiety
Oncology	Based-evidence psychology
Clinical psychology	Early attention
Psycho-oncology	Developmental disorders
Psychological treatment	Neuropsychological alterations
Rare diseases	Verbal behaviour
Development disability	Cognoscitive behaviour

» HIGHLIGHTED PUBLICATIONS:

1. Corpas J, Gilbody S, McMillan D; Cognitive, behavioural or cognitive-behavioural self-help interventions for subclinical depression in older adults: A systematic review and meta-analysis; JOURNAL OF AFFECTIVE DISORDERS; 2022; 384-390; DOI: 10.1016/j.jad.2022.04.085
IF: 6,533 Q1 D3
2. Garcia-Torres F, Gomez-Solis A, Garcia SR, Castillo-Mayen R, Ruiz-Ruano VG, Moreno E, Moriana JA, Luque-Salas B, Jaen-Moreno MJ, Cuadrado-Hidalgo F, Galvez-Lara M, Jablonski M, Rodriguez-Alonso B, Aranda E; Efficacy of a Combined Acceptance and Commitment Intervention to Improve Psychological Flexibility and Associated Symptoms in Cancer Patients: Study Protocol for a Randomized Controlled Trial; FRONTIERS IN PSYCHOLOGY; 2022; -; DOI: 10.3389/fpsyg.2022.871929
IF: 4,232 Q1 D3
3. Ruano A, Garcia-Torres F, Galvez-Lara M, Moriana JA; Psychological and Non-Pharmacologic Treatments for Pain in Cancer Patients: A Systematic Review and Meta-Analysis; JOURNAL OF PAIN AND SYMPTOM MANAGEMENT; 2022; E505-E520; DOI: 10.1016/j.jpainsymman.2021.12.021
IF: 5,576 Q1 D2
4. Vacas J, Antoli A, Sanchez-Raya A, Perez-Duenas C, Cuadrado F; Social attention and autism in early childhood: Evidence on behavioral markers based on visual scanning of emotional faces with eye-tracking methodology; RESEARCH IN AUTISM SPECTRUM DISORDERS; 2022; -; DOI: 10.1016/j.rasd.2022.101930
IF: 3,293 Q1 D1
5. de la Torre-Aguilar MJ, Gomez-Fernandez A, Flores-Rojas K, Martin-Borreguero P, Mesa MD, Perez-Navero JL, Olivares M, Gil A, Gil-Campos M; Docosahexaenoic and Eicosapentaenoic Intervention Modifies Plasma and Erythrocyte Omega-3 Fatty Acid Profiles But Not the Clinical Course of Children With Autism Spectrum Disorder: A Randomized Control Trial; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.790250
IF: 6,59 Q1 D2

» **CLINICAL GUIDES:**

1. Moriana JA, Corpas J, Galvez-Lara M; Towards a Consensus in the Evaluation of the Evidence of Psychological Treatments; CLINICA Y SALUD; 2022; 91-92; DOI: 10.5093/clysa2022a9

» **ACTIVITY:**

- N° ONGOING PROJECTS: 3
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

• NETWORKS:

1. Excellence research and interdisciplinary Network for the diagnosis and promotion of youth issues, emotions and psychological well-being (MINEICO PSI2015-70943-REDT).
2. HUM-924 PSICOLOGÍA BASADA EN LA EVIDENCIA. EVALUACIÓN Y DISEÑO DE INTERVENCIONES PSICOLÓGICAS EFICACES
3. BIO-272 GENÉTICA Y TRASTORNOS DEL COMPORTAMIENTO

GC21:

METABOLOMICS AND IDENTIFICATION OF BIOACTIVE COMPOUNDS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Priego Capote	Feliciano	R4	0000-0003-0697-719X
Luque de Castro	M ^a Dolores	R4	0000-0003-2326-284X
Calderón	Santiago	R3	
Ledesma	Escobar	R2	
Criado	Navarro	R2	
Castillo	Luna	R1	
Castillo	Peinado	R1	
Luque	Córdoba	R1	
Tomé	Rodríguez	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Metabolomics	Sample preparation
Mass spectrometry	Clinical analysis
Targeted analysis	Agrofood
Untargeted analysis	Bioactive compounds

» HIGHLIGHTED PUBLICATIONS:

- Castillo-Luna A, Ledesma-Escobar CA, Gomez-Diaz R, Priego-Capote F; The secoiridoid profile of virgin olive oil conditions phenolic metabolism; FOOD CHEMISTRY; 2022; -; DOI: 10.1016/j.foodchem.2022.133585
IF: 9,231 Q1 D1
- Luque-Cordoba D, Calderon-Santiago M, Priego-Capote F; Combining data acquisition modes in liquid-chromatography-tandem mass spectrometry for comprehensive determination of acylcarnitines in human serum; METABOLOMICS; 2022; -; DOI: 10.1007/s11306-022-01916-5
IF: 4,747 Q2 D4
- Exposito-Diaz A, Miho H, Ledesma-Escobar CA, Moral J, Diez CM, Priego-Capote F; Influence of genetic and interannual factors on bioactive compounds of olive pomace determined through a germplasm survey; FOOD CHEMISTRY; 2022; -; DOI: 10.1016/j.foodchem.2022.132107
IF: 9,231 Q1 D1

4. Criado-Navarro I, Ledesma-Escobar CA, Parrado-Martinez MJ, Marchal-Lopez RM, Olmo-Peinado JM, Espejo-Calvo JA, Priego-Capote F; Monitoring the partition of bioactive compounds in the extraction of extra virgin olive oil; LWT-FOOD SCIENCE AND TECHNOLOGY; 2022; -; DOI: 10.1016/j.lwt.2022.113433

IF: 6,056 Q1 D2

5. Tome-Rodriguez S, Ledesma-Escobar CA, Penco-Valenzuela JM, Calderon-Santiago M, Priego-Capote F; Metabolic patterns in the lipoxygenase pathway associated to fruitiness attributes of extra virgin olive oil; JOURNAL OF FOOD COMPOSITION AND ANALYSIS; 2022; -; DOI: 10.1016/j.jfca.2022.104478

IF: 4,52 Q2 D4

» **ACTIVITY:**

- N° ONGOING PROJECTS: 2
- N° GRANTED PROJECTS IN 2022: 2

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3

1. CIBERFES - Cooperative Research Thematic Network on Aging and Frailty [link: <http://www.ciberfes.es/en>] (Collaborator)
2. Dr Priego Capote is the coordinator of the FQM-227 - Analytical Chemistry Research Group, of the Andalusian Plan for Research, Development and Innovation (PAIDI).
3. Metabored – Red Española de Metabolómica (Collaborator)

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2

1. BECA FPU (MINISTERIO DE UNIVERSIDADES) – ANA CASTILLO LUNA.
2. BECA FPI (MINISTERIO DE CIENCIA E INNOVACIÓN) – SONIA TOMÉ RODRÍGUEZ.

- 3 AGREEMENTS WITH COMPANIES

GC22:

EPIGENETICS

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Roldán	Arjona	M ^a Teresa	R4	0000-0003-2842-3956
Rodríguez	Ariza	Rafael	R3	
Rojas	Moreno	Adriana Patricia	R3	
Córdoba	Cañero	Dolores	R2	
Morales	Ruiz	Teresa	R2	
Martínez	Macías	M ^a Isabel	R2	
Sánchez	León	Susana	R2	
Segorbe	Luque	David	R2	
Carrasco	Carmona	Álvaro	R2	
Jordano	Raya	Marina	R1	
Grávalos	Cano	Inés	R1	
Muñoz	Fernández	Ariadna	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS

» KEYWORDS:

Epigenetics	DNA demethylation
DNA repair	DNA glycosylases
Cancer	Base excision repair
DNA methylation	

» HIGHLIGHTED PUBLICATIONS:

1. Parrilla-Doblas JT, Morales-Ruiz T, Ariza RR, Martinez-Macias MI, Roldan-Arjona T; The C-terminal domain of Arabidopsis ROS1 DNA demethylase interacts with histone H3 and is required for DNA binding and catalytic activity; DNA REPAIR; 2022; -; DOI: 10.1016/j.dnarep.2022.103341
IF: 4,354 Q2 D4
2. Rodriguez S, Bermudez L, Gonzalez D, Bernal C, Cañas A, Henríquez B, Rojas A, Morales-Ruiz T; Henríquez, B; Rojas, A. Transcriptional regulation of CDKN2A/p16 by sirtuin 7 in senescence; MOLECULAR MEDICINE REPORTS; 2022; -; DOI: 10.3892/mmr.2022.12861
IF: 3,423 Q3

» **ACTIVITY:**

- N° ONGOING PROJECTS: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 1

1. COST Action CA18111-Genome editing in plants - a technology with transformative potential (PlantEd)

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4

1. P2Med-IMIBIC- (UNIÓN EUROPEA) - M^a ISABEL MARTÍNEZ MACÍAS

2. Programa Juan de la Cierva – SUSANA SÁNCHEZ LEÓN

3. Ayuda del Programa de Formación de Profesorado Universitario del Ministerio de Universidades. Referencia: FPU20/01146 – MARINA JORDANO RAYA.

4. Ayuda del Programa de Personal Investigador en Formación de la Junta de Andalucía. Referencia: PREDOC_00426 - INÉS GRÁVALOS CANO.

- 1 AGREEMENTS WITH COMPANIES

- INTERNATIONAL PROJECTS: 1

1. ADRIANA PATRICIA ROJAS MORENO; Identificación de biomarcadores epigenéticos para diagnóstico temprano de Cáncer de pulmón en muestras mínimamente invasivas; Funding Agency: Ministerio de Ciencia, Tecnología e Innovación -Colombia; Reference: BPIN 2020000100363.

- AWARDS: 1

1. Teresa Morales Ruiz. FEBS Open Bio Poster Prize at the 44th Congress of the SEBBM, (Spanish Society for Biochemical and Molecular Biology) 2022.

GC23:

METABOLISM IN CHILDHOOD

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

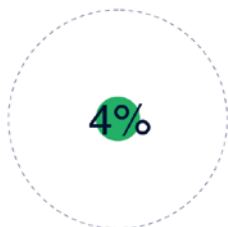
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Gil Campos	M^a Mercedes	R4	0000-0002-9007-0242
Antón	Montserrat	R3	
de la Torre	M ^a José	R3	
Flores	Katherine	R3	
Ibarra	Ignacio	R3	
Llorente	Francisco Jesús	R3	
López	Eduardo	R3	
Mateos	M ^a Elena	R3	
Pérez	Juan Luis	R3	
Velasco	M ^a José	R3	
Aguilar	Francisco Javier	R2	
Ariza	Ana Belén	R2	
Fernández	Joaquín Alejandro	R2	
Gómez	Antonio Rafael	R2	
Jurado	José Manuel	R2	
Ordoñez	M ^a Dolores	R2	
Pastor	M ^a Belén	R2	
Palomino	Laura	R1	
Rodríguez	M ^a Victoria	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Children	Physical activity
Childhood	Pre-probiotics
Metabolic syndrome	Renal disease
Metabolic diseases	Nutrition
Obesity	

» HIGHLIGHTED PUBLICATIONS:

1. Jurado-Castro JM, Casanova-Rodriguez D, Campos-Perez J, Llorente-Cantarero FJ, De La Florida-Villagran CA, Diaz-Bernier VM, Ranchal-Sanchez A; Beetroot Juice Produces Changes in Heart Rate Variability and Reduces Internal Load during Resistance Training in Men: A Randomized Double-Blind Crossover; NUTRIENTS; 2022; -; DOI: 10.3390/nu14235119.
IF: 6,706 Q1 D2
2. de la Torre-Aguilar MJ, Gomez-Fernandez A, Flores-Rojas K, Martin-Borreguero P, Mesa MD, Perez-Navero JL, Olivares M, Gil A, Gil-Campos M; Docosahexaenoic and Eicosapentaenoic Intervention Modifies Plasma and Erythrocyte Omega-3 Fatty Acid Profiles But Not the Clinical Course of Children With Autism Spectrum Disorder: A Randomized Control Trial; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.790250.
IF: 6,59 Q1 D2
3. Llorente-Cantarero FJ, Aguilera CM, Perez-Navero JL, Gil A, Benitez-Sillero JD, Gil-Campos M; Fitness Levels and Gender Are Related With the Response of Plasma Adipokines and Inflammatory Cytokines in Prepubertal Children; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.883871.
IF: 6,59 Q1 D2
4. Llorente-Cantarero FJ, Leis R, Ruperez AI, Anguita-Ruiz A, Vazquez-Cobela R, Flores-Rojas K, Gonzalez-Gil EM, Aguilera CM, Moreno LA, Gil-Campos M, Bueno G; Prepubertal Children With Metabolically Healthy Obesity or Overweight Are More Active Than Their Metabolically Unhealthy Peers Irrespective of Weight Status: GENOBOX Study; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.821548.
IF: 6,59 Q1 D2
5. Rangel-Huerta OD, de la Torre-Aguilar MJ, Mesa MD, Flores-Rojas K, Perez-Navero JL, Baena-Gomez MA, Gil A, Gil-Campos M; The Metabolic Impact of Two Different Parenteral Nutrition Lipid Emulsions in Children after Hematopoietic Stem Cell Transplantation: A Lipidomics Investigation; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES; 2022; -; DOI: 10.3390/ijms23073667.
IF: 6,208 Q1 D3

» CLINICAL GUIDES:

1. Castellano IP, Cabrera-Serrano M, Medina RC, Cattinari MG, Garcia SE, Fernandez-Ramos JA, Campos OG, Gomez-Andres D, Calatayud MAG, Martinez AJG, Albert EI, Garcia SK, Madruga-Garrido M, Martinez-Moreno M, Cantillo JM, Suarez AIM, Escribano AM, Munell F, Osorio AN, Pascual-Pascual SI, Povedano M, Casiano IMS, Vazquez-Costa JF; Delphi consensus on recommendations for the treatment of spinal muscular atrophy in Spain (RET-AME consensus); NEUROLOGIA; 2022; 216-228; DOI: 10.1016/j.nrl.2021.07.008

» ACTIVITY:

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 5
- N° PHD THESES: 3

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. CIBER on Obesity and Nutrition (CIBEROBN)
 2. CIBER on Rare Diseases (CIBERER)
 3. PAIDI CTS-639
 4. Spanish Pediatric Clinical Trials Network RECLIP
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. INTENSIFICACIÓN (SAS) – MARÍA MERCEDES GIL CAMPOS
 2. SARA BORRELL (ISCI) – MARÍA BELÉN PASTOR VILLAESCUSA
 3. SELLO DE EXCELENCIA ISCI-HEALTH DE LA ACCIÓN ESTRATÉGICA EN SALUD 2021-2023, UCO-IMIBIC. IHMC22/00024 - MARÍA BELÉN PASTOR VILLAESCUSA
- 2 AGREEMENTS WITH COMPANIES

CLINICAL AND MOLECULAR MICROBIOLOGY

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	
Martínez	Martínez	Luis	R4	0000-0002-6091-4045
Causse	del Río	Manuel	R3	
Egea	Miranda	M ^a del Pilar	R3	
Gracia	Ahufinger	Irene	R3	
Linares	Sicilia	M ^a José	R3	
Pérez	Jiménez	Ana Belén	R3	
Ruiz	Martínez	Pilar	R3	
Tejero	García	Rocío	R3	
Bellido	Barquero	M ^a del Mar	R2	
Vaquero	Álvarez	Esther	R2	
Ayala	Morillo	Luis	R1	
Blanco	Martín	Tania	R1	
Guzmán	Puche	Julia	R1	
Marfil	Pérez	Eduardo	R1	
Marín	Sanz	Juan Antonio	R1	
Morales	Domínguez	Clara de Asís	R1	
Muñoz	Muñoz de la Rosa	Montserrat	R1	
Pedraza	Merino	Rosa	R1	
Pérez	Garrido	Virginia	R1	
Riazzo	Damas	Cristina	R1	
Sánchez	León	Irene	R1	
Elías	López	Cristina	R1	
Ocampo	Ibañez	Iván Darío	R1	
Rivera	Sanchez	Sandra Patricia	R1	
Aranaga	Arias	Carlos Andrés	R1	
Córdoba	Fernández	María	T	
de la Casa	Huertas Ros	Yaiza	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Antimicrobial-resistance	Cephalosporins
Beta-lactamases	Heteroresistance
Aminoglycoside-modifying-enzymes	Antibiogram
Methyl-transferases	Susceptibility-testing
Qnr	Molecular-typing
Quinolones	Enterobacteria
Polymyxins	Pseudomonas
Carbapenems	Acinetobacter

» HIGHLIGHTED PUBLICATIONS:

1. Guzman-Puche J, Perez-Nadales E, Perez-Vazquez M, Causse M, Gracia-Ahufinger I, Mendez-Natera A, Allalou-Ruiz Y, Elias C, Oteo-Iglesias J, Torre-Cisneros J, Martinez-Martinez L; In vivo selection of KPC-94 and KPC-95 in *Klebsiella pneumoniae* isolates from patients treated with ceftazidime/avibactam; INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS; 2022; -; DOI: 10.1016/j.ijantimicag.2022.106524.
IF: 15,441 Q1 D1
2. Pacios O, Fernández-García L, Bleriot I, Blasco L, Ambroa A, López M, Ortiz-Cartagena C, González de Aledo M, Fernández-Cuenca F, Oteo-Iglesias J, PascualÁ, Martínez-Martínez L, Tomás M, Adaptation of clinical isolates of *Klebsiella pneumoniae* to the combination of niclosamide with the efflux pump inhibitor phenyl-arginine- β -naphthylamide (Pa β N): co-resistance to antimicrobials, J Antimicrob Chemother 2022, 77:1272-1281. DOI: 10.1093/jac/dkac044.
IF: 5,758 Q1
3. Pedraza R, Kieffer N, Guzman-Puche J, Artacho MJ, Pitart C, Hernandez-Garcia M, Vila J, Canton R, Martinez-Martinez L; Hidden dissemination of carbapenem-susceptible OXA-48-producing *Proteus mirabilis*; J Antimicrob Chemother 2022; 3009-3015; DOI: 10.1093/jac/dkac267.
IF: 5,758 Q1
4. Marfil E, Ruiz P, Martinez-Martinez L, Causse M; Comparative study of in vitro activity of tedizolid and linezolid against *Mycobacterium avium* complex.; JOURNAL OF GLOBAL ANTIMICROBIAL RESISTANCE; 2022; 395-398; DOI: 10.1016/j.jgar.2022.07.012.
IF: 4,349 Q2
5. Machuca I, Guzman-Puche J, Perez-Nadales E, Gracia-Ahufinger I, Mendez A, Cano A, Caston JJ, Dominguez A, Torre-Cisneros J, Martinez-Martinez L; Community-acquired bacteraemia by *Klebsiella pneumoniae* producing KPC-3 and resistant to ceftazidime/avibactam; JOURNAL OF GLOBAL ANTIMICROBIAL RESISTANCE; 2022; 399-402; DOI: 10.1016/j.jgar.2022.07.017.
IF: 4,349 Q2

» CLINICAL GUIDES:

1. Larrosa MN, Canut-Blasco A, Benito N, Cantón R, Cercenado E, Docobo-Pérez F, Fernández-Cuenca F, Fernández-Domínguez J, Guinea J, López-Navas A, Moreno MA, Morosini MI, Navarro F, Martínez-Martínez L, Oliver A; Recomendaciones del Comité Español del Antibiograma (CoEsAnt) para la realización del Informe de Sensibilidad Acumulada; Enferm Infecc Microbiol Clin 2022. 2022 Sep 26:S2529-993X(22)00177-0. doi:10.1016/j.eimce.2022.09.002.
Implantación en centros sanitarios: SI. Hospitales del Sistema Nacional de Salud.
2. Bou, G., Calbo, E., Crespo, M., Cantón, R., Álvarez de Luna, F. F., García Rodríguez, J., Ángel Goenaga, M., González-García, J., González, J., Larrosa, N., Martínez-Martínez, L., Navarro, D., Ramón Paño, J., Rivero, A., Carlos Rodríguez, J., Tomás, M., & Vilaj, J; Justification for 24/7 clinical microbiology services; Enferm Infecc Microbiol Clin (Engl Ed). 2022 Jan; doi:10.1016/j.eimce.2021.08.014
Implantación en centros sanitarios: SI. Hospitales del Sistema Nacional de Salud.
3. Egea Miranda P, Rodríguez Garrido V, Ruiz Garbajosa P, Roiz Mesones MP; Control de esterilidad de los productos farmacéuticos y de terapia celular preparados en salas de ambiente controlado; Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica (SEIMC). 2022; doi: 10.1016/j.eimc.2022.07.001
Implantación en centros sanitarios: SI. Hospitales del Sistema Nacional de Salud.

» **ACTIVITY:**

- N° ONGOING PROJECTS: 5
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

• NETWORKS: 5

1. Spanish Network for Research on Infectious Diseases (REIPI)
2. Andalusian Network For Clinical Research In Infectious Diseases
3. Centro de Investigación Biomédica en Red de Enfermedades Infecciosas (CIBERINFEC)
4. Alliance for the Exploration of Pipelines for Inhibitors of Carbapenemases (EPIC Alliance); JPIAMR Network Plus 2020.
5. Improving surveillance of antibiotic-resistant *Pseudomonas aeruginosa* in Europe (ISARPAE). JPIAMR Network 2022.

• COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3

1. INTENSIFICACIÓN (SAS) – LUIS MARTÍNEZ MARTÍNEZ
2. IRENE SÁNCHEZ LEÓN; Modalidad 6.2 Contratos Predoctorales UCO 2018; Funding Agency: UCO; PP18-UCO_ISL-MOD.6.2
3. MARÍA CÓRDOBA FERNÁNDEZ; Fondo de Investigación Sanitaria (FIS). Proyecto PI20-01749 2

• 3 AGREEMENTS WITH COMPANIES

• INTERNATIONAL PROJECTS: 4

1. LUIS MARTÍNEZ MARTÍNEZ; Study of the mechanisms of resistance to Ceftazidime-Avibactam in isolates of *Klebsiella pneumoniae* producing KPC-3 cultured from patients under Ceftazidime-Avibactam therapy Funding Agency: PFIZER, S.A; Reference: INSPIRE-2018-01
2. LUIS MARTÍNEZ MARTÍNEZ; Antibiotic Resistance Testing & Evaluation of Materials for In vitro Susceptibility (ARTEMIS); Shionogi B.V./IHMA Europe Sàrl.
3. LUIS MARTÍNEZ MARTÍNEZ; Alliance for the Exploration of Pipelines for Inhibitors of Carbapenemases; JPIAMR Network Plus 2020; JPIAMR_NP_2020-011.
4. LUIS MARTÍNEZ MARTÍNEZ; Improving surveillance of antibiotic-resistant *Pseudomonas aeruginosa* in Europe (ISARPAE). JPIAMR Network 2022. JPIAMR_NP_2022-021.

GC25:

KNOWLEDGE DISCOVERY AND INTELLIGENT SYSTEMS IN BIOMEDICINE

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Ventura	Soto	Sebastián	R4	0000-0003-4216-6378
García	Martínez	Carlos	R3	
Gibaja	Galindo	Eva Lucrecia	R3	
Luna	Ariza	José María	R3	
Luque	Rodríguez	María	R3	
Romero	Morales	Cristóbal	R3	
Romero	Salguero	José Raúl	R3	
Zafra	Gómez	Amelia	R3	
Moyano	Murillo	José María	R2	
Ramírez	Quesada	Aurora	R2	
Almeda	Luna	Eduardo	R1	
Barbudo	Lunar	Rafael	R1	
Delgado	Osuna	José Antonio	R1	
Esteban	Toscano	Aurora	R1	
Luque	Guzmán	M ^a Carmen	R1	
Marín	Sanz	Juan Antonio	R1	
Moya	Martín-Castaño	Antonio Rafael	R1	
Pérez	Perdomo	Eduardo	R1	
Trasierras	Fresco	Antonio Manuel	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Biomedical Data Science

Healthcare Data Analytics

Medical Image

Radiomics

Machine learning

Deep Learning

Big Data

Clustering

Descriptive models

Pattern Mining

Predictive models

Classification and Regression

» HIGHLIGHTED PUBLICATIONS:

1. Moyano JM, Ventura S; Auto-adaptive Grammar-Guided Genetic Programming algorithm to build Ensembles of Multi-Label Classifiers; INFORMATION FUSION; 2022; 1-19; DOI: 10.1016/j.inffus.2021.07.005.
IF: 17,564 Q1 D1
2. Esteban A, Zafra A, Ventura S; Data mining in predictive maintenance systems: A taxonomy and systematic review; WILEY INTERDISCIPLINARY REVIEWS-DATA MINING AND KNOWLEDGE DISCOVERY; 2022; -; DOI: 10.1002/widm.1471.
IF: 7,558 Q1 D1
3. Luna JM, Fardoun HM, Padillo F, Romero C, Ventura S; Subgroup discovery in MOOCs: a big data application for describing different types of learners; INTERACTIVE LEARNING ENVIRONMENTS; 2022; 127-145; DOI: 10.1080/10494820.2019.1643742.
IF: 4,965 Q1 D1
4. Trasierras AM, Luna JM, Ventura S; Improving the understanding of cancer in a descriptive way: An emerging pattern mining-based approach; INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS; 2022; 2822-2848; DOI: 10.1002/int.22503.
IF: 8,993 Q1 D2
5. Bowen-Mendoza L, Pinargote-Ortega M, Meza J, Ventura S; Design of peer assessment rubrics for ICT topics; JOURNAL OF COMPUTING IN HIGHER EDUCATION; 2022; 211-241; DOI: 10.1007/s12528-021-09297-9.
IF: 4,045 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. PAIDI TIC-122
 2. Red de Excelencia en Big Data y Análisis de Datos Escalable.
 3. Red de Excelencia en Ingeniería del Software basada en Búsqueda (SEBASENet)
 4. Teoría y Aplicaciones de Minería de Datos
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. AYUDAS PARA LA PROMOCIÓN DE EMPLEO JOVEN E IMPLANTACIÓN DE LA GARANTÍA JUVENIL EN I+D+I- (MINISTERIO DE ASUNTOS ECONÓMICOS Y TRANSFORMACIÓN DIGITAL) - JUAN ANTONIO MARIN SANZ
- 1 AGREEMENTS WITH COMPANIES

GC26:

CLINICAL VIROLOGY AND ZOOONOSIS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

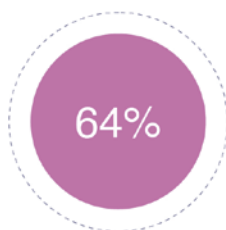
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	
Rivero	Román	Antonio	R4
Camacho	Espejo	Ángela	R3
Frias	Casas	Mario	R3
Risalde	Moya	M ^a Ángeles	R3
Rivero	Juárez	Antonio	R3
Caballero	Gómez	Javier	R2
López	López	Pedro	R2
Machuca	Sánchez	Isabel	R2
Pérez	Valero	Ignacio	R2
Corona	Mata	Diana	R1
Ruiz	Cáceres	Inmaculada	R1
Romero	Morales	M ^a del Carmen	ADM
García	Delgado	Gema Dolores	T
Ruiz	Torres	Laura	T
Zafra	Soto	Ismael	T

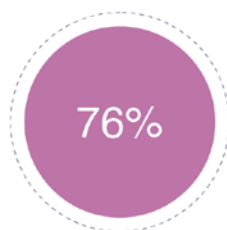
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

HIV	Pathogens
HCV	Fibrosis
HEV	Cirrhosis
Infection	Innate immunity
AIDS	Pharmacogenomics
ART	Viral reservoir
CD4	Zoonoses
Hepatitis	

» HIGHLIGHTED PUBLICATIONS:

1. Rivero-Juarez A, Frias M, Perez AB, Pineda JA, Reina G, Fuentes-Lopez A, Freyre-Carrillo C, Ramirez-Arellano E, Alados JC, Rivero A; Orthohepevirus C infection as an emerging cause of acute hepatitis in Spain: First report in Europe; JOURNAL OF HEPATOLOGY; 2022; 326-331; DOI: 10.1016/j.jhep.2022.01.028
IF: 30,083 Q1 D1
2. Caballero-Gómez J, Rivero-Juarez A, Beato-Benítez A, Fernández-Maldonado C, Domingo M, García-Párraga D, Fernández A, Sierra E, Ulrich RG, Martínez-Nevado E, Sierra-Arqueros C, Canales-Merino R, Rivero A, García-Bocanegra; Hepatitis E Virus Infections in Free-Ranging and Captive Cetaceans, Spain, 2011-2022; Emerg Infect Dis. 2022 Dec;28(12):2543-2547; doi: 10.3201/eid2812.221188.
IF: 16,126 Q1 D1
3. Frias M, Cuadrado-Matias R, Jarilla-Fernandez MD, Lopez-Lopez P, Casades-Marti L, Madrigal E, Rivero A, Rivero-Juarez A, Ruiz-Fons F; The spatial pattern of human exposure to Crimean-Congo haemorrhagic fever virus is not consistent with red deer-based risk predictions; TRANSBOUNDARY AND EMERGING DISEASES; 2022; E3208-E3214; DOI: 10.1111/tbed.14484.
IF: 4,521 Q1 D1
4. Caballero-Gomez J, Rivero-Juarez A, Jurado-Tarifa E, Jimenez-Martin D, Jimenez-Ruiz E, Castro-Scholten S, Ulrich RG, Lopez-Lopez P, Rivero A, Garcia-Bocanegra I; Serological and molecular survey of hepatitis E virus in cats and dogs in Spain; TRANSBOUNDARY AND EMERGING DISEASES; 2022; 240-248; DOI: 10.1111/tbed.14437.
IF: 4,521 Q1 D1
5. Rivero-Juarez A, Dashti A, Santin M, Koster PC, Lopez-Lopez P, Risalde MA, Garcia-Bocanegra I, Gomez-Villamandos JC, Caballero-Gomez J, Frias M, Bailo B, Ortega S, Muadica AS, Calero-Bernal R, Gonzalez-Barrio D, Rivero A, Briz V, Carmena D; Diarrhoea-causing enteric protist species in intensively and extensively raised pigs (*Sus scrofa domestica*) in Southern Spain. Part II: Association with Hepatitis E virus susceptibility; TRANSBOUNDARY AND EMERGING DISEASES; 2022; E1172-E1178; DOI: 10.1111/tbed.14408.
IF: 4,521 Q1 D1

» CLINICAL GUIDES:

1. Gomez-Espana, MA; Gallego, J; Gonzalez-Flores, E; Maurel, J; Paez, D; Sastre, J; Aparicio, J; Benavides, M; Feliu, J; Vera, R. SEOM clinical guidelines for diagnosis and treatment of metastatic colorectal cancer (2018). CLINICAL & TRANS-LATIONAL ONCOLOGY. 21. 46-54. DOI: 10.1007/s12094-018-02002-w. PMID: 30565083

» ACTIVITY:

- N° ONGOING PROJECTS: 10
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 11
- N° PHD THESES: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. CIBER - Enfermedades Infecciosas (CB21/13/00083)
 2. AIDS Research Network (RIS. RD16/0025/0034)
 3. HEVnet (ECDC: NP/2016/OCS/7892/01)
 4. Red Española de Investigación en Sida (RIS)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 11
 1. Programa de Refuerzo Mediante Contratos UGC del SAS, para el Desarrollo de Programas de Investigación, de Larga Duración de las Desarrollo E Innovación (S0011). Exp.: RB-0002-2020. Consejería de Salud - ANTONIO RIVERO ROMÁN
 2. A1-0035-2021 SAS 2021 - REFUERZO CON RRHH DE LA ACTIVIDAD INVESTIGADORA EN LAS UC DEL SAS - ACCIONES A Y B. AYUDAS PARA INTENSIFICACIÓN. Consejería de Salud de la Junta de Andalucía - ANTONIO RIVERO ROMÁN
 3. AMPLIACIÓN - ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2018- (INSTITUTO DE SALUD CARLOS III. CD18/00091) - MANUEL MARIO FRIAS CASAS
 4. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS MIGUEL SERVET TIPO I 2018- (INSTITUTO DE SALUD CARLOS III. CP18/00111) - ANTONIO RIVERO JUAREZ
 5. LACP18/00111. Contrato asociado "Miguel Servet" (Proyecto Mochila). Agencia financiadora: Ministerio de Ciencia, Promoción y Universidades. Instituto de Salud Carlos III. ISMAEL ZAFRA SOTO
 6. RD16/0025/0034. Programa de Ayuda para "Redes de Temáticas de Investigación Colaborativa en Salud" (RETICS). Instituto de Salud Carlos III - INMACULADA RUIZ CÁCERES (Técnico de apoyo a la investigación).

7. FPU17/0139. Programa de Ayuda para "Formación de Profesorado Universitario" (FPU). Ministerio de Ciencia, Innovación y Universidades - JAVIER CABALLERO GÓMEZ.
 8. Convocatoria de 25 de febrero de 2020 para la contratación de personal laboral técnico de apoyo y de gestión de la I+D+i, en el marco del sistema nacional de garantía juvenil y del programa operativo de empleo juvenil 2014-2020 (POEJ) - GEMA DOLORES GARCÍA DELGADO.
 9. Ayudas "Margarita Salas" 2022. Convocatoria complementaria de ayudas para la recualificación del Sistema Universitario Español 2021-2023. Universidad de Córdoba. Plan de Recuperación, Transformación y Resiliencia – Financiado por la Unión Europea – NextGeneration EU. PEDRO LOPEZ LOPEZ
 10. Contrato Investigador@ postdoctoral grupo CIBER CB21/13/00083. Instituto de Salud Carlos III - JAVIER CABALLERO GÓMEZ
 11. Contrato Titulado superior grupo CIBER CB21/13/00083. PLAN FORMATIVO CONTRATO DE FORMACIÓN PARA LA OBTENCIÓN DE LA PRÁCTICA PROFESIONAL. FINANCIADO POR LA UNION EUROPEA-NEXTGENERATION EU. Reference: PI22/01098
- 16 AGREEMENTS WITH COMPANIES
 - INTERNATIONAL PROJECTS: 1
1. ANTONIO RIVERO ROMAN; Real-life effectiveness of BIC/FTC/TAF in naïve patients with CD4+ less than 200 cells/mL or AIDS events Funding Agency: GILEAD SCIENCES EUROPE LTD.; Reference: Gilead-ISR-2021-01
- AWARDS: 4
1. JAVIER CABALLERO-GÓMEZ; PREMIO A LA MEJOR COMUNICACIÓN "Evaluación de la circulación de SARS-CoV-2 en lince ibérico (*Lynx pardinus*)". Entidad concesionaria: Grupo de Estudio sobre Ecopatología de la Fauna de Montaña. Fecha de concesión: 2022
 2. JAVIER CABALLERO-GÓMEZ; Premio Extraordinario de Doctorado 2021/2022. Programa de Doctorado: Biociencias y Ciencias Agroalimentarias. Universidad de Córdoba. Fecha de concesión: 2022
 3. PEDRO LÓPEZ-LÓPEZ; Premio Extraordinario de Doctorado 2021/2022. Programa de Doctorado: Biomedicina. Universidad de Córdoba. Fecha de concesión: 2022
 4. Participación en un proyecto de investigación internacional para el desarrollo de una vacuna para prevenir la infección por el VIH (estudio Mosaico), actividad que ha sido galardonada en la IV Edición de los Premios LGTB Andalucía.

ONCOOBESITY AND METABOLISM**SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)****» TEAM**

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Luque	Huertas	Raúl Miguel	R4	0000-0002-7585-1913
Gahete	Ortiz	Manuel David	R4	0000-0002-4578-2179
Martínez	Fuentes	Antonio Jesús	R4	0000-0003-0994-1037
Solivera	Vela	Juan	R3	
García	Martínez	Araceli	R2	
Flores	Martínez	Álvaro	R2	
Fuentes	Fayos	Antonio Carlos	R2	
González	Serrano	M ^a Teresa	R2	
Jiménez	Vacas	Juan Manuel	R2	
León	González	Antonio José	R2	
López	Cánovas	Juan Luis	R2	
Morais Sarmiento	Borges Cabral	André	R2	
Moreno	Rodríguez	M ^a del Mar	R2	
Alors	Pérez	Emilia María	R1	
de la Luz	Borrero	Marina	R1	
de la Rosa	Herencia	Ana de la Salud	R1	
Di Caro		Isidoro	R1	
García	Estrada	Antonio	R1	
García	García	Miguel Eduardo	R1	
Hermán	Sánchez	Natalia	R1	
Herrero	Aguayo	Vicente	R1	
López	López	Fernando	R1	
Lozano	de la Haba	Samanta	R1	
Mata	Ordoñez	Fernando	R1	
Montero	Hidalgo	Antonio Jesús	R1	
Ojeda	Pérez	Betsaida	R1	
Pérez	Gómez	Jesús Miguel	R1	
Porcel	Pastrana	Francisco	R1	
Sáez	Martínez	Prudencio	R1	
Sánchez	Medianero	M ^a Teresa	R1	
Sánchez	Sánchez	Rafael	R1	
Selmi		Salima	R1	
Toledano	Delgado	Álvaro	R1	
Valverde	Moyano	Roberto	R1	
Vidal	Miñano	Juana María	R1	
Núñez	Santos	Miguel Ángel	R1	
Ortega	Bellido	María	R1	
Rodríguez	Vázquez	Marta	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Obesity	Adipose tissue
Cancer	Inflammasome
Tumor pathologies	miRNAs
Prostate cancer	Extracellular vesicles
Hepatocellular carcinoma	Splicing/spliceosome
Pituitary tumors	Non-sense Mediated mRNA Decay
Brain tumors	RNA-exosome
Bladder cancer	Telomerase
Breast cancer	Heterogeneity
Diabetes	Diagnostic biomarkers
Metabolic dysregulations	Prognostic biomarkers
Epitranscriptomics	Epigenomics

» HIGHLIGHTED PUBLICATIONS:

1. Fuentes-Fayos AC, Perez-Gomez JM, G-Garcia ME, Jimenez-Vacas JM, Blanco-Acevedo C, Sanchez-Sanchez R, Solivera J, Breunig JJ, Gahete MD, Castano JP, Luque RM; SF3B1 inhibition disrupts malignancy and prolongs survival in glioblastoma patients through BCL2L1 splicing and mTOR/beta-catenin pathways imbalances; JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH; 2022; -; DOI: 10.1186/s13046-022-02241-4
IF: 12,658 Q1 D1
2. Herrero-Aguayo V, Saez-Martinez P, Jimenez-Vacas JM, Moreno-Montilla MT, Montero-Hidalgo AJ, Perez-Gomez JM, Lopez-Canovas JL, Porcel-Pastrana F, Carrasco-Valiente J, Anglada FJ, Gomez-Gomez E, Yubero-Serrano EM, Ibanez-Costa A, Herrera-Martinez AD, Sarmento-Cabral A, Gahete MD, Luque RM; Dysregulation of the miRNome unveils a crosstalk between obesity and prostate cancer: miR-107 as a personalized diagnostic and therapeutic tool; MOLECULAR THERAPY-NUCLEIC ACIDS; 2022; 1164-1178; DOI: 10.1016/j.omtn.2022.02.010
IF: 10,183 Q1 D2
3. Moreno-Moreno P, Ibanez-Costa A, Venegas-Moreno E, Fuentes-Fayos AC, Alhambra-Exposito MR, Fajardo-Montanana C, Garcia-Martinez A, Dios E, Vazquez-Borrego MC, Remon-Ruiz P, Camara R, Lamas C, Padillo-Cuenca JC, Solivera J, Cano DA, Gahete MD, Herrera-Martinez AD, Pico A, Soto-Moreno A, Galvez-Moreno MA, Castano JP, Luque RM; Integrative Clinical, Radiological, and Molecular Analysis for Predicting Remission and Recurrence of Cushing Disease; JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM; 2022; E2938-E2951; DOI: 10.1210/clinem/dgac172
IF: 6,134 Q1 D3
4. Lopez-Canovas JL, Herman-Sanchez N, Moreno-Montilla MT, Del Rio-Moreno M, Alors-Perez E, Sanchez-Frias ME, Amado V, Ciria R, Briceno J, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD; Spliceosomal profiling identifies EIF4A3 as a novel oncogene in hepatocellular carcinoma acting through the modulation of FGFR4 splicing; CLINICAL AND TRANSLATIONAL MEDICINE; 2022; -; DOI: 10.1002/ctm2.1102
IF: 8,554 Q1 D2
5. Herrera-Martinez AD, Herrero-Aguayo V, Perez-Gomez JM, Gahete MD, Luque RM; Inflammasomes: Cause or consequence of obesity-associated comorbidities in humans; OBESITY; 2022; 2351-2362; DOI: 10.1002/oby.23581
IF: 9,298 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 14
- N° GRANTED PROJECTS IN 2022: 5
- N° CLINICAL TRIALS: 7
- N° PHD THESES: 5
- N° PATENTS: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 14
 1. CIBER of Physiopathology of Obesity and Nutrition (CIBERObn).
 2. Spanish Society of Endocrinology and Nutrition (SEEN). Neuroendocrinology, Obesity (GOOSEEN), and Hepatic-Metabolic Illness (EHMET-SEEN) working groups
 3. Andalusian Society of Endocrinology, Diabetes and Nutrition (SAEDYN). Neuroendocrinology working group
 4. Red de Investigación Nacional (RED2018-102785-E; RED2022-134397-T) of the Ministry of Science, Innovation and Universities.
 5. European infrastructure for translational medicine EATRIS
 6. European Society of Endocrinology (ESE). Endocrine Related Cancers Focus Area, Pituitary and Neuroendocrinology Focus Area, and ESE Young Endocrinologists & Scientists (EYES) Committee.
 7. European Neuroendocrine Association. ENEA Young Researchers Committee (EYRC).
 8. Spanish Molecular Registry of pituitary tumors (REMAH).
 9. Agrifood Campus of International Excellence (ceiA3).
 10. PAIDI BIO-139 Cellular and Molecular Endocrinology.
 11. TransBioNet – Spanish Bioinformatics Network for Clinical Research.
 12. Global Engagement Advisory Group of the Endocrine Society (USA).
 13. Asociación ASTUCE Spain (Brain Tumour Association, Spain). OLIGOSPAIN Network.
 14. Spanish Association for the Study of Liver (Asociación Española para el Estudio del Hígado; AEEH).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 17
 1. PERSONAL INVESTIGADOR DOCTOR (CTEICU) - ARACELI GARCÍA MARTÍNEZ
 2. POSDOCTORALES SENIOR (CSYF) - ANTONIO JOSÉ LEÓN GONZÁLEZ
 3. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA 2021- (CONSEJERÍA DE SALUD Y CONSUMO) - ALVARO FLORES MARTINEZ
 4. MARIE SKLODOWSKA-CURIE: CO-FUNDING OF REGIONAL, NATIONAL AND INTERNATIONAL PROGRAMMES 2018- (COMISIÓN EUROPEA) - ANDRE MORAIS SARMENTO BORGES CABRAL
 5. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2016 (MIU) - VICENTE HERRERO AGUAYO
 6. CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD (PFIS) (AES) – EMILIA ALORS PÉREZ
 7. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2017 (MIU) - PRUDENCIO SAEZ MARTÍNEZ
 8. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2018 (MIU) - ANTONIO JESÚS MONTERO HIDALGO
 9. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2018 (MIU) - JESÚS MIGUEL PÉREZ GÓMEZ
 10. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2020 (MIU) – MIGUEL EDUARDO GARCÍA GARCÍA
 11. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2020 (MIU) – NATALIA HERMÁN SÁNCHEZ
 12. AYUDAS PARA CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES “FPI” 2020 (MICIN) – FRANCISCO PORCEL PASTRANA
 13. CONTRATO DE TRABAJO PREDOCTORAL PARA LA REALIZACIÓN DE UN PROYECTO DE INVESTIGACIÓN (FPyS) 2021 – ISIDORO DI CARO
 14. CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD (PFIS) 2021 (AES) – BETSAIDA OJEDA PEREZ
 15. CONTRATO DE TRABAJO PREDOCTORAL PARA LA REALIZACIÓN DE UN PROYECTO DE INVESTIGACIÓN (FPyS) 2021 – SAMANTA LOZANO DE LA HABA
 16. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2021 (MIU) – ANA DE LA SALUD DE LA ROSA HERENCIA
 17. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” 2021 (MIU) – ANTONIO GARCÍA ESTRADA
- 7 AGREEMENTS WITH COMPANIES
- INTERNATIONAL PROJECTS: 1

1. RAUL MIGUEL LUQUE HUERTAS; Molecular and functional characterization of bladder cancers and castration-resistant prostate cancers: search for novel therapies; Funding Agency: Eli Lilly & Company (Boston, EE.UU); Reference: PSS.0298
- AWARDS: 5
1. MANUEL DAVID GAHETE ORTIZ; ECE 2022 Poster Award Winners – Basic/Translational; EUROPEAN SOCIETY OF ENDOCRINOLOGY (ESE)
 2. BETSAIDA OJEDA PÉREZ; Mejor comunicación oral de la sesión II (Multidisciplinary I) de las XIII Jornadas de Jóvenes Investigadores del IMIBIC; IMIBIC/FIBICO
 3. ANA DE LA SALUD DE LA ROSA HERENCIA; Mejor comunicación oral de la sesión III (Nutrition, Endocrine and metabolic diseases I) de las XIII Jornadas de Jóvenes Investigadores del IMIBIC; IMIBIC/FIBICO
 4. FRANCISCO PORCEL PASTRANA; Mejor comunicación oral de la sesión VI (Nutrition, Endocrine and metabolic diseases II) de las XIII Jornadas de Jóvenes Investigadores del IMIBIC; IMIBIC/FIBICO
 5. ANA DE LA SALUD DE LA ROSA HERENCIA; Mejor comunicación oral de la 1ª sesión del VII Congreso Científico de Investigadores Noveles; Universidad de Córdoba

GC28:

NEUROPLASTICITY AND OXIDATIVE STRESS

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Agüera	Morales	Eduardo	R3	0000-0002-8604-2054
Túnez	Fiñana	Isaac	R4	
Caballero	Villarraso	Javier	R3	
Escribano	Durán	Begoña María	R3	
Jimena	Medina	Ignacio	R3	
Luque	Carabot	Evelio	R3	
Peña	Amaro	Jose	R3	
Conde	Gavilán	Cristina	R2	
Espejo	Portero	Isabel	R2	
Feijóo	López	Montserrat	R2	
Galvao	Carmona	Alejandro	R2	
Gascón	Luna	Felix	R2	
Gómez	Chaparro	José Luis	R2	
Gómez	Melero	Sara	R2	
Muñoz	Jurado	Ana	R2	
Peña	Toledo	Mª Ángeles	R2	
Rodríguez	Cantalejo	Fernando	R2	
Galvan	Jurado	Alberto	R1	
Moyano	Gallego	Mª José	R1	
Peña	García	Victoria	R1	
Buendía	Bello	Paula	T	
Giraldo	Polo	Ana Isabel	T	
la Torre	Luque	Manuel	T	
Martín	Hersog	Francisco Antonio	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Antioxidant systems	Neuroplasticity
Huntingtons's disease	Oxidative stress
Multiple sclerosis	Cell death
Neurodegenerative diseases	Transcranial magnetic stimulation
Evidence-based medicine (EBM)	Systematic reviews of the literature
Bibliometric studies and economic evaluations	Point-of-care testing (pocT)
Programming	

» HIGHLIGHTED PUBLICATIONS:

1. Munoz-Jurado A, Escribano BM, Aguera E, Caballero-Villarraso J, Galvan A, Tunez I; SARS-CoV-2 infection in multiple sclerosis patients: interaction with treatments, adjuvant therapies, and vaccines against COVID-19; *JOURNAL OF NEUROLOGY*; 2022; 4581-4603; DOI: 10.1007/s00415-022-11237-1
IF: 6,682 Q1 D2
2. Munoz-Jurado A, Escribano BM, Caballero-Villarraso J, Galvan A, Aguera E, Santamaria A, Tunez I; Melatonin and multiple sclerosis: antioxidant, anti-inflammatory and immunomodulator mechanism of action; *INFLAMMOPHARMACOLOGY*; 2022; 1569-1596; DOI: 10.1007/s10787-022-01011-0
IF: 5,093 Q1 D3
3. Delgado-Lista J, Alcala-Diaz JF, Torres-Pena JD, Quintana-Navarro GM, Fuentes F, Garcia-Rios A, Ortiz-Morales AM, Gonzalez-Requero AI, Perez-Caballero AI, Yubero-Serrano EM, Rangel-Zuniga OA, Camargo A, Rodriguez-Cantalejo F, Lopez-Segura F, Badimon L, Ordovas JM, Perez-Jimenez F, Perez-Martinez P, Lopez-Miranda J; Long-term secondary prevention of cardiovascular disease with a Mediterranean diet and a low-fat diet (CORDIOPREV) a randomised controlled trial; *LANCET*; 2022; 1876-1885; DOI: 10.1016/S0140-6736(22)00122-2
IF: 202,731 Q1 D1
4. Roos I, Malpas C, Leray E, Casey R, Horakova D, Havrdova EK, Debouverie M, Patti F, De Seze J, Izquierdo G, Eichau S, Edan G, Prat A, Girard M, Ozakbas S, Grammond P, Zephir H, Ciron J, Maillart E, Moreau T, Amato MP, Labauge P, Alroughani R, Buzzard K, Skibina O, Terzi M, Laplaud DA, Berger E, Grand'Maison F, Lebrun-Frenay C, Cartechini E, Boz C, Lechner-Scott J, Clavelou P, Stankoff B, Prevost J, Kappos L, Pelletier J, Shaygannejad V, Yamout BI, Khoury SJ, Gerlach O, Spitaleri DLA, Van Pesch V, Gout O, Turkoglu R, Heinzlef O, Thouvenot E, McCombe PA, Soysal A, Bourre B, Slee M, Castillo-Trivino T, Bakchine S, Ampapa R, Butler EG, Wahab A, Macdonell RA, Aguera-Morales E, Cabre P, Ben NH, Van der Walt A, Laureys G, Van Hijfte L, Ramo-Tello CM, Maubeuge N, Hodgkinson S, Sanchez-Menoyo JL, Barnett MH, Labeyrie C, Vucic S, Sidhom Y, Gouider R, Csepany T, Sotoca J, de Gans K, Al-Asmi A, Fragoso YD, Vukusic S, Butzkueven H, Kalincik T; Disease Reactivation After Cessation of Disease-Modifying Therapy in Patients With Relapsing-Remitting Multiple Sclerosis; *NEUROLOGY*; 2022; E1926-E1944; DOI: 10.1212/WNL.0000000000201029
IF: 12,258 Q1 D1
5. Hidalgo-Moyano C, Rangel-Zuniga OA, Gomez-Delgado F, Alcala-Diaz JF, Rodriguez-Cantalejo F, Yubero-Serrano EM, Torres-Pena JD, Arenas-de Larriva AP, Camargo A, Perez-Martinez P, Lopez-Miranda J, Delgado-Lista J; Diet and SIRT1 Genotype Interact to Modulate Aging-Related Processes in Patients with Coronary Heart Disease: From the CORDIOPREV Study; *NUTRIENTS*; 2022; -; DOI: 10.3390/nu14183789
IF: 6,706 Q1 D2

» CLINICAL GUIDES:

1. Granell-Gil M, Murcia-Anaya M, Sevilla S, Martinez-Plumed R, Biosca-Perez E, Cozar-Bernal F, Garutti I, Gallart L, Ubierna-Ferreras B, Sukia-Zilbeti I, Galvez-Munoz C, Delgado-Roel M, Minguez L, Bermejo S, Valencia O, Real M, Unzueta C, Ferrando C, Sanchez F, Gonzalez S, Ruiz-Villen C, Lluch A, Hernandez A, Hernandez-Beslmeisl J, Vives M, Vicente R; Clinical guide to perioperative management for videothoracoscopy lung resection (Section of Cardiac, Vascular and Thoracic Anesthesia, SEDAR; Spanish Society of Thoracic Surgery, SECT; Spanish Society of Physiotherapy); *REVISTA ESPANOLA DE ANESTESIOLOGIA Y REANIMACION*; 2022; 266-301; DOI: 10.1016/j.redar.2021.03.005
2. Brieva L, Estruch BC, Merino JAG, Meca-Lallana V, Rio J, Rodriguez-Antiguedad A, Aguera E, Ara JR, Luque AA, Garcia CA, Blanco Y, Castillo-Trivino T, Costa-Frossard L, Platas MG, Pascual LL, Llana-Gonzalez M, Gines MLM, Matias-Guiu J, Meca-Lallana JE, Bilbao MM, Sempere AP, Romero-Pinel L, Saiz A, Moral E; Disease modifying therapy switching in relapsing multiple sclerosis: A Delphi consensus of the demyelinating expert group of the Spanish society of neurology; *MULTIPLE SCLEROSIS AND RELATED DISORDERS*; 2022; -; DOI: 10.1016/j.msard.2022.103805

» **ACTIVITY:**

- N° ONGOING PROJECTS: 6
- N° CLINICAL TRIALS: 30
- N° PHD THESES: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 4
 1. Spanish Brain Stimulation Network (Red Española de Estimulación Cerebral)
 2. The Spanish Network of Multiple Sclerosis (REEM)
 3. PAIDI CTS-624 Neuroplasticity and oxidative stress
 4. CTS-985 Muscular regeneration
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. INTENSIFICACIÓN ACCIÓN A (SAS) – EDUARDO AGÜERA MORALES
- 17 AGREEMENTS WITH COMPANIES

GC29:

INFLAMMATORY IMMUNE-MEDIATED CUTANEOUS DISEASES

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Ruano	Ruiz	Juan Alberto	R4	0000-0002-0286-4107
Vélez	García-Nieto	Antonio	R3	
Galán	Gutiérrez	Manuel	R2	
Gómez	García	Francisco	R2	
Isla	Tejera	Beatriz	R2	
Aguilar	Luque	Macarena	R1	
Allalou	Ruiz	Yasmin	R1	
Baleato	Gómez	Beatriz	R1	
Carmona	Fernández	Pedro Jesús	R1	
Franco	García	Francisco	R1	
Gay	Mimblera	Jesús	R1	
Gómez	Arias	Pedro Jesús	R1	
López	García	María	R1	
Rivera	Ruiz	Irene	R1	
Sanz	Cabanillas	Juan Luis	R1	
Viguera	Guerra	Isabel	R1	
Clemente	Millán	M ^a del Carmen	N	
López	González	Carmen	N	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Immune-mediated skin diseases	Cell Culture
Psoriasis	Cold Atmospheric Plasma
Atopic Dermatitis	Cost-efficiency analyses
Vitiligo	Systematic Reviews
Alopecia Areata	Meta-analyses
Genetic Polymorphisms	Meta-epidemiology
Biological Therapies	Single Cell Transcriptome

» HIGHLIGHTED PUBLICATIONS:

1. Gomez-Garcia F, Gomez-Arias PJ, Montilla-Lopez A, Hernandez-Parada J, Sanz-Cabanillas JL, Ruano J, Parra-Peralbo E; A Scoping Review on Use of Drugs Targeting the JAK/STAT Pathway in Psoriasis; FRONTIERS IN MEDICINE; 2022; -; DOI: 10.3389/fmed.2022.754116
IF: 5,058 Q2
2. Ruiz-Villaverde R, Fernandez-Freire LR, Font-Ugalde P, Galan-Gutierrez M; Tildrakizumab: Efficacy, Safety and Survival in Mid-Term (52 Weeks) in Three Tertiary Hospitals in Andalusia (Spain); JOURNAL OF CLINICAL MEDICINE; 2022; DOI: 10.3390/jcm11175098
IF: 4,964 Q2
3. Dubin C, Glickman JW, Del Duca E, Chennareddy S, Han J, Dahabreh D, Estrada YD, Zhang N, Kimmel GW, Singer G, Chowdhury M, Zheng AY, Angelov M, Gay-Mimbrera J, Ruiz JR, Krueger JG, Pavel AB, Guttman-Yassky E; Scalp and serum profiling of frontal fibrosing alopecia reveals scalp immune and fibrosis dysregulation with no involvement; JOURNAL OF THE AMERICAN ACADEMY OF DERMATOLOGY; 2022; 551-562; DOI: 10.1016/j.jaad.2021.05.016
IF: 15,487 Q1 D1
4. Guzman-Puche J, Perez-Nadales E, Perez-Vazquez M, Causse M, Gracia-Ahufinger I, Mendez-Natera A, Allalou-Ruiz Y, Elias C, Oteo-Iglesias J, Torre-Cisneros J, Martinez-Martinez L; In vivo selection of KPC-94 and KPC-95 in Klebsiella pneumoniae isolates from patients treated with ceftazidime/avibactam; INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS; 2022; -; DOI: 10.1016/j.ijantimicag.2022.106524
IF: 15,441 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° CLINICAL TRIALS: 27

» ADDITIONAL INFORMATION:

- NETWORKS: 7
 1. Cochrane Skin group
 2. Cochrane Bias Method group
 3. PAIDI CTS-1041 Scientific Group. Coordinator (PI) of the Group "New diagnostic and therapeutic methods in immunome-mediated inflammatory skin diseases" that belongs to the Andalusian Research Plan since October 2017
 4. Laboratory for Investigative Dermatology, Rockefeller University, NY, USA
 5. Eczema center and the Laboratory of Inflammatory Skin Diseases, Icahn School of Medicine Center at Mount Sinai New York (EEUU)
 6. Dept. of Population Health Science and Policy and Icahn Institute for Genomics and Multiscale Biology at Icahn School of Medicine Center at Mount Sinai New York (EEUU)
 7. Institute for Research in Operative Medicine at Witten/Herdecke University, (Germany)
- 11 AGREEMENTS WITH COMPANIES
- AWARDS: 1
 1. BEATRIZ ISLA TEJERA; TTParmacy; ROCHE FARMA, S.A.

GC30:

MOLECULAR HEPATOLOGY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Gahete	Ortiz	Manuel David	R4	0000-0002-4578-2179
López	Cánovas	Juan Luis	R2	
García	Estrada	Antonio	R1	
Hermán	Sánchez	Natalia	R1	
Lozano	de la Haba	Samanta	R1	
Ojeda	Pérez	Betsaida	R1	

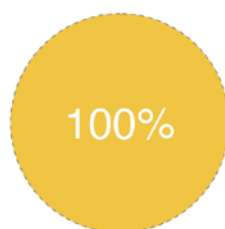
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Fatty liver	NAFLD
MAFLD	Cirrhosis
NASH	Liver cancer
Hepatocellular carcinoma	Cholangiocarcinoma
Obesity	Diabetes
Metabolic Syndrome	RNA
Splicing	Spliceosoma
Non-sense mediated decay	NMD
RNA Exosome	tRNA
RNA biogenesis	Protein Synthesis
Endocrine Systems	Somatostatin
Ghrelin	GH
IGF	Hepatokines
Adipokines	Pre-clinical models

» HIGHLIGHTED PUBLICATIONS:

1. Lopez-Canovas JL, Herman-Sanchez N, Moreno-Montilla MT, Del Rio-Moreno M, Alors-Perez E, Sanchez-Frias ME, Amado V, Ciria R, Briceno J, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD; Spliceosomal profiling identifies EIF4A3 as a novel oncogene in hepatocellular carcinoma acting through the modulation of FGFR4 splicing; CLINICAL AND TRANSLATIONAL MEDICINE; 2022; -; DOI: 10.1002/ctm2.1102
IF: 8,554 Q1 D2
2. Herrera-Martinez AD, Herrero-Aguayo V, Perez-Gomez JM, Gahete MD, Luque RM; Inflammasomes: Cause or consequence of obesity-associated comorbidities in humans; OBESITY; 2022; 2351-2362; DOI: 10.1002/oby.23581
IF: 9,298 Q1 D1
3. Amaro-Gahete FJ, Jurado J, Cisneros A, Corres P, Marmol-Perez A, Osuna-Prieto FJ, Fernandez-Escabias M, Salcedo E, Herman-Sanchez N, Gahete MD, Aparicio VA, Gonzalez-Callejas C, Pozo BM, Ruiz JR, Nestares T, Carneiro-Barrera A; Multidisciplinary Prehabilitation and Postoperative Rehabilitation for Avoiding Complications in Patients Undergoing Resection of Colon Cancer: Rationale, Design, and Methodology of the ONCOFIT Study; NUTRIENTS; 2022; -; DOI: 10.3390/nu14214647
IF: 6,706 Q1 D2
4. Saez-Martinez P, Porcel-Pastrana F, Perez-Gomez JM, Pedraza-Arevalo S, Gomez-Gomez E, Jimenez-Vacas JM, Gahete MD, Luque RM; Somatostatin, Cortistatin and Their Receptors Exert Antitumor Actions in Androgen-Independent Prostate Cancer Cells: Critical Role of Endogenous Cortistatin; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES; 2022; -; DOI: 10.3390/ijms232113003
IF: 6,208 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2022: 3
- N° PHD THESES: 1
- N° PATENTS: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 5
 1. CIBERobn - Centro de Investigación Biomédica en Red - Fisiopatología de la Obesidad y Nutrición
 2. Red de Investigación Nacional (RED2018-102785-E) - Ministerio de Ciencia, Innovación y Universidades
 3. PAIDI BIO-139 - Endocrinología Celular y Molecular.
 4. Grupo de Trabajo de Enfermedad Hepática Metabólica (SEEN - Sociedad Española de Endocrinología y Nutrición).
 5. Focus Area: Tumores endocrinos (ESE - Sociedad Europea de Endocrinología).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4
 1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2021- (INSTITUTO DE SALUD CARLOS III) - BETSAIDA OJEDA PÉREZ
 2. PLAN ESTATAL DE INVESTIGACIÓN CIENTÍFICA Y TÉCNICA Y DE INNOVACIÓN - AYUDAS FPU: FORMACIÓN DE PROFESORADO UNIVERSITARIO – MINISTERIO DE UNIVERSIDADES – NATALIA HERMÁN SÁNCHEZ
 3. PLAN ESTATAL DE INVESTIGACIÓN CIENTÍFICA Y TÉCNICA Y DE INNOVACIÓN - AYUDAS FPU: FORMACIÓN DE PROFESORADO UNIVERSITARIO – MINISTERIO DE UNIVERSIDADES – ANTONIO GARCÍA ESTRADA
 4. PLAN DE RECUPERACIÓN, TRANSFORMACIÓN Y RESILENCIA – CONTRATO POSTDOCTORAL "MARGARITA SALAS" – JUAN LUIS LÓPEZ CÁNOVAS
- 1 AGREEMENTS WITH COMPANIES
- AWARDS: 1
 1. BETSAIDA OJEDA PÉREZ; PREMIO A LA MEJOR COMUNICACIÓN ORAL; XIII JORNADAS DE JÓVENES INVESTIGADORES DEL IMIBIC.

GC31:

COMPREHESIVE NURSING CARE. MULTIDISCIPLINARY PERSPECTIVE

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

» TEAM

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
López	Soto	Pablo Jesús	R4	0000-0002-1046-6686
Alanís	López	Joaquín	R3	
Arévalo	Buitrago	Pedro	R3	
Carmona	Torres	Juan Manuel	R3	
Cobo	Cuenca	Ana Isabel	R3	
Dios	Guerra	Caridad	R3	
Gonçalves	Nitschke	Rosane	R3	
Hidalgo	Lopezosa	Pedro	R3	
Laredo	Aguilera	José Alberto	R3	
Morales	Cané	Ignacio	R3	
Rodríguez	Muñoz	Pedro Manuel	R3	
Medina	Valverde	Mª José	R2	
Miñarro	del Moral	Rosa	R2	
Moral	Arroyo	Juan Antonio	R2	
Muñoz	Alonso	Adoración	R2	
Aranburu	Imazt	Alejandra	R1	
Crepaldi		Anna	R1	
Cubero	Luna	Ana María	R1	
Jiménez	Pastor	José Manuel	R1	
Jiménez	Ruz	Andrea	R1	
López	Cerda	Elena	R1	
Rodríguez	Cortés	Francisco José	R1	
Ruiz	Cañete	Macarena	R1	
Segura	Ruiz	Rocío	R1	
Valverde	León	Mª del Rocío	R1	
Rodríguez	Borrego	Mª Aurora	C	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Integral nursing care	Evidence-based nursing care
Nursing care philosophy	Health and gender
Fragility	Female nurses
Healthy aging	Health communication
Clinical and basic chronobiology	Physical activity

» HIGHLIGHTED PUBLICATIONS:

1. Morales-Cane I, Moral-Arroyo JA, Debbia F, Guler I, Llamas-Recio F, Jimenez-Pastor JM, Lopez-Carrasco JD, Acuna-Castroviejo D, Rodriguez-Borrego MA, Lopez-Soto PJ; Impact of sound levels on physiological and consciousness state of cardiovascular patients; NURSING IN CRITICAL CARE; 2022; 240-250; DOI: 10.1111/nicc.12746
IF: 2,897 Q1 D2
2. Arévalo-Buitrago P, Morales-Cané I, Olivares Luque E, Godino-Rubio M, Rodríguez-Borrego MA, López-Soto PJ. Early detection of risk for clinical deterioration in emergency department patients: validation of a version of the National Early Warning Score 2 for use in Spain. Emergencias. 2022 Dec;34(6):452-457. English, Spanish. PMID: 36625695.
IF: 5.345 Q1 D2
3. Aranburu-Imatz A, Lopez-Carrasco JD, Moreno-Luque A, Jimenez-Pastor JM, Valverde-Leon MD, Rodriguez-Cortes FJ, Arevalo-Buitrago P, Lopez-Soto PJ, Morales-Cane I; Nurse-Led Interventions in Chronic Obstructive Pulmonary Disease Patients: A Systematic Review and Meta-Analysis; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph19159101
IF: 4,614 Q1
4. Rodriguez-Cortes FJ, Morales-Cane I, Rodriguez-Munoz PM, Cappadona R, De Giorgi A, Manfredini R, Rodriguez-Borrego MA, Fabbian F, Lopez-Soto PJ; Individual Circadian Preference, Eating Disorders and Obesity in Children and Adolescents: A Dangerous Liaison? A Systematic Review and a Meta-Analysis; CHILDREN-BASEL; 2022; -; DOI: 10.3390/children9020167
IF: 2,835 Q2 D5
5. Rodriguez-Borrego MA, Rodriguez-Munoz PM, Lopez-Soto PJ, Carmona-Torres JM; Perceptions of Gender Violence in Spanish Adolescents; JOURNAL OF FORENSIC NURSING; 2022; E5-E16; DOI: 10.1097/JFN.0000000000000386
IF: 1,2 Q4

» ACTIVITY:

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2022: 1
- N° PHD THESES: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 1
 1. PAIDI CTS-666 scientific group
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2020- (INSTITUTO DE SALUD CARLOS III) - FRANCISCO JOSE RODRIGUEZ CORTES
 2. AYUDAS PARA LA CONTRATACIÓN DE JÓVENES POR LOS AGENTES PÚBLICOS NO UNIVERSITARIOS DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - LAURA MORAY PEREA
- 1 AGREEMENTS WITH COMPANIES

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Luque	Salas	Bárbara	R4
Tabernero	Urbieto	Carmen	R4
Arenas	Moreno	Alicia	R3
Castillo	Mayén	Rosario	R3
Cuadrado		Esther	R3
Fernández	Calvo	Bernardino	R3
Moyano	Pacheco	Manuel	R3
Rubio	García	Sebastián	R3
Farhane	Medina	Naima Z.	R2
Gutiérrez	Domingo	Tamara	R2
Villaécija	Rodríguez	Joaquín	R1

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Motivation	Diet
Self-efficacy	Cardiovascular disease
Aging	Cope with stress
Women	Emotional self-regulation
Positivity	Management training programs
Emotions	E-health

» HIGHLIGHTED PUBLICATIONS:

1. Cuadrado E, Arenas A, Moyano M, Tabernero C; Differential impact of stay-at-home orders on mental health in adults who are homeschooling or “childless at home” in time of COVID-19; FAMILY PROCESS; 2022; 722-744; DOI: 10.1111/famp.12698
IF: 4,319 Q1 D2
2. Luque B, Villaécija J, Ramallo A, de Matos MG, Castillo-Mayen R, Cuadrado E, Tabernero C; Spanish Validation of the Self-Perceived Food Literacy Scale: A Five-Factor Model Proposition; NUTRIENTS; 2022; -; DOI: 10.3390/nu14142902
IF: 6,706 Q1 D2

3. Tabernero C, Gutierrez-Domingo T, Steca P, Castillo-Mayen R, Cuadrado E, Rubio SJ, Farhane-Medina NZ, Luque B; Effectiveness of Mindfulness and Positive Strengthening mHealth Interventions for the Promotion of Subjective Emotional Wellbeing and Management of Self-Efficacy for Chronic Cardiac Diseases; JOURNAL OF PERSONALIZED MEDICINE; 2022; -; DOI: 10.3390/jpm12121953
IF: 3,508 Q2 D4
4. Villaecija J, Luque B, Martinez S, Castillo-Mayen R, Cuadrado E, Dominguez-Escribano M, Tabernero C; Perceived social support and healthy eating self efficacy on the well-being of children and adolescents; REVISTA IBEROAMERICANA DE PSICOLOGIA Y SALUD; 2022; 56-72; DOI: 10.23923/j.rips.2022.01.054
IF: 0,94 Q2 D3
5. Ramírez-García, A., González-Molina, A., Gutiérrez-Arenas, M., & Moyano-Pacheco, M. (2022). Interdisciplinarity of scientific production on hate speech and social media: A bibliometric analysis. [Interdisciplinariedad de la producción científica sobre el discurso del odio y las redes sociales: Un análisis bibliométrico]. Comunicar, 72, 129-140. <https://doi.org/10.3916/C72-2022-10>
IF: 5.725 Q1

» **ACTIVITY:**

- Nº ONGOING PROJECTS: 3
- Nº PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3
 1. PAIDI HUM-414
 2. Instituto de Neurociencias de Castilla Y León "IncyL" - Unidad de Investigación Consolidada de Castilla y León
 3. PAIDI SEJ-544 ÍNDICES (<http://www.uco.es/investiga/grupos/indices/>)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. FORMACIÓN PROFESORADO UNIVERSITARIO "FPU" (MEC) - JOAQUÍN VILLAÉCIJA RODRÍGUEZ
- AGREEMENTS WITH COMPANIES: 0
- INTERNATIONAL PROJECTS: 3
 1. Dra. M^a del Mar Delgado Serrano. Título: IN-HABIT - INclusive Health And wellBeing In small and medium size ciTies. Funding Agency: Unión Europea, Horizon 2020. Reference: H2020-SC5-14-2019-869227.
 2. Alicia Arenas / Donatella Di Marco. MINDLIVEN: Mindfulness-in-Nature Based Training through Virtual Environments. Universidad de Verona/Italia. Erasmus+ Programme Higher Education – Strategic partnership Action KA2.
 3. Manuel Moyano. DigiPatch. Moving from networked to patchworked society: motivational underpinnings and societal consequences. Unión Europea: CHANSE programme, Horizon 2020

GE05:

GENITOURINARY DISEASES

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Carrasco	Valiente	Julia	R3	0000-0002-3974-3990
Gómez	Gómez	Enrique	R3	
Blanca	Pedregosa	Ana María	R2	
Campos	Hernández	Juan Pablo	R2	
Anglada	Curado	Francisco	R1	
Chamorro	Castillo	Laura	R1	
Márquez	López	Javier	R1	
Morillo	Tejedor	Ana Cristina	R1	
Prieto	Castro	Rafael	R1	
Rubio	Galisteo	Juan Manuel	R1	
Ruiz	García	Jesús	R1	
Sánchez	Ostos	Manuel	R1	
Valero	Rosa	José	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Bladder cancer	Diagnosis
Prostata cancer	Prognosis
Kidney transplantation	Predictive
Biomarkers	Robotic laparoscopic surgery

» HIGHLIGHTED PUBLICATIONS:

1. Herrero-Aguayo, V., Sáez-Martínez, P., Jiménez-Vacas, J.M., Moreno-Montilla, M.T., Montero-Hidalgo, A.J., Pérez-Gómez, J.M., López-Canovas, J.L., Porcel-Pastrana, F., Carrasco-Valiente, J., Anglada, F.J., Gómez-Gómez, E., Yubero-Serrano, E.M., Ibañez-Costa, A., Herrera-Martínez, A.D., Sarmiento-Cabral, A., Gahete, M.D., Luque, R.M. Dysregulation of the miR-Nome unveils a crosstalk between obesity and prostate cancer: miR-107 as a personalized diagnostic and therapeutic tool. (2022) *Molecular Therapy - Nucleic Acids*, 27, pp. 1164-1178. DOI: 10.1016/j.omtn.2022.02.010.
IF: 10.183 Q1 D2

2. Lopez-Beltran, A., Blanca, A., Cimadamore, A., Montironi, R., Luque, R.J., Volavšek, M., Cheng, L. T1 bladder carcinoma with variant histology: pathological features and clinical significance (2022) *Virchows Archiv*, 480 (5), pp. 989-998. DOI: 10.1007/s00428-021-03264-6.
IF: 4.548 Q2

3. Sáez-Martínez, P., Porcel-Pastrana, F., Pérez-Gómez, J.M., Pedraza-Arévalo, S., Gómez-Gómez, E., Jiménez-Vacas, J.M., Gahete, M.D., Luque, R.M. Somatostatin, Cortistatin and Their Receptors Exert Antitumor Actions in Androgen-Independent Prostate Cancer Cells: Critical Role of Endogenous Cortistatin. (2022) International Journal of Molecular Sciences, 23 (21), art. no. 13003. DOI: 10.3390/ijms232113003.

IF: 6.208 Q1

4. Frantzi, M., Heidegger, I., Roesch, M.C., Gomez-Gomez, E., Steiner, E., Vlahou, A., Mullen, W., Guler, I., Merseburger, A.S., Mischak, H., Culig, Z. Validation of diagnostic nomograms based on CE-MS urinary biomarkers to detect clinically significant prostate cancer. (2022) World Journal of Urology, 40 (9), pp. 2195-2203. DOI: 10.1007/s00345-022-04077-1

IF: 3.661 Q2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 2
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 4

» **ADDITIONAL INFORMATION:**

- NETWORKS: 2
 1. Life Length – a biotechnology-based company whose activity focuses on the commercialization of the TAT telomere measurement technique.
 2. CTS-172 –Group of Urological Pathology, pertaining to the Andalusian Plan for Research, Development and Innovation (PAIDI)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. AYUDAS PARA LA CONTRATACIÓN DE JÓVENES POR LOS AGENTES PÚBLICOS NO UNIVERSITARIOS DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - MARTA CHACON GAMIZ
- 9 AGREEMENTS WITH COMPANIES

GE06:

PATHOPHYSIOLOGY OF RENAL AND VASCULAR DAMAGE

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Moreno	Gutiérrez	Juan Antonio	R4	0000-0002-7468-2871
Mendoza	García	Francisco Javier	R3	
Pérez	Écija	Rafael Alejandro	R3	
Durán	Torralba	María del Carmen	R2	
López	Aguilera	José	R2	
Morgado	Pascual	José Luis	R2	
Rodríguez	Almodóvar	Ana María	R2	
García	Caballero	Cristina	R1	
Guerrero	Hue	Melania	R1	
Sanz	Zorrilla	Alicia	R1	
Vallejo	Mudarra	Mercedes	C	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Kidney	Intravascular Hemolysis
Hemoglobin	Rhabdomyolysis
Myoglobin	Nrf2
Cell death	Macrophages
Oxidative stress	Podocytes
Acute Kidney Injury	IgA Nephropathy

» HIGHLIGHTED PUBLICATIONS:

1. Vazquez-Carballo C, Herencia C, Guerrero-Hue M, Garcia-Caballero C, Rayego-Mateos S, Morgado-Pascual JL, Opa-zo-Rios L, Gonzalez-Guerrero C, Vallejo-Mudarra M, Cortegano I, Gaspar ML, De Andres B, Egido J, Moreno JA; Role of Toll-like receptor 4 in intravascular hemolysis-mediated injury; JOURNAL OF PATHOLOGY; 2022; 236-249; DOI: 10.1002/path.5995

IF: 9,883 Q1 D1

2. Trujillo H, Sandino J, Cavero T, Caravaca-Fontan F, Gutierrez E, Sevillano AM, Shabaka A, Fernandez-Juarez G, Doyaguez PR, Munoz RG, Garcia LC, Cabello V, Munoz-Terol JM, Santiago AG, Toldos O, Moreno JA, Praga M; IgA Nephropathy Is the Most Common Underlying Disease in Patients With Anticoagulant-Related Nephropathy; KIDNEY INTERNATIONAL REPORTS; 2022; 831-840; DOI: 10.1016/j.ekir.2022.01.1048

IF: 6,234 Q1 D2

3. Opazo-Rios L, Tejera-Munoz A, Catalan MS, Marchant V, Lavoz C, Fontao SM, Moreno JA, Fernandez MF, Ramos R, Suarez-Alvarez B, Lopez-Larrea C, Ruiz-Ortega M, Egido J, Rodrigues-Diez RR; Kidney microRNA Expression Pattern in Type 2 Diabetic Nephropathy in BTBR Ob/Ob Mice; FRONTIERS IN PHARMACOLOGY; 2022; -; DOI: 10.3389/fphar.2022.778776
IF: 5,988 Q1 D2
4. Opazo-Rios L, Soto-Catalan M, Lazaro I, Sala-Vila A, Jimenez-Castilla L, Orejudo M, Moreno JA, Egido J, Mas-Fontao S; Meta-Inflammation and De Novo Lipogenesis Markers Are Involved in Metabolic Associated Fatty Liver Disease Progression in BTBR ob/ob Mice; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES; 2022; -; DOI: 10.3390/ijms23073965
IF: 6,208 Q1 D3
5. Calderon-Dominguez M, Trejo-Gutierrez E, Gonzalez-Rovira A, Beltran-Camacho L, Rojas-Torres M, Eslava-Alcon S, Sanchez-Morillo D, Calderon-Dominguez J, Martinez-Nicolas MP, Gonzalez-Beitia E, Nieto-Martin MD, Trujillo-Soto T, Rodriguez-Iglesias MA, Moreno JA, Moreno-Luna R, Duran-Ruiz MC; Serum microRNAs targeting ACE2 and RAB14 genes distinguish asymptomatic from critical COVID-19 patients; MOLECULAR THERAPY-NUCLEIC ACIDS; 2022; 76-87; DOI: 10.1016/j.omtn.2022.06.006
IF: 10,183 Q1 D2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 4
- N° PATENTS: 1

» **ADDITIONAL INFORMATION:**

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4
 1. RAMÓN Y CAJAL (MICINN) - JUAN ANTONIO MORENO GUTIÉRREZ
 2. JUAN DE LA CIERVA FORMACIÓN (MICINN) – JOSÉ LUIS MORGADO PASCUAL
 3. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PFIS: CONTRATOS PREDOCTORALES DE FORMACIÓN EN INVESTIGACIÓN EN SALUD 2018- (INSTITUTO DE SALUD CARLOS III) - MELANIA GUERRERO HUE
 4. AYUDAS PARA LA CONTRATACIÓN DE JÓVENES POR LOS AGENTES PÚBLICOS NO UNIVERSITARIOS DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - RAQUEL MARIA GARCIA SAEZ
- 2 AGREEMENTS WITH COMPANIES
- AWARDS: 1
 1. Papel de la enzima CYB5R3 en el fracaso renal agudo asociado a hemolisis intravascular. Cristina García-Caballero, Luz Marina Sánchez-Mendoza, Laura Moray-Perea, Carlos Pérez-Sánchez, Mercedes Vallejo-Mudarra, Melania Guerrero-Hue, José Luis Morgado-Pascual, Miguel Pérez Rodríguez, José Manuel Villalba Montoro, Juan Antonio Moreno. 52 Congreso de la Sociedad Española de Nefrología Granada. 12 al 14 de noviembre 2022. Premio a mejor comunicación oral

GE07:

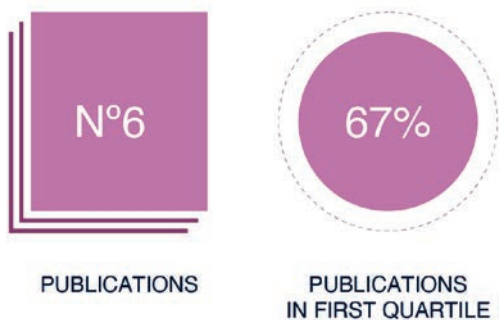
VISUAL QUALITY

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	
González	Andrades	Miguel	R3
			0000-0003-4632-1267
Domínguez	Pérez	Juan Manuel	R4
Granados	Machuca	M ^a del Mar	R4
Martín	Martínez	Francisco	R4
Gallardo	Galera	José María	R3
Giménez	Gómez	Rafael	R3
Martín	Suárez	Eva M.	R3
Villalba	Montoro	Rafael	R3
Alba	Molina	David	R2
Anaya	Alaminos	Roberto	R2
Arias	Alcalá	Manuel	R2
Avilés	Mora	Carmen	R2
Caballos	Castilla	Rafael	R2
Contieri	Lambiese	Fabio	R2
Fernández	Choquet de Isla	José Ignacio	R2
Fernández	Molina	Francisco José	R2
García	Martín	Manuel	R2
Giménez-Almenara	Amo	Francisco Javier	R2
Hens	Gutiérrez	José Manuel	R2
Herrador	Montiel	M ^a de los Angeles	R2
Ibarra	de la Rosa	EncarnaciÓn	R2
Islam		Mohammad Mirazul	R2
Jiménez	Gómez	Yolanda	R2
Mohedano	Rincón	José María	R2
Pérez	Cordobés	M ^a José	R2
Plugiese	Rojas	Francisco Antonio	R2
Reyes	Ortega	Felisa	R2
Stoikow	Pino	Indira	R2
Villalba	González	Marta	R2
Blanco	Blanco	Mario	R1
Pérez	Perdomo	Mayelín	R1
Baños	Gil	Rosa	N
Ordóñez	Villaizan	Ángela	N
Pérez	Fajardo	Lorena	N
Ortega	Llamas	Laura	N

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Ophthalmology	Biomedical engineering
Cornea	Reconstructive surgery
Retina	Drug delivery
Glaucoma	Nanomedicine
Tissue engineering	Nanoparticles
Regenerative medicine	Biomaterials

» HIGHLIGHTED PUBLICATIONS:

1. Jimenez-Gomez Y, Alba-Molina D, Blanco-Blanco M, Perez-Fajardo L, Reyes-Ortega F, Ortega-Llamas L, Villalba-Gonzalez M, De Isla IFC, Pugliese F, Stoikow I, Gonzalez-Andrades M; Novel Treatments for Age-Related Macular Degeneration: A Review of Clinical Advances in Sustained Drug Delivery Systems; PHARMACEUTICS; 2022; -; DOI: 10.3390/pharmaceutics14071473
IF: 6,525 Q1 D2
2. Torres J, Faris IH, Callejas A, Reyes-Ortega F, Melchor J, Gonzalez-Andrades M, Rus G; Torsional wave elastography to assess the mechanical properties of the cornea; SCIENTIFIC REPORTS; 2022; -; DOI: 10.1038/s41598-022-12151-2
IF: 4,997 Q2 D3
3. Aguilar-Garcia D, Fernandez-Sarmiento JA, Machuca MDG, Rodriguez JM, Rascon PM, Calvo RN, Ruiz YM, Poveda JMC, Castaneda JM, Bertomeu RC, Perez JMD; Histological and biochemical evaluation of plasma rich in growth factors treatment for grade II muscle injuries in sheep; BMC VETERINARY RESEARCH; 2022; -; DOI: 10.1186/s12917-022-03491-2
IF: 2,792 Q1 D2
4. Sharifi S, Sharifi H, Akbari A, Lei FY, Dohlman CH, Gonzalez-Andrades M, Guild C, Paschalis EI, Chodosh J; Critical media attributes in E-beam sterilization of corneal tissue; ACTA BIOMATERIALIA; 2022; 218-227; DOI: 10.1016/j.actbio.2021.10.033
IF: 10,633 Q1 D2
5. Naranjo-Bonilla P, Gimenez-Gomez R, Munoz-Villanueva MD, Jurado-Gamez B; Retinal and Choroidal Effects of Continuous Positive Airway Pressure as Treatment for Sleep Apnea: Results at 12 Months; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph191912637
IF: 4,614 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° CLINICAL TRIALS: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 1
 1. "OFTARED" ISCIII. Eye Diseases: Prevention, early detection and treatment of prevalent, degenerative and chronic ocular pathology.
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 5
 1. PAIDI 2020 – AYUDAS A LA CONTRATACIÓN DE PERSONAL INVESTIGADOR DOCTOR POR PARTE DE LAS UNIVERSIDADES Y ENTIDADES PÚBLICAS DE INVESTIGACIÓN 2019- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - FELISA REYES ORTEGA
 2. AYUDAS JUAN DE LA CIERVA FORMACIÓN 2020- (AGENCIA ESTATAL DE INVESTIGACIÓN) - DAVID ALBA MOLINA
 3. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PARA LA INTENSIFICACIÓN DE LA ACTIVIDAD INVESTIGADORA EN EL SNS 2021- (INSTITUTO DE SALUD CARLOS III) - MIGUEL GONZALEZ ANDRADES
 4. AYUDAS PARA LA CONTRATACIÓN DE JÓVENES POR LOS AGENTES PÚBLICOS NO UNIVERSITARIOS DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - LAURA ORTEGA LLAMAS
 5. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA- (CONSEJERÍA DE SALUD Y CONSUMO) - YOLANDA JIMÉNEZ GÓMEZ
- 2 AGREEMENTS WITH COMPANIES
- INTERNATIONAL PROJECTS: 1
 1. May Griffith; A liquid corneal glue-filler as an alternative to transplantation in high-risk patients; Funding Agency: EuroNanoMed3 – European Commission; Reference: LIQD-CORNEA AWARDS

GE09:

RESEARCH IN PERITONEAL AND RETROPERITONEAL ONCOLOGICAL SURGERY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Arjona	Sánchez	Álvaro	R3	0000-0002-3024-3009
Alhama	Carmona	José	R3	
Medina	Fernández	Javier	R3	
Michán	Doña	Carmen	R3	
Romero	Ruiz	Antonio	R3	
Rufián	Peña	Sebastián	R3	
Vázquez	Borrego	M ^a Carmen	R3	
Casado	Adam	Ángela	R2	
Díaz	López	César	R2	
Ortega	Salas	Rosa	R2	
Sánchez	Hidalgo	Juan Manuel	R2	
Granados	Rodríguez	Melissa	R1	
Espinosa	Redondo	M ^a Esther	R1	
Martín	Rodríguez	Cristina	R1	
Martínez	López	Ana	R1	
Rodríguez	Ortiz	Lidia	R1	
Rufián	Andújar	Blanca	R1	
Valenzuela	Molina	Francisca	R1	
Bura		Florina Iulia	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

peritoneal carcinomatosis	HIPEC
pseudomyxoma peritonei	mesothelioma
sarcoma	Colon cancer

» HIGHLIGHTED PUBLICATIONS:

1. Arjona-Sanchez A, Martinez-Lopez A, Valenzuela-Molina F, Rufian-Andujar B, Rufian-Pena S, Casado-Adam A, Sanchez-Hidalgo JM, Rodriguez-Ortiz L, Medina-Fernandez FJ, Diaz-Lopez C, Granados-Rodriguez M, Ortega-Salas R, Castano JP, Tena-Sempere M, Briceno-Delgado J, Romero-Ruiz A; A Proposal for Modification of the PSOGI Classification According to the Ki-67 Proliferation Index in Pseudomyxoma Peritonei; ANNALS OF SURGICAL ONCOLOGY; 2022; 126-136; DOI: 10.1245/s10434-021-10372-9

IF: 4,339 Q1 D2

2. Casado-Adam A, Rodriguez-Ortiz L, Rufian-Pena S, Munoz-Casares C, Caro-Cuenca T, Ortega-Salas R, Fernandez-Peralbo MA, Luque-de-Castro MD, Sanchez-Hidalgo JM, Hervas-Martinez C, Romero-Ruiz A, Briceno J, Arjona-Sanchez A; The Role of Intraperitoneal Intraoperative Chemotherapy with Paclitaxel in the Surgical Treatment of Peritoneal Carcinomatosis from Ovarian Cancer-Hyperthermia versus Normothermia: A Randomized Controlled Trial; JOURNAL OF CLINICAL MEDICINE; 2022; -; DOI: 10.3390/jcm11195785

IF: 4,964 Q2 D4

3. Pedraza-Arevalo S, Ibanez-Costa A, Blazquez-Encinas R, Branco MR, Vazquez-Borrego MC, Herrera-Martinez AD, Venegas-Moreno E, Serrano-Blanch R, Arjona-Sanchez A, Galvez-Moreno MA, Korbonits M, Soto-Moreno A, Gahete MD, Charalambous M, Luque RM, Castano JP; Epigenetic and post-transcriptional regulation of somatostatin receptor subtype 5 (SST5) in pituitary and pancreatic neuroendocrine tumors; MOLECULAR ONCOLOGY; 2022; 764-779; DOI: 10.1002/1878-0261.13107

IF: 7,449 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2022: 2
- N° CLINICAL TRIALS: 4
- N° PHD THESES: 1
- N° PATENTS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 4

1. COST Action: EuroPMP, European network for the study of pseudomyxoma peritonei.
2. "PSOGI" The Peritoneal Surface Oncology Group International (Lap-CRS+HIPEC registry)
3. "SEProt" – Spanish Society of Proteomic
4. REGECOP: registro español de carcinomatosis peritoneal. Promovido por la Sociedad Española de Oncología Quirúrgica SEOQ

- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3

1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS SARA BORRELL 2021- (INSTITUTO DE SALUD CARLOS III) - M^a CARMEN VAZQUEZ BORREGO
2. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS PARA LA INTENSIFICACIÓN DE LA ACTIVIDAD INVESTIGADORA EN EL SNS 2020- (INSTITUTO DE SALUD CARLOS III) - ÁLVARO ARJONA SÁNCHEZ
3. AYUDAS PARA LA CONTRATACIÓN DE JÓVENES POR LOS AGENTES PÚBLICOS NO UNIVERSITARIOS DEL SISTEMA ANDALUZ DEL CONOCIMIENTO 2021- (CONSEJERÍA DE UNIVERSIDAD, INVESTIGACIÓN E INNOVACIÓN) - FLORINA IULIA BURA

- 2 AGREEMENTS WITH COMPANIES

- AWARDS 1

1. Álvaro Arjona Sánchez; Premio al mejor artículo presentado; 41st Congress of the European Society of Surgical Oncology.

GA01:

LUNG TRANSPLANTS. THORACIC NEOPLASMS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	
Salvatierra	Velázquez	Ángel	R3	0000-000204639-7344
Álvarez	Kindelan	Antonio	R3	
Moreno	Casado	Paula	R3	
Algar	Algar	Francisco Javier	R2	
Baamonde	Laborda	Carlos	R2	
Cerezo	Madueño	Francisco	R2	
Robles	Arista	Juan Carlos	R2	
Fernández	González	Alba María	R1	
González	García	Francisco Javier	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Lung preservation	Genomics
Chronic rejection	Lung cancer
Bronchiolitis obliterans. Endothelium	Biomarkers
Inflammation	ECMO
Oxidative stress	Ex-vivo lung perfusion
Proteomics	

» HIGHLIGHTED PUBLICATIONS:

1. Ruiz E, Moreno P, Poveda DS, Fernandez AM, Gonzalez FJ, Algar FJ, Cerezo F, Baamonde C, Salvatierra A, Alvarez A; Case Report on Sternal Osteomyelitis by Trichosporon inkin Complicating Lung Transplantation: Effective Treatment With Vacuum-Assisted Closure and Surgical Reconstruction; TRANSPLANTATION PROCEEDINGS; 2022; 54-56; DOI: 10.1016/j.transproceed.2021.09.062
IF: 1,014 Q4
2. Fernandez AM, Poveda DS, Ruiz E, Alvarez E, Gonzalez FJ, Moreno P, Salvatierra A, Alvarez A; Incidence of Carcinoma in the Native Lung After Single Lung Transplantation; TRANSPLANTATION PROCEEDINGS; 2022; 57-58; DOI: 10.1016/j.transproceed.2021.10.009
IF: 1,014 Q4

3. Poveda D, Ruiz E, Fernandez AM, Gonzalez FJ, Moreno P, Algar FJ, Cerezo F, Baamonde C, Salvatierra A, Alvarez A; Lung Transplantation in a Young Patient With Pulmonary Artery Hypertension After Arterial Switch Operation: A Case Report; TRANSPLANTATION PROCEEDINGS; 2022; 65-67; DOI: 10.1016/j.transproceed.2021.09.068

IF: 1,014 Q4

4. Nosotti M, Leiva-Juarez M, D'Ovidio F, Van Raemdonck D, Ceulemans L, Keshavjee S, Rackauskas M, Paladini P, Luzzi L, Casado PM, Alvarez A, Inci I, Ehsam J, Krueger T, Roth A, Rea F, Schiavon M, Rosso L; Survival After Lung Transplantation for Chronic Hypersensitivity Pneumonitis: Results From a Large International Cohort Study; TRANSPLANT INTERNATIONAL; 2022; DOI: 10.3389/ti.2022.10450

IF: 3,842 Q1 D3

5. Ramos AC, Almanzar SF, Castro RL, Hernandez NJM, Perez LM, Casado PM, Jimenez JZ; Spanish Society of Thoracic Surgery (SECT) consensus document. Long-term follow-up for operated patients with lung cancer; CIRUGIA ESPANOLA; 2022; 320-328; DOI: 10.1016/j.ciresp.2021.08.003

IF: 2,242 Q3

» CLINICAL GUIDES:

Ramos AC, Almanzar SF, Castro RL, Hernandez NJM, Perez LM, Casado PM, Jimenez JZ; Spanish Society of Thoracic Surgery (SECT) consensus document. Long-term follow-up for operated patients with lung cancer; CIRUGIA ESPANOLA; 2022; DOI: 10.1016/j.ciresp.2021.08.003

» ADDITIONAL INFORMATION:

• NETWORKS:4

1. Sociedad española de neumología y cirugía torácica – SEPAR
2. Asociación de neumología y cirugía torácica del sur - NEUMOSUR
3. Sociedad española de cirugía torácica – SECT
4. PAIDI BIO-304: Inmunofarmacología y Virología Molecular

• 2 AGREEMENTS WITH COMPANIES

GA03:

PNEUMOLOGY

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Jurado	Gámez	Bernabé	R4	0000-0002-1608-1795
Entrenas	Costa	Luis M	R4	
Arenas	De Larriva	Marisol	R3	
Cobos	Ceballos	María Jesús	R3	
Feu	Collado	Nuria	R3	
Pascual	Martínez	Natalia	R3	
Redel	Montero	Javier	R3	
Santos	Luna	Francisco	R3	
Vaquero	Barrios	Jose Manuel	R3	
Arenas	Vacas	Antonio Pablo	R2	
Cadenas de Llano	Conde	María José	R2	
Lama	Martínez	Rafael	R2	
Martín	De León	Roberto	R2	
Caballero	Ballesteros	Laura	R1	
Gómez	Rebollo	Cristina	R1	
Requejo	Jiménez	Antonio	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Lung cancer	Omics
Nocturnal Hypoxemia	Epigenetic
Chronic pulmonary disease	Climate change, air quality and health
Home respiratory therapies	Environmental and occupational diseases
Telecare and telemedicine	Big-data, data mining, e-learning

» HIGHLIGHTED PUBLICATIONS:

1. Arenas-De Larriva MD, Fernandez-Vega A, Jurado-Gamez B, Ortea I; diaPASEF Proteomics and Feature Selection for the Description of Sputum Proteome Profiles in a Cohort of Different Subtypes of Lung Cancer Patients and Controls; INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES; 2022; -; DOI: 10.3390/ijms23158737

IF: 6,208 Q1 D3

2. Naranjo-Bonilla P, Gimenez-Gomez R, Munoz-Villanueva MD, Jurado-Gamez B; Retinal and Choroidal Effects of Continuous Positive Airway Pressure as Treatment for Sleep Apnea: Results at 12 Months; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph191912637

IF: 4,614 Q1 D3

3. Navas-Bueno B, Casas-Maldonado F, Padilla-Galo A, González-Moya-Mondelo E, Arenas-Gordillo M, Bioque-Rivera JC, Jimeno-Galván R, Cano-Gómez MS, López-Campos JL, Merlos-Navarro S, Valido-Morales A, Vaquero-Barrios JM. High Adherence, Microbiological Control and Reduced Exacerbations in Patients With Non-Cystic Fibrosis Bronchiectasis Treated With Nebulised Colistin. A Prospective Observational Study. Arch Bronconeumol. 2022;58(12):834-836. doi: 10.1016/j.arbres.2022.03.023.

IF: 6,333 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° CLINICAL TRIALS: 3

» ADDITIONAL INFORMATION:

- NETWORKS: 5
 1. Sociedad española de neumología y cirugía torácica – SEPAR
 2. Asociación de neumología y cirugía torácica del sur – NEUMOSUR
 3. Asociación Española de Endoscopia Respiratoria y Neumología Intervencionista
 4. European Respiratory Society - ERS
 5. PAIDI CTS-992: Incorporación de nuevos métodos diagnósticos y control de terapias respiratorias.
- 4 AGREEMENTS WITH COMPANIES

GA04:

ENDOCRINOLOGY AND NUTRITION. INSULIN RESISTANCE, DIABETES AND METABOLISM

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Gálvez	Moreno	M^a Ángeles	R3	0000-0002-1680-1932
Calañas	Continente	Alfonso	R3	
Herrera	Martínez	Aura Dulcinea	R3	
Molina	Puertas	María José	R3	
Palomares	Ortega	Rafael	R3	
Paniagua	González	Juan Antonio	R3	
Alhambra	Expósito	María Rosa	R2	
Muñoz	Jiménez	Concepción	R1	
Rebollo	Román	Ángel	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Insuliline resistance	Pituitary adenoma
B-pancreatic dysfunction	Somatostatin receptors
Prediabetes	Vitamin D
Metabolic síndrome	Metabolic síndrome
Adipototoxicity	Neuroendrocine tumors
Adipose tissue	Bariatric surgery
Inflammation	Hormones
Oxidative stress	Diabetes mellitus
Gene expression	Fertility
Metabolomics	Pregnancy

» HIGHLIGHTED PUBLICATIONS:

1. Herrera-Martinez AD, Herrero-Aguayo V, Perez-Gomez JM, Gahete MD, Luque RM; Inflammation: Cause or consequence of obesity-associated comorbidities in humans; OBESITY; 2022; 2351-2362; DOI: 10.1002/oby.23581
IF: 9,298 Q1 D1
2. Herrera-Martinez Y, Gonzalez MJC, Pedraza-Arevalo S, Martinez MDG, Martinez AR, Menchen AG, Molina MAB, Galvez-Moreno MA, Moreno-Vega AL, Luque RM, Herrera-Martinez AD; Calcitriol-Mediated Hypercalcemia, Somatostatin Receptors Expression and 25-Hydroxyvitamin D-3-1 alpha-Hydroxylase in GIST Tumors; FRONTIERS IN ENDOCRINOLOGY; 2022; -; DOI: 10.3389/fendo.2021.812385
IF: 6,055 Q1 D3
3. Leon-Idougourram S, Perez-Gomez JM, Jimenez CM, L-Lopez F, Garcia GM, Puertas MJM, Herman-Sanchez N, Alonso-Echague R, Continente AC, Moreno MAG, Luque RM, Gahete MD, Herrera-Martinez AD; Morphofunctional and Molecular Assessment of Nutritional Status in Head and Neck Cancer Patients Undergoing Systemic Treatment: Role of Inflammation in Clinical Nutrition; CANCERS; 2022; -; DOI: 10.3390/cancers14030494
IF: 6,575 Q1 D3
4. Herrera-Martinez Y, Teomiro CA, Idougourram SL, Puertas MJM, Continente AC, Blanch RS, Castano JP, Moreno MAG, Gahete MD, Luque RM, Herrera-Martinez AD; Sarcopenia and Ghrelin System in the Clinical Outcome and Prognosis of Gastroenteropancreatic Neuroendocrine Neoplasms; CANCERS; 2022; -; DOI: 10.3390/cancers14010111
IF: 6,575 Q1 D3
5. Herrero-Aguayo V, Saez-Martinez P, Jimenez-Vacas JM, Moreno-Montilla MT, Montero-Hidalgo AJ, Perez-Gomez JM, Lopez-Canovas JL, Porcel-Pastrana F, Carrasco-Valiente J, Anglada FJ, Gomez-Gomez E, Yubero-Serrano EM, Ibanez-Costa A, Herrera-Martinez AD, Sarmiento-Cabral A, Gahete MD, Luque RM; Dysregulation of the miRNome unveils a crosstalk between obesity and prostate cancer: miR-107 as a personalized diagnostic and therapeutic tool; MOLECULAR THERAPY-NUCLEIC ACIDS; 2022; 1164-1178; DOI: 10.1016/j.omtn.2022.02.010
IF: 10,183 Q1 D2

» ACTIVITY:

- Nº ONGOING PROJECTS: 3
- Nº CLINICAL TRIALS: 3
- Nº PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 1
- 1. PAIDI CTS-651
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
- 1. ACCIÓN ESTRATÉGICA EN SALUD - CONTRATOS JUAN RODÉS 2019- (INSTITUTO DE SALUD CARLOS III) - AURA DULCINEA HERRERA MARTÍNEZ
- 9 AGREEMENTS WITH COMPANIES

GA05:

STUDY OF GROWTH. ENDOCRINOLOGY AND CHILD NUTRITION

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Ariza	Jiménez	Ana Belén	R4	0000-0002-0585-0886
Cañete	Estrada	Ramón	R4	
Jiménez	Reina	Luis	R4	
Cañete	Vázquez	María Dolores	R3	
García	Aldana	David	R3	
García	Martínez	Elena	R3	
González de Caldas	Marchal	Rafael	R3	
Martos	Estepa	Rosario	R3	
Párraga	Quiles	Mª José	R3	
Ruiz	González	Mª Dolores	R3	
Salas	Rodríguez	Mónica	R3	
Tofe	Valera	Inés	R3	
Torres	Borrego	Javier	R3	
Valle	Jiménez	Miguel	R3	
Vázquez	Rueda	Fernando	R3	
Gómez	Guzmán	Elena	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Child obesity	Gene expression
Metabolic syndrome	Proteomics
Diet	Intrauterine-growth-retardation (IUGR)
Endothelium	Growth hormone (GH)
Inflammation	Food allergy
Cardiovascular biomarkers	

» HIGHLIGHTED PUBLICATIONS:

1. Leiva-Gea I, Martos-Lirio MF, Gómez-Perea A, Ariza-Jiménez AB, Tapia-Ceballos L, Jiménez-Hinojosa JM, Lopez-Siguero JP. Metabolic Control of the FreeStyle Libre System in the Pediatric Population with Type 1 Diabetes Dependent on Sensor Adherence. *J Clin Med*. 2022 Jan 6;11(2):286.

IF: 3,9 Q2

2. Santos Mata MA, Ariza Jimenez AB, Macias Lopez F, de la Camara Moraño C. Thyroid Hormone Resistance: Multicentric Case Series Study. *Horm Metab Res*. 2022 Feb;54(2):67-75. DOI: 10.1055/a-1725-8533

IF: 2,2 Q4

3. Leiva-Gea I, Porcel Chacón R, Ariza Jiménez AB, Mora Loro M, Tapia-Ceballos L, Jiménez-Hinojosa J, Gómez Perea A, López Siguero JP. Impact on variables of severe hypoglycaemia and healthcare costs of the use of the FreeStyle system in paediatric population with type 1 diabetes mellitus. *Endocrinol Diabetes Nutr (Engl Ed)*. 2022 Oct;69(8):561-565. DOI: 10.1016/j.endinu.2021.10.010

IF: 1,9 Q4

4. Torrent-Vernetta A, Gaboli M, Castillo-Corullón S, Mondéjar-López P, Sanz Santiago V, Costa-Colomer J, Osona B, Torres-Borrego J, de la Serna-Blázquez O, Bellón Alonso S, Caro Aguilera P, Gimeno-Díaz de Aauri Á, Valenzuela Soria A, Ayats R, Martín de Vicente C, Velasco González V, Moure González JD, Canino Calderín EM, Pastor-Vivero MD, Villar Álvarez MÁ, Rovira-Amigo S, Iglesias Serrano I, Díez Izquierdo A, de Mir Messa I, Gartner S, Navarro A, Baz-Redón N, Carmona R, Camats-Tarruella N, Fernández-Cancio M, Rapp C, Dopazo J, Griese M, Moreno-Galdó A; ChILD-Spain Group. *Arch Bronconeumol*. 2022 Jan;58(1):22-29. DOI: 10.1016/j.arbres.2021.06.001. Epub 2021 Jun 17. PMID:35249699. English, Spanish.

IF: 6,333 Q1 D3

» ACTIVITY:

• N° CLINICAL TRIALS: 9

» ADDITIONAL INFORMATION:

• NETWORKS: 2

1. CIBERobn: CIBER on Obesity and Nutrition

2. PAIDI CTS-329

• 1 AGREEMENTS WITH COMPANIES

GA08:

RADIODIAGNOSIS AND BREAST CANCER

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Álvarez	Benito	Marina	R4	0000-0002-0273-3393
Delgado	Acosta	Fernando	R3	
García-Revilla	García	José	R3	
Vicente	Rueda	Josefa	R3	
Benito	Ysamat	Alberto	R2	
Bravo	Rodríguez	Francisco de Asís	R2	
Contreras	De Miguel	Elvira	R2	
Elías	Cabot	Esperanza	R2	
Espejo	Herrero	Juan José	R2	
Espejo	Pérez	Simona	R2	
Fernández	Valverde	Francisco	R2	
García	Ortega	M ^a José	R2	
Gordillo	Arnau	José Enrique	R2	
Izquierdo	Palomares	Lucía Nuria	R2	
Jiménez	Gómez	Elvira	R2	
López	Ruiz	Daniel	R2	
Mesa	Quesada	Juan	R2	
Muñoz	Carrasco	Rafaela	R2	
Muñoz	Sánchez	Raquel	R2	
Oteros	Fernández	Rafael	R2	
Pedrosa	Garriguet	Margarita	R2	
Pérez	Montilla	M ^a Eugenia	R2	
Ramos	Gómez	Manuel	R2	
Raya	Povedano	José	R2	
Roldán	Romero	Elisa	R2	
Romero	Martín	Sara	R2	
Rudski	Ricondo	Luciana	R2	
Segui	Azpilicueta	Pedro	R2	
Blanco	Negrero	Marta	R1	
Bravo	Rey	Isabel María	R1	
Cara	García	María	R1	
Cortés	García	José Ignacio	R1	
Escribano	Fernández	José	R1	
Fernández	López	Isabel María	R1	
García	Jurado	Pedro Blas	R1	
Lombardo	Galera	M ^a Sagrario	R1	
Pulido	Carmona	Cristina	R1	
Sanabria	Gay	Ana Belén	R1	
Amate	Rivas	Cristina	T	
Cerro	Luna	Ana Isabel	T	
Gallego	Casanueva	Julia	T	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Stem cells	Therapeutic radiological scans
Arterial ischemia of the lower limbs	Pathochrony
Therapeutic angiogenesis	Radiological assessment of response to drugs
Neoplasms	Diagnostic radiological scans
Demyelinating diseases	

» HIGHLIGHTED PUBLICATIONS:

- Romero-Martin S, Elias-Cabot E, Raya-Povedano JL, Gubern-Merida A, Rodriguez-Ruiz A, Alvarez-Benito M; Stand-Alone Use of Artificial Intelligence for Digit Mammography and Digital Breast Tomosynthesis Screening: A Retrospective Evaluation; *RADIOLOGY*; 2022; 535-542; DOI: 10.1148/radiol.211590
IF: 29,146 Q1 D1
- Navarrete C, Garcia-Martin A, Correa-Saez A, Prados ME, Fernandez F, Pineda R, Mazzone M, Alvarez-Benito M, Calzado MA, Munoz E; A cannabidiol aminoquinone derivative activates the PP2A/B55 alpha/HIF pathway and shows protective effects in a murine model of traumatic brain injury; *JOURNAL OF NEUROINFLAMMATION*; 2022; DOI: 10.1186/s12974-022-02540-9
IF: 9,587 Q1 D2
- Ibanez-Costa A, Perez-Sanchez C, Patino-Trives AM, Luque-Tevar M, Font P, de la Rosa IA, Roman-Rodriguez C, Abalos-Aguilera MC, Conde C, Gonzalez A, Pedraza-Arevalo S, del Rio-Moreno M, Blazquez-Encinas R, Segui P, Calvo J, Castro RO, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castano-Fuentes JP, Luque RM, Collantes-Estevez E, Lopez-Pedraza C; Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy; *ANNALS OF THE RHEUMATIC DISEASES*; 2022; 56-67; DOI: 10.1136/annrheumdis-2021-220308
IF: 27,973 Q1 D1
- Blasco J, Puig J, Lopez-Rueda A, Daunis-i-Estadella P, Lull L, Zarco F, Macias N, Macho J, Gonzalez E, Labayen I, Vega P, Murias E, Jimenez-Gomez E, Rey IB, Moreu M, Perez-Garcia C, Chaparro OC, Aixut S, Terceno M, Werner M, Pumar JM, Tejedor YA, Mendez JC, Moliner S, Nogueira RG, San Roman L; Addition of intracranial aspiration to balloon guide catheter does not improve outcomes in large vessel occlusion anterior circulation stent retriever based thrombectomy for acute stroke; *JOURNAL OF NEUROINTERVENTIONAL SURGERY*; 2022; 863-867; DOI: 10.1136/neurintsurg-2021-017760
IF: 8,572 Q1 D1
- Perez-Garcia C, Rosati S, Gomez-Escalonilla C, Arrazola J, Lopez-Frias A, Gonzalez E, Fondevila J, Vega P, Murias E, Jimenez-Gomez E, Rey IB, Macho J, San Roman L, Caamano IR, Paipa AJ, Remollo S, Tejedor YA, Bermudez-Coronel I, Moliner S, Pumar JM, Bashir S, Puig J, Lopez-Rueda A, Blasco J, Nogueira RG, Moreu M; Stent-retriever alone versus combined use of stent-retriever and contact aspiration technique for middle cerebral artery M2 occlusions: a propensity score analysis; *JOURNAL OF NEUROINTERVENTIONAL SURGERY*; 2022; 1062-1067; DOI: 10.1136/neurintsurg-2021-017987
IF: 8,572 Q1 D1

» **CLINICAL GUIDES:** 11

1. Estudio Radiológico en enfermedades neurodegenerativas. María Teresa Cáceres Redondo y Manuel José Ramos Gómez. 28/12/2022.
2. Terapia Mediante Ultrasonidos Focalizados de Alta Intensidad (HIFU) Guiada por Resonancia Magnética en Pacientes con Temblor Esencial refractario al Tratamiento Médico. Juan José Ochoa Sepúlveda, Juan Solivera Vela, Manuel José Ramos Gómez, 2022.
3. POE para la revisión y mantenimiento del Carro de parada en Resonancia Magnética (pediátrico y adulto). Ana Belen Cledera Pons. Revisado Pilar Pedraza Mora y aprobado por Marina Álvarez Benito. 13/07/2022.
4. POE para la gestión de estudios de radiología convencional solicitados desde la UGC de Urgencias. Pilar Pedraza Mora. revisado por Jose Carlos Palomo Romero, Ángela Romero Bravo, Miguel Roldán López y aprobado por Marina Álvarez Benito y Luis Jimenez Murillo. 21/06/2020.
5. POE para la revisión y mantenimiento del Carro de parada en salas de TAC (adulto y pediátrico). Ana Belen Cledera Pons, Alejandro Bernal Navas y Ana M.^a Copado Obrero. Revisado por Pilar Pedraza Mora y aprobado por Marina Álvarez Benito. 15/03/2022.
6. POE para la obtención de información sobre exploraciones radiológicas por los servicios peticionarios a través del portal PIC. Josefina Sanchez Rodríguez, revisado por Jose Carlos Palomo y aprobado por Marina Álvarez. 08/02/2022.
7. Protocolos indicaciones pruebas de imagen en rodilla. Alberto Benito Ysamat, Victor Manuel Carmona Tamajón, Fernando Mayordomo Riera. 2022.
8. Protocolos indicaciones pruebas de imagen en rodilla. Alberto Benito Ysamat, Victor Manuel Carmona Tamajón, Fernando Mayordomo Riera. 2022.
9. Proceso cancer de próstata. Daniel José Lopez Ruiz. 2022.
10. Protocolo de seguimiento de los tumores hipofisarios. Francisco Fernández Valverde y Elisa Roldán Romero. 2022.
11. Acuerdo Atención Primaria-Atención Hospitalaria para la solicitud de ecografías en pacientes adultos. 2022.

» **ACTIVITY:**

- N° CLINICAL TRIALS: 4
- N° PATENTS: 1

» **ADDITIONAL INFORMATION:**

- 6 AGREEMENTS WITH COMPANIES

GA09:

CARDIOVASCULAR PATHOLOGY

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Muñoz	Carvajal	Ignacio	R4	0000-0003-3843-8609
Blázquez	Ruiz	M ^a del Valle	R3	
Casares	Mediavilla	Jaime Guillermo	R3	
Chacón	Quevedo	Antonio	R3	
De la Fuente	Martos	Carmen	R3	
Elías	Fuentes	Agustín	R3	
Hervás	Sotomayor	Daniela	R3	
Jiménez	Castilla	Agustina	R3	
Moya	González	Javier	R3	
Pernía	Oreña	Isabel	R3	
Sartor	Wunderlin	Lucio	R3	
Alados	Arboledas	Pedro José	R2	
Merino	Cejas	Carlos Manuel	R2	
Zurita	Martínez	Federico	R2	
Abril	Ramírez	Cristina	R1	
Alonso	Muñoz	Gema	R1	
Batista	Castañeda	Sara Amalia	R1	
Bilbao	Carrasco	Lucía	R1	
Cabrera	Arenas	Inmaculada	R1	
Cáliz	Fuentes	Javier	R1	
Conejero	Jurado	M ^a Teresa	R1	
Domínguez	Del Castillo	José Joaquín	R1	
González-Caldevilla	Fernández	Alejandro	R1	
Jiménez	Sánchez	Mercedes	R1	
Jurado	Morata	Aurea	R1	
López	Romero	Rosalía	R1	
Mayayo	Alcaide	Inmaculada	R1	
Torres	Delgado	Eva María	R1	
Riballo	Cortés	Raquel	N	
Ferres	Serrano	Juan José	T	
Sereno	Rodríguez	Alejandro	T	
Carmona	Trigo	M ^a del Carmen	ADM	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Cardiovascular

Cardiac Surgery

Pathology

Vascular Surgery

» HIGHLIGHTED PUBLICATIONS:

1. Efficacy and Safety of an Extravascular Implantable Cardioverter-Defibrillator. Paul Friedman, Francis Murgatroyd, Lucas V A Boersma, Jaimie Manlucu, David O'Donnell, Bradley P Knight, Nicolas Clémenty, Christophe Leclercq, Anish Amin, Béla P Merkely, Ulrika M Birgersdotter-Green, Joseph Y S Chan, Mauro Biffi, Reinoud E Knops, Greg Engel, Ignacio Muñoz Carvajal, Laurence M Epstein, Venkata Sagi, Jens B Johansen, Maciej Sterliński, Clemens Steinwender, Troy Hounshell, Richard Abben, Amy E Thompson, Christopher Wiggenhorn, Sarah Willey, Ian Crozier; Extravascular ICD Pivotal Study Investigators. The New England Journal of Medicine (2022); DOI: 10.1056/NEJMoa2206485.
IF: 176,082 Q1 D1

2. Solla-Buceta M, Gonzalez-Vilchez F, Almenar-Bonet L, Lambert-Rodriguez JL, Segovia-Cubero J, Gonzalez-Costello J, Delgado JF, Perez-Villa F, Crespo-Leiro MG, Rangel-Sousa D, Martinez-Selles M, Rabago-Juan-Aracil G, De-la-Fuente-Galan L, Blasco-Peiro T, Hervas-Sotomayor D, Garrido-Bravo IP, Mirabet-Perez S, Muniz J, Barge-Caballero E; Infectious complications associated with short-term mechanical circulatory support in urgent heart transplant candidates; REVISTA ESPANOLA DE CARDIOLOGIA; 2022; 141-149; DOI: 10.1016/j.rec.2020.11.019
IF: 6,975 Q1 D3

3. Hernandez-Vaquero D, Rodriguez-Caulo E, Vigil-Escalera C, Blanco-Herrera O, Berastegui E, Arias-Dachary J, Souaf S, Parody G, Laguna G, Adsuar A, Castilla M, Valderrama JF, Pulitani I, Canovas S, Ferreiro A, Garcia-Valentin A, Carnero M, Pareja P, Corrales JA, Blazquez JA, Macias D, Fletcher-Sanfelu D, Martinez D, Martin E, Martin M, Margarit J, Hernandez-Estefania R, Monguio E, Otero J, Silva J; Life expectancy after aortic valve replacement in young patients; REVISTA ESPANOLA DE CARDIOLOGIA; 2022; 294-299; DOI: 10.1016/j.rec.2021.04.010
IF: 6,975 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2022: 1
- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- 2 AGREEMENTS WITH COMPANIES
- INTERNATIONAL PROJECTS: 1

1. IGNACIO MUÑOZ CARVAJAL; STARS - Empowering Patients by Professional Stress Avoidance and Recovery Services Funding Agency: COMISIÓN EUROPEA; Reference: PM-12-2016-002

GA10:

NUCLEAR MEDICINE

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Vallejo Casas	Juan Antonio	R3	0000-0002-0315-0157
Mena Bares	Luisa María	R3	
Moreno Ortega	Estefanía	R3	
Albalá González	M ^a Dolores	R2	
Pacheco Capote	Carmen	R2	
Benítez Velasco	Ana	R1	
Carmona Asenjo	Elvira	R1	
Castejón Echevarne	Simona	R1	
Guiote Moreno	M ^a Victoria	R1	
Márquez Fernández	Juan	R1	
Maza Muret	Francisco Roberto	R1	
Prieto Prieto	Juan Carlos	R1	
Rodríguez Cáceres	Ester	R1	
Santos Bueno	Antonio María	R1	
Vallejo Lesmes	Ana	R1	
Zurera Pareja	Rocío	R1	
Martín Ruiz	Antonio	T	
Moriana Porras	María del Carmen	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Nuclear Medicine	SPECT/CT
PET/CT	Oncology

» HIGHLIGHTED PUBLICATIONS:

1. Casas JAV, Sambo M, Lopez CL, Duran-Poveda M, Garcia JRV, Santos RJ, Llanos M, Navarro-Gonzalez E, Aller J, Pubul V, Guadalix S, Crespo G, Gonzalez C, Zafon C, Navarro M, Santamaria-Sandi J, Segura A, Gajate P, Gomez-Balaguer M, Valdivia J, Puig-Domingo M, Galofre JC, Castelo B, Villanueva MJ, Argueelles I, Orcajo-Rincon L; Initial clinical and treatment patterns of advanced differentiated thyroid cancer: ERUDIT study; EUROPEAN THYROID JOURNAL; 2022; -; DOI: 10.1530/ETJ-21-0111
IF: 4,084 Q2 D5
2. Cardelo MP, Corina A, Leon-Acuna A, Quintana-Navarro GM, Alcala-Diaz JF, Rangel-Zuniga OA, Camargo A, Conde-Gavilan C, Carmona-Medialdea C, Vallejo-Casas JA, Carmona-Asenjo E, Ochoa-Sepulveda JJ, Aguera-Morales E, Delgado-Lista J, Katsiki N, Lopez-Miranda J, Perez-Jimenez F, Yubero-Serrano EM, Perez-Martinez P; Effect of the Mediterranean diet and probiotic supplementation in the management of mild cognitive impairment: Rationale, methods, and baseline characteristics; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.1037842
IF: 6,59 Q1 D2
3. Bajo-Morales J, Prieto-Prieto JC, Herrera LJ, Rojas I, Castillo-Secilla D; COVID-19 Biomarkers Recognition & Classification Using Intelligent Systems; CURRENT BIOINFORMATICS; 2022; 426-439; DOI: 10.2174/1574893617666220328125029
IF: 4,85 Q1 D2
4. Bajo-Morales J, Galvez JM, Prieto-Prieto JC, Herrera LJ, Rojas I, Castillo-Secilla D; Heterogeneous Gene Expression Cross-Evaluation of Robust Biomarkers Using Machine Learning Techniques Applied to Lung Cancer; CURRENT BIOINFORMATICS; 2022; 150-163; DOI: 10.2174/1574893616666211005114934
IF: 4,85 Q1 D2

» ACTIVITY:

- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- 3 AGREEMENTS WITH COMPANIES

GA11:

LEARNING AND ARTIFICIAL NEURAL NETWORKS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	
Hervás	Martínez	César	R4
Gutiérrez	Peña	Pedro Antonio	R4
Fernández	Caballero	Juan Carlos	R3
García	Alonso	Carlos	R3 (*)
Pérez	Ortiz	María	R3
Rodero	Cosano	M ^a Luisa	R3
Salinas	Pérez	José Alberto	R3
Sánchez	Monedero	Javier	R3
Torres	Jiménez	Mercedes	R3
Durán	Rosal	Antonio M	R2
Gómez	Orellana	Antonio	R2
Guijo	Rubio	David	R2
Ayllón	Gavilán	Rafael	R1
Barbero	Gómez	Javier	R1
Bérchez	Moreno	Francisco	R1
Morales	Martín	Alejandro	R1
Vargas	Yun	Víctor	R1

(*) Till March 2022

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Ordinal classification	Convolutional Neural Networks
Artificial neural networks	Scores for liver transplantation
Processing of biomedical images	Explainable artificial intelligence models
Time series segmentation	

» HIGHLIGHTED PUBLICATIONS:

1. Diaz-Lozano M, Guijo-Rubio D, Gutierrez PA, Gomez-Orellana AM, Tunez I, Ortigosa-Moreno L, Romanos-Rodriguez A, Padillo-Ruiz J, Hervas-Martinez C; COVID-19 contagion forecasting framework based on curve decomposition and evolutionary artificial neural networks: A case study in Andalusia, Spain; EXPERT SYSTEMS WITH APPLICATIONS; 2022; -; DOI: 10.1016/j.eswa.2022.117977
IF: 8,665 Q1 D2
2. Vargas VM, Gutierrez PA, Hervas-Martinez C; Unimodal regularisation based on beta distribution for deep ordinal regression; PATTERN RECOGNITION; 2022; -; DOI: 10.1016/j.patcog.2021.108310
IF: 8,518 Q1 D2
3. Gomez-Orellana AM, Guijo-Rubio D, Gutierrez PA, Hervas-Martinez C; Simultaneous short-term significant wave height and energy flux prediction using zonal multi-task evolutionary artificial neural networks; RENEWABLE ENERGY; 2022; 975-989; DOI: 10.1016/j.renene.2021.11.122
IF: 8,634 Q1 D3
4. Duran-Rosal AM, Carbonero M, Gutierrez PA, Hervas-Martinez C; A mixed distribution to fix the threshold for Peak-Over-Threshold wave height estimation; SCIENTIFIC REPORTS; 2022; -; DOI: 10.1038/s41598-022-22243-8
IF: 4,997 Q2 D3
5. Flores-Hernandez ER, Garcia-Alonso CR, Hervas-Martinez C; Strategic management practices in Central American micro family enterprises: The case of the commercial sector in El Salvador; MANAGERIAL AND DECISION ECONOMICS; 2022; 3454-3465; DOI: 10.1002/mde.3607
IF: 1,379 Q3

» ACTIVITY:

- N° ONGOING PROJECTS: 4

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. DAMA Network
 2. MAPAS Network
 3. PAIDI TIC-148
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4
 1. Programa Margarita Salas de la Universidad de Córdoba a través de las ayudas a Universidades Públicas para la recualificación del sistema universitario español del Ministerio de Universidades, financiadas por la Unión Europea - NextGenerationEU – David Guijo Rubio (Ref. UCOR01MS). Contratado hasta Junio de 2023
 2. Programa Predoctoral del Ministerio de Ciencia, Innovación y Universidades – Víctor Manuel Vargas Yun (Ref. FPU18/00358). Contratado hasta Septiembre de 2023
 3. Programa de Formación de Personal Investigador del Ministerio de Ciencia, Innovación y Universidades – Javier Barbero Gómez (Ref. PRE2018-085659). Contratado hasta septiembre de 2023
 4. Consejería de Transformación Económica, Industria, Conocimiento y Universidades de la Junta de Andalucía – Antonio Manuel Gómez Orellana (Ref. PREDOC-00489). Contratado hasta febrero de 2026

SEVERE MENTAL ILLNESS-HEALTH ALERTS**SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY****» TEAM**

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Sarramea	Crespo	Fernando	R3
			0000-0003-0457-2340
Gutiérrez	Rojas	Luis	R3
Luque	Luque	Rogelio	R3
Alcalá	Partera	Jose Ángel	R2
Jaén	Moreno	M ^a José	R2
Prados	Ojeda	Juan Luis	R2
Alcántara	García	Montserrat	R1
Arribas	Lozano	Teresa	R1
Blanco	Quesada	Francisca	R1
Canalejo	Rodríguez	Ana Isabel	R1
Carrión	Expósito	Laura	R1
Castellano	Palma	Ana María	R1
Chauca	Chauca	Geli Marie	R1
Del Pozo	Seseña	Gloria Isabel	R1
Espejo	Obejo	M ^a Teresa	R1
Gómez	Moreno	Cristina	R1
Laguna	Muñoz	David	R1
López	Carnerero	M ^a Soledad	R1
Mellado	Martínez	M ^a José	R1
Montiel	López	Francisco Javier	R1
Ortiz	Alfaro	M ^a José	R1
Osuna	Carmona	Maribel	R1
Padilla	Obrero	Leonor	R1
Polonio	De Dios	Inmaculada	R1
Prada	Carrasco	Carmen	R1
Redondo	Écija	Justa	R1
Rivera	Hidalgo	M ^a Luisa	R1
Ruiz	Rull	Cristina Esther	R1
Sánchez	Gallardo	Sonia	R1
Sánchez	Rodríguez	Araceli	R1
Valdivia	Romero	Francisca	R1
Zurita	Gotor	Pilar	R1

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Severe mental disorder	Mortality
Schizophrenia	Readiness to change
Bipolar disorder	Chronic obstructive pulmonary disease
Tobacco cessation	Screening

» HIGHLIGHTED PUBLICATIONS:

- Alcala JA, Fontalba-Navas A, Company-Morales M, Romero-Guillena SL, Gutierrez-Higuera T, Gutierrez-Rojas L; Facilitators and Barriers of Medication Adherence Based on Beliefs of Persons with Bipolar Disorder: A Qualitative Study; INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH; 2022; -; DOI: 10.3390/ijerph19137633
IF: 4,614 Q1 D3
- Jaen-Moreno MJ, Garcia-Portilla MP, Sarramea F, Bascaran TB, Galvan G, Diaz-Mesa EM, Al-Halabi S, Elizagarate E, Martinez PAS, Bobes J, Garcia-Alvarez L; The Multi-Component Smoking Cessation Support Programme (McSCSP) is effective in patients with severe mental disorder without gender differences; ADICCIONES; 2022; 218-226; DOI: 10.20882/adicciones.1481.
IF: 4,102 Q2 D4
- Prados-Ojeda JL, Gordillo-Urbano RM, Carrillo-Perez T, Vazquez-Calvo A, Herrera-Cortes MA, Carreno-Ruiz MA, Font-Ugalde P; Suicide Presentations to an Emergency Department Pre and During the COVID Lockdown, March-May 2020, in Spain; ARCHIVES OF SUICIDE RESEARCH; 2022; 1336-1348; DOI: 10.1080/13811118.2021.1887023
IF: 2,833 Q3 D
- Garcia-Torres F, Gomez-Solis A, Garcia SR, Castillo-Mayen R, Ruiz-Ruano VG, Moreno E, Moriana JA, Luque-Salas B, Jaen-Moreno MJ, Cuadrado-Hidalgo F, Galvez-Lara M, Jablonski M, Rodriguez-Alonso B, Aranda E; Efficacy of a Combined Acceptance and Commitment Intervention to Improve Psychological Flexibility and Associated Symptoms in Cancer Patients: Study Protocol for a Randomized Controlled Trial; FRONTIERS IN PSYCHOLOGY; 2022; -; DOI: 10.3389/fpsyg.2022.871929
IF: 4,232 Q1 D3
- Garcia-Torres F, Tejero-Perea A, Gomez-Solis A, Castillo-Mayen R, Jaen-Moreno MJ, Luque B, Galvez-Lara M, Sanchez-Raya A, Jablonski M, Rodriguez-Alonso B, Aranda E; Effectiveness of the Unified Barlow Protocol (UP) and neuropsychological treatment in cancer survivors for cognitive impairments: study protocol for a randomized controlled trial; TRIALS; 2022; -; DOI: 10.1186/s13063-022-06731-w
IF: 2,728 Q4

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° CLINICAL TRIALS: 1
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3
 1. CIBERSAM (Grupo 05)
 2. PAIDI CTS 550
 3. GETBA (Grupo para el Estudio del Trastorno bipolar en Andalucía)
- 2 AGREEMENTS WITH COMPANIES

GA13:

PREVENTIVE MEDICINE AND PUBLIC HEALTH

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY		
Salcedo	Leal	María Inmaculada	R3	0000-0002-0864-6856
Barranco	Quintana	José Luis	R3	
Fernández	Martínez	Nicolás Francisco	R1	
González	Morales	Laura	R1	
Guillén	Climent	Silvia	R1	
López	Cabrera	Estefanía	R1	
Marín	González	Beatriz	R1	
Monserrat	Villatoro	Jaime	R1	
Ortiz	González-Serna	Rocío	R1	
Rubio	Osuna	Francisco	R1	
Ruiz	Montero	Rafael	R1	
Serrano	Ortiz	Álvaro	R1	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Public Health	Vaccine uptake
Healthcare associated infections	Adherence
Vaccination	Environmental Biosafety

» HIGHLIGHTED PUBLICATIONS:

1. Fernández-Martínez NF, Ruiz-Montero R, Briones E, Baños E, García San Miguel Rodríguez-Alarcón L, Chaves JA, Abad R, Varela C; LISMOAN team; Lorusso N. Listeriosis outbreak caused by contaminated stuffed pork, Andalusia, Spain, July to October 2019. Euro Surveill. 2022 Oct;27(43):2200279. doi: 10.2807/1560-7917.ES.2022.27.43.2200279. Erratum in: Euro Surveill. 2022 Oct;27(44)

IF: 6.454 Q1

2. Fernández-Martínez NF, Ruiz-Montero R, Gómez-Barroso D, Rodríguez-Torronteras A, Lorusso N, Salcedo-Leal I, Sordo L. Socioeconomic differences in COVID-19 infection, hospitalisation and mortality in urban areas in a region in the South of Europe. BMC Public Health. 2022 Dec 12;22(1):2316. doi: 10.1186/s12889-022-14774-6.

IF: .98 Q1

3. Petrova D, Špacírová Z, Fernández-Martínez NF, Ching-López A, Garrido D, Rodríguez-Barranco M, Pollán M, Redondo-Sánchez D, Espina C, Higuera-Callejón C, Sánchez MJ. The patient, diagnostic, and treatment intervals in adult patients with cancer from high- and lower-income countries: A systematic review and meta-analysis. *PLoS Med.* 2022 Oct 20;19(10):e1004110. doi: 10.1371/journal.pmed.1004110.

IF: 11.069 D1

4. Fernández-Martínez NF, Cárcel-Fernández S, De la Fuente-Martos C, Ruiz-Montero R, Guzmán-Herrador BR, León-López R, Gómez FJ, Guzmán-Puche J, Martínez-Martínez L, Salcedo-Leal I. Risk Factors for Multidrug-Resistant Gram-Negative Bacteria Carriage upon Admission to the Intensive Care Unit. *Int J Environ Res Public Health.* 2022 Jan 18;19(3):1039. doi: 10.3390/ijerph19031039.

IF: 4.614 Q1

5. Delgado-Sanchez S, Serrano-Ortiz A, Ruiz-Montero R, Lorusso N, Rumbao-Aguirre JM, Salcedo-Leal I; Impact of the first superspreading outbreak of COVID-19 related to a nightlife establishment in Andalusia, Spain; *JOURNAL OF HEALTH-CARE QUALITY RESEARCH*; 2022; 216-224; DOI: 10.1016/j.jhqr.2021.12.006

IF: 0,15 Q4

» ADDITIONAL INFORMATION:

• NETWORKS: 3

1. Sociedad Andaluza de Medicina Preventiva y Salud Pública (SAMPSP).
2. Consejería de Salud y Familias de la Junta de Andalucía. Dirección General de Salud Pública.
3. Sociedad Española de Medicina Preventiva y Salud Pública e higiene (SEMPSPH).

• COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1

1. Programa María Castellano Arroyo – Universidad de Córdoba

• INTERNATIONAL PROJECTS: 1

1. MARÍA INMACULADA SALCEDO LEAL; REVERSE - pREvention and management tools for rEducing antibiotic Resistance in high prevalence Settings. Funding Agency: COMISIÓN EUROPEA; Reference: BHC34-2020-01

GA14:

IMMUNOGENOMICS AND MOLECULAR PATHOGENESIS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	
Garrido	Pavón	Juan José	R4	0000-0001-6592-2231
Aguilar	Jurado	Carmen	R3	
Argüello	Rodríguez	Héctor	R3	
Arce	Jiménez	Cristina	R3	
García	García	Tránsito	R3	
Zaldivar	López	Sara	R3	
Jiménez	Marín	Ángeles	R2	
Fernández	Rodríguez	Raúl	R1	
Ortiz	Sanjuán	Juan Manuel	R1	
Suárez	Cárdenas	José Manuel	R1	
Romero	Guillén	Antonio	R1	

» SCIENTIFIC PRODUCTION



» KEYWORDS:

Host-Microbiome-Pathogen Interplay	Intestinal Immunity
Inflammatory Response	Immunometabolism
SARS-CoV-2 Accessory Proteins	MicroARNs and Immunity
Extracellular vesicles / Exosomes	Microbiota
Enterobacterial infections	Organoids

» HIGHLIGHTED PUBLICATIONS:

- García-García T, Fernández-Rodríguez R, Redondo N, de Lucas-Rius A, Zaldivar-Lopez S, Lopez-Ayllon BD, Suarez-Cardenas JM, Jimenez-Marin A, Montoya M, Garrido JJ; Impairment of antiviral immune response and disruption of cellular functions by SARS-CoV-2 ORF7a and ORF7b; ISCIENCE; 2022; -; DOI: 10.1016/j.isci.2022.105444
IF: 6,107 Q1 D3
- Herrera-Urbe J, Zaldivar-Lopez S, Aguilar C, Entrenas-Garcia C, Bautista R, Claros MG, Garrido JJ; Study of microRNA expression in Salmonella Typhimurium-infected porcine ileum reveals miR-194a-5p as an important regulator of the TLR4-mediated inflammatory response; VETERINARY RESEARCH; 2022; -; DOI: 10.1186/s13567-022-01056-7
IF: 3,829 Q1 D1

3. Sanchez-Carvajal JM, Rodriguez-Gomez IM, Ruedas-Torres I, Zaldivar-Lopez S, Larenas-Munoz F, Bautista-Moreno R, Garrido JJ, Pallares FJ, Carrasco L, Gomez-Laguna J; Time Series Transcriptomic Analysis of Bronchoalveolar Lavage Cells from Piglets Infected with Virulent or Low-Virulent Porcine Reproductive and Respiratory Syndrome Virus 1; JOURNAL OF VIROLOGY; 2022; -; DOI: 10.1128/JVI.01140-21

IF: 6,549 Q2 D3

4. Alvarez B, Revilla C, Moreno S, Jimenez-Marin A, Ramos E, Riva PMD, Poderoso T, Garrido JJ, Ezquerra A, Dominguez J; CD9 expression in porcine blood CD4(+) T cells delineates two subsets with phenotypic characteristics of central and effector memory cells; DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY; 2022; -; DOI: 10.1016/j.dci.2022.104431

IF: 3,605 Q1 D1

» **ADDITIONAL INFORMATION:**

• NETWORKS: 1

1. Red de Investigación en Sanidad Animal. Convocatoria de Redes Temáticas de Investigación del Ministerio de Economía, Industria y Competitividad.

• COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1

1. Convocatoria Contratos María Zambrano // Convocatoria Programa Ramón y Cajal. Ministerio de Ciencia e Innovación. Tránsito García García.

GA15:

FOODS FOR HEALTH

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Moreno	Rojas	Rafael	R3	0000-0003-3134-7392
Cámara	Martos	Fernando	R3	
De Haro	Bailón	Antonio	R3	
Moreno	Rojas	Jose Manuel	R3	
Obregón	Cano	Sara	R3	
Pereira	Caro	Mª Gema	R3	
Hernández	Reyes	Alberto	R2	
Moreno	Ortega	Alicia	R2	

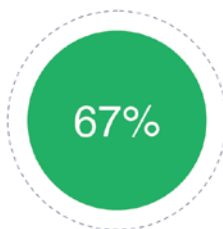
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Polyphenols	In vitro digestion
Carotenoids	Design of new foods
Bioavailability	Functional foods
Bioaccessibility	Antinutritive compounds
Biological activity	Plant breeding
Glucosinolates	Fatty acids
Fibre	Brassica
Turnip tops	Mustards
Near infrared reflectance spectroscopy	Borage
Gamma linolenic acid	Mineral
Gastronomy	

» HIGHLIGHTED PUBLICATIONS:

1. Moreno-Ortega A, Di Pede G, Pereira-Caro G, Calani L, Mena P, Del Rio D, Moreno-Rojas JM; In Vitro Colonic Fermentation of (Poly)phenols and Organosulfur Compounds of Fresh and Black Garlic; JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY; 2022; 3666-3677; DOI: 10.1021/acs.jafc.1c08081
IF: 5,895 Q1 D2
2. Moreno-Ortega A, Di Pede G, Mena P, Calani L, Del Rio D, Moreno-Rojas JM, Pereira-Caro G; Effects of colonic fermentation on the stability of fresh and black onion bioactives; FOOD & FUNCTION; 2022; 4432-4444; DOI: 10.1039/d1fo04240h
IF: 6,317 Q1 D2
3. Cámara-Martos F, Obregón-Cano S, de Haro-Bailón A. Glucosinolates, Ca, Se Contents, and Bioaccessibility in Brassica rapa Vegetables Obtained by Organic and Conventional Cropping Systems. Foods. 2022; 11(3):350. <https://doi.org/10.3390/foods11030350>
IF: 5,2 Q1
4. Bayon RF, Esponera MPV, de La Torre DG, Rojas RM; Degree of adherence to the Mediterranean Diet and nutrient intake during the 24-hour shifts of the resident medical staff at the Reina Sofia Hospital in Cordoba, Spain; NUTRICION CLINICA Y DIETETICA HOSPITALARIA; 2022; 105-116; DOI: 10.12873/422fradejas
IF: 0,07 Q4

» ACTIVITY:

- Nº ONGOING PROJECTS: 4

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. Grupo PAIDI AGR-241: Tecnología poscosecha e industria agroalimentaria. Director: José Manuel Moreno Rojas
 2. Grupo PAIDI AGR 013. Calidad Alimentaria y Nutrición. Director: Manuel A. Amaro López
 3. Grupo AGR 118. Mejora y agronomía plantas oleaginosas. Director: Juan Domínguez Giménez
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. Programa Emergia de Atracción de Talento Investigador de la Junta de Andalucía- M^a Gema Pereira Caro.

GA16:

LIFESTYLES, INNOVATION AND HEALTH

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Molina Recio	Guillermo	R3	0000-0002-0005-4901
García Hernández	Laura	R3	
Martínez Pérez	Héctor	R3	
Olivares Bueno	Joaquín	R3	
Palomares Muñoz	Jose Manuel	R3	
Rodríguez Hidalgo	Antonio Jesús	R3	
García Rodríguez	María	R2	
León García	Fernando	R2	
Martínez De La Iglesia	Jorge	R2	
Molina Luque	Rafael	R2	
Rodríguez Lozano	Francisco Javier	R2	
Romero Saldaña	Manuel	R2	
Villena Esponera	Mª Pilar	R2	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

mHealth	International cooperation
eHealth	Prevention
Cardiovascular health	Occupational health
Nutrition	Predictive models
Health promotion	Non-invasive techniques
Critical care	Internet of things
Algorithm and hardware optimization	Artificial Intelligence

» HIGHLIGHTED PUBLICATIONS:

1. Sevillano-Jimenez A, Molina-Recio G, Garcia-Mellado JA, Garcia-Rodriguez M, Molina-Luque R, Romero-Saldana M; Efficacy of nutrition education for the increase of symbiotic intake on nutritional and metabolic status in schizophrenic spectrum disorders: A two-arm protocol; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.912783

IF: 6,59 Q1 D2

2. Guzman-Garcia JM, Romero-Saldana M, Molina-Recio G, Alvarez-Fernandez C, Raya-Cano E, Molina-Luque R; Diagnostic accuracy of the waist-to-height ratio and other anthropometric indices for metabolically healthy obesity in the working population; FRONTIERS IN NUTRITION; 2022; -; DOI: 10.3389/fnut.2022.962054

IF: 6,59 Q1 D2

3. Sevillano-Jimenez A, Romero-Saldana M, Garcia-Rodriguez M, Molina-Luque R, Molina-Recio G; Nutritional Impact and Eating Pattern Changes in Schizophrenic Spectrum Disorders after Health Education Program on Symbiotic Dietary Modulation Offered by Specialised Psychiatric Nursing-Two-Arm Randomised Clinical Trial; NUTRIENTS; 2022; -; DOI: 10.3390/nu14245388
IF: 6,706 Q1 D2

4. Naranjo-Rojas, A; Pérula-de-Torres, LA; Molina-Recio, G. (3/3). 2022. Patients, caregivers, and healthcare professionals' needs when designing the content of a mobile application for the clinical monitoring of patients with chronic obstructive pulmonary disease and home oxygen therapy: A user-centered design. INTERNET INTERVENTIONS; 2022; pp.100552. DOI 10.1016/j.invent.2022.100552
IF: 4,3. Q1 D3

5. Raya-Cano E, Vaquero-Abellan M, Molina-Luque R, De Pedro-Jimenez D, Molina-Recio G, Romero-Saldana M; Association between metabolic syndrome and uric acid: a systematic review and meta-analysis; SCIENTIFIC REPORTS; 2022; -; DOI: 10.1038/s41598-022-22025-2
IF: 4,997 Q1 D3

» **ACTIVITY:**

- N° ONGOING PROJECTS: 2

» **ADDITIONAL INFORMATION:**

- NETWORKS: 6

1. Red de Investigación en Enfermería de Salud Ocupacional - "REDENSO"
2. Research groups pertaining to the Andalusian Plan for Research, Development and Innovation (PAIDI):
 - a) HUM-298
 - b) AGR-13
 - c) HUM-298
 - d) TEP-226 (PRINIA)
 - e) TIC-252 (GIIA)

- INTERNATIONAL PROJECTS: 1

1. JOAQUÍN OLIVARES BUENO; ALive: Analytics for computation and visualization of liver resections; Funding Agency: The Research Council of Norway; Reference: 311393/AAU.



**SCIENTIFIC REPORT
IMIBIC 2022**

PLATFORMS AND NETWORKS

IMIBIC researchers are involved in a wide range of strategic initiatives coordinated by the National Institute of Health Carlos III (ISCIII). These include the Thematic Networks for Cooperative Research in Health (*Redes Temáticas de Investigación Cooperativa en Salud*: RETICs) and the Networked Biomedical Research Centers (*Centros de Investigación Biomédica en Red*: CIBERs), among others. IMIBIC is also part of two European research infrastructures (EATRIS & ECRIN) and several other national and international networks.

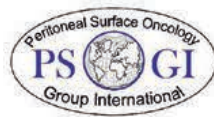
Of the 49 groups integrated within the IMIBIC, twelve are involved in 16 different RETICs, fifteen are involved in 8 CIBERs (including the newly created CIBERinfec) and there are 37 groups involved in the Andalusian Plan for Research, Development & Innovation (PAIDI Programme).

» CIBER



» RETICS





CIBER PROGRAM

Our researchers lead or participate in the following CIBER nodes:

1 CIBER ON OBESITY AND NUTRITION (CIBEROBN)

Dr. José López Miranda

Dr. Manuel Tena Sempere

Dr. María Mercedes Gil Campos

Dr. M^a Mar Malagón Poyato

Dr. Justo P. Castaño Fuentes

Dr. Raúl M. Luque Huertas

2 CIBER ON LIVER AND DIGESTIVE DISEASES (CIBEREHD)

Dr. Manuel de la Mata García

Dr. Francisco Javier Briceño Delgado

3 CIBER ON RARE DISEASES (CIBERER)

Dr. Eduardo López Laso

4 CIBER ON FRAGILITY AND HEALTHY AGING (CIBERFES)

Dr. Feliciano Priego Capote

Dr. Antonio Casado Diaz

Dr. Manuel Rich Ruiz

5 CIBER ON CANCER (CIBERONC)

Dr. Enrique Aranda Aguilar

6 CIBER ON MENTAL HEALTH (CIBERSAM)

Dr. Fernando Sarramea Crespo

7 CIBER ON CARDIOVASCULAR DISEASES (CIBERCV)

Dr. Juan Antonio Moreno Gutiérrez

8 CIBER ON INFECTIOUS DISEASES (CIBERINFEC)

Dr. Antonio Rivero Román

Dr. Julián de la Torre Cisneros

RETICS

ISCIII Networks for Cooperative Research in Health that IMIBIC is involved in:

1 AIDS RESEARCH NETWORK (RIS)

Dr. Antonio Rivero Román

2 THE SPANISH RENAL RESEARCH NETWORK (REDINREN)

Dr. Alejandro Martín Malo

Dr. Mariano Rodríguez Portillo

3 SPANISH NETWORK FOR RESEARCH IN INFECTIOUS DISEASES (REIPI)

Dr. Julián de la Torre Cisneros

Dr. Rafael Solana Lara

Dr. Luis Martínez Martínez

- **4 PRIMARY CARE PREVENTION AND HEALTH PROMOTION NETWORK (REDIAPP)**

Dr. Luis A. Pérula de Torres
- **5 SPANISH NETWORK FOR ASTHMA, ADVERSE AND ALLERGIC REACTIONS (ARADYAL)**

Dr. Carmen Moreno Aguilar
- **6 THE RESEARCH NETWORK FOR INFLAMMATION AND RHEUMATIC DISEASES (RIER)**

Dr. Eduardo Collantes Estévez

Dr. Rosario López Pedrera
- **7 THE SPANISH NETWORK OF MULTIPLE SCLEROSIS (REEM)**

Dr. Eduardo Agüera Morales

Dr. Isaac Túnez Fiñana
- **8 HEALTHCARE RESEARCH UNIT (INVESTÉN-ISCIII)**

Dr. Manuel Rich Ruiz
- **9 EYE DISEASES: PREVENTION, EARLY DETECTION AND TREATMENT OF PREVALENT, DEGENERATIVE AND CHRONIC OCULAR PATHOLOGY (OFTARED ISCIII)**

Dr. Miguel González Andrades
- **10 INTERNATIONAL NETWORK OF OCCUPATIONAL HEALTH NURSING (ENSO NETWORK)**

Dr. Guillermo Molina Recio
- **11 REDHYPOX**

Dr. Eduardo Muñoz Blanco
- **12 ANDALUSIAN NETWORK OF CAR THERAPY (RANTECAR)**

Dr. Inmaculada Concepción Herrera Arroyo
- **13 SPANISH PEDIATRIC CLINICAL TRIALS NETWORK (RECLIP)**

Dr. M^a Mercedes Gil Campos
- **14 SPANISH NETWORK OF MULTIPLE SCLEROSIS (REEM)**

Dr. Eduardo Agüera Morales
- **15 PRECISION NUTRITION AND PHYSICAL EXERCISE AS MODULATORS OF THE EPIGENOME IN DIET-RELATED PATHOLOGIES (NUTRIEPIGEN)**

Dr. José López Miranda
- **16 RESEARCH NETWORK ON ADIPOSE PLASTICITY AND RELATED PATHOLOGIES (ADIPOPLAST)**

Dr. M^a del Mar Malagón Poyato

THE ANDALUSIAN PLAN FOR RESEARCH, DEVELOPMENT AND INNOVATION (PAIDI)

Many IMIBIC researchers belong to or lead groups that are part of the Andalusian Plan for Research, Development and Innovation (PAIDI).

PAIDI GROUP	IMIBIC RESEARCHERS
AGR-013	Dr. Guillermo Molina Recio
AGR-231	Dr. Juan José Garrido Pavón
AGR-241	Dr. Rafael Moreno Rojas
BIO-139	Dr. Justo P. Castaño Fuentes
BIO-139	Dr. María Del Mar Malagón Poyato
BIO-139	Dr. Raúl Miguel Luque Huertas
BIO-187	Dr. Antonio Romero Ruiz
BIO-216	Dr. José Antonio Bárcena Ruiz
BIO-272	Dr. Manuel Ruiz Rubio
BIO-301	Dr. Rafael Rodríguez Ariza
BIO-304	Dr. Eduardo Muñoz Blanco
BIO-304	Dr. Ángel Salvatierra Velázquez
BIO-310	Dr. Manuel Tena Sempere
CTS 550	Dr. Fernando Sarramea Crespo
CTS-1004	Dr. Eduardo Collantes Estevez
CTS-1041	Dr. Juan Alberto Ruano Ruiz
CTS-172	Dr. Julia Carrasco Valiente
CTS-179	Dr. Escolástico Aguilera Tejero
CTS-208	Dr. Rafael Solana Lara
CTS-212	Dr. Pablo Pérez Martínez
CTS-234	Dr. Enrique Aranda Aguilar
CTS-260	Dr. Pedro Aljama García
CTS-273	Dr. Manuel de la Mata García
CTS-273	Dr. Francisco Javier Briceño Delgado
CTS-413	Dr. José Manuel Quesada Gómez
CTS-452	Dr. Luis A. Pérula de Torres
CTS-525	Dr. José López Miranda
CTS-620	Dr. Joaquín Sánchez García
CTS-624	Dr. Eduardo Agüera Morales
CTS-639	Dr. María Mercedes Gil Campos
CTS-647	Dr. Julián Carlos de la Torre Cisneros
CTS-651	Dr. Juan Antonio Paniagua González
CTS-666	Dr. Pablo Jesús Lopez Soto
CTS-985	Dr. José Peña Amaro
CTS-992	Dr. Bernabé Jurado Gámez
FQM-227	Dr. Feliciano Priego Capote
HUM-298	Dr. Antonio Jesús Rodríguez Hidalgo
HUM-414	Dr. Bárbara Luque Salas
HUM-924	Dr. Juan Antonio Moriana
TEP-226	Dr. Laura García Hernández
TIC-122	Dr. Sebastián Ventura Soto
TIC-148	Dr. César Hervás Martínez
TIC-161	Dr. Rafael Medina Carnicer
TIC-252	Dr. José Manuel Palomares Muñoz

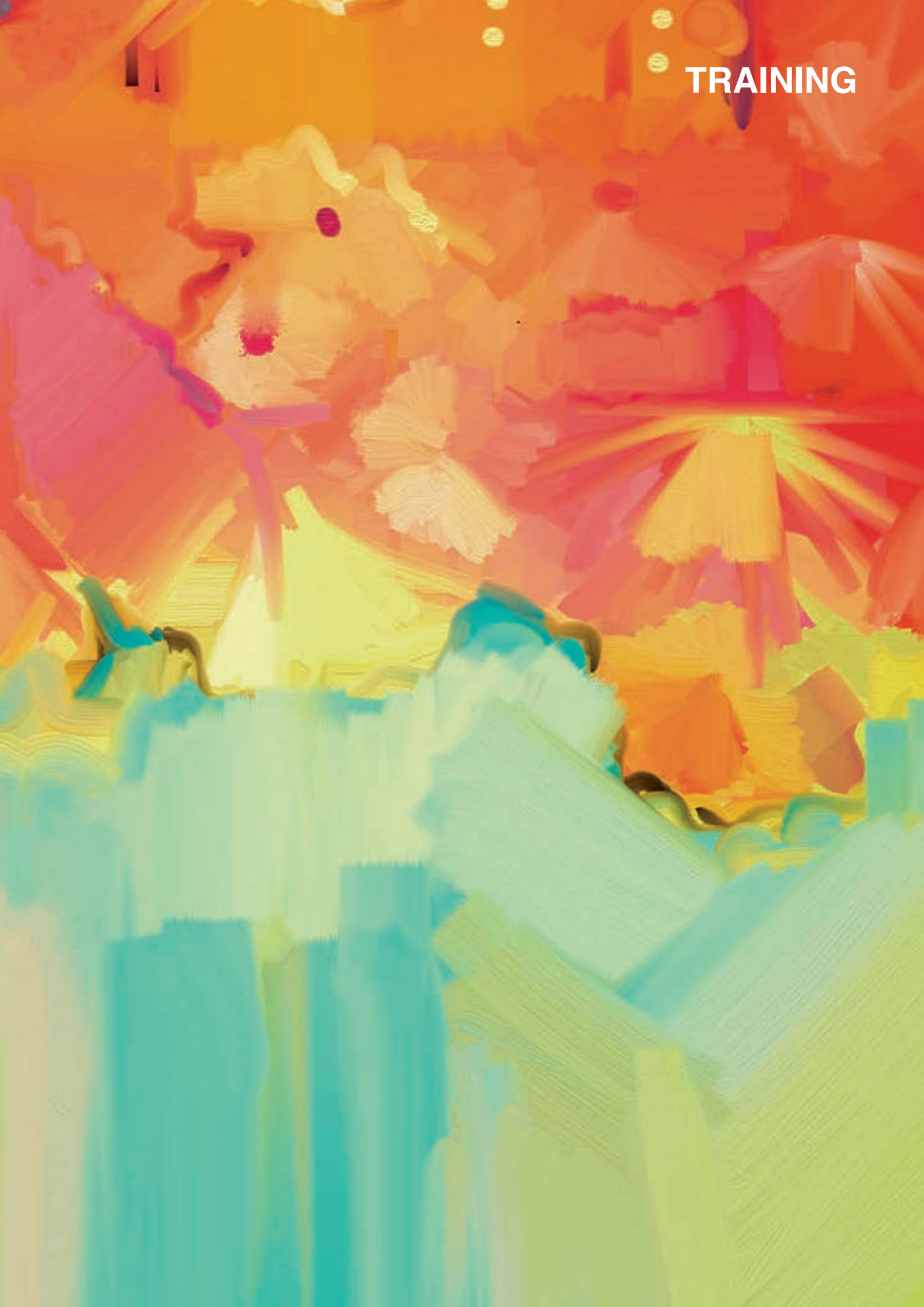
OTHER

IMIBIC is a member of the following national and international networks, platforms and infrastructures:

- ITEMAS ISCIII: Medical Technology Innovation Platform
- SCReN: Clinical Research and Clinical Trials Unit Platform
- EATRIS: European Infrastructure for Translational Medicine Platform
- ECRIN: European Clinical Research Infrastructure Network
- EUROPMP: European network on Pseudomyxoma Peritonei
- VascAgeNet: Network For Research In Vascular Ageing
- TRANSBIONET: Spanish Bioinformatics Network for Clinical Research
- RISA: Animal Health Research Network
- SEPAR: Spanish Society of Pneumology and Thoracic Surgery
- NEUMOSUR: Southern Association for Pulmonology and Thoracic Surgery
- SECT: Spanish Society of Thoracic Surgery
- GETBA: Group for the Study of Bipolar Disorder in Andalusia
- SAMPSP: Andalusian Society of Preventive Medicine and Public Health
- SEMPSPH: Spanish Society of Preventive Medicine and Public Health and Hygiene
- ERA-EDTA: Immunonephrology Working Group. European Renal Association – European Dialysis and Transplant Association
- PSOGI: The Peritoneal Surface Oncology Group International (Lap-CRS+HIPEC registry)
- SEProt: Spanish Society of Proteomics
- GETECCU: Spanish Working Group On Crohn's Disease And Ulcerative Colitis
- COMBACTE-NET: Combatting Bacterial Resistance in Europe – networks
- COMBACTE-CARE: Combatting Bacterial Resistance in Europe – carbapenem-resistance
- APS ACTION. Anti-Phospholipid Syndrome Alliance For Clinical Trials and International Networking
- GEICAM: Spanish Breast Cancer Research Group
- TTD: Digestive Tumour Treatment Group
- GEICO: Spanish Research Group on Ovarian Cancer
- GECP: Spanish Lung Cancer Group
- GEIS: Spanish Sarcoma Research Group
- SOGUG: Spanish Oncology Genito-Urinary Group
- GETNE: Spanish Group of Neuroendocrine and Endocrine Tumours
- ENETS: European Neuroendocrine Tumor Society
- ESE: European Society of Endocrinology: Pituitary and Neuroendocrinology Focus Area
- IARC, WHO: Rare Cancer Genomics
- SEEN: Spanish Society of Endocrinology and Nutrition: Knowledge of Neuroendocrinology Area
- SAEDYN: Andalusian Society of Endocrinology, Diabetes and Nutrition: Knowledge of Neuroendocrinology Area
- NutriEpiGen: Precision Nutrition and Physical Exercise as Modulators of the Epigenome in Diet-related Pathologies
- COST Action: European Cooperation in Science and Technology
- EUTOX: European Uremic Toxin
- GESMD: Spanish Group of Myelodysplastic Syndromes
- COCHRANE Skin group

10

**SCIENTIFIC REPORT
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Training is considered a fundamental institutional tool for achieving and improving the scientific objectives of the Institute. Each year, it draws up an extensive programme of events and training activities to promote and deliver quality scientific training to researchers at the Institute, tailored to the different stages of their scientific careers. The programme includes the organisation of an annual program of seminars given by well-known national and international authorities on the latest cutting-edge scientific topics, courses covering concepts related to our current lines of research, as well as practical applications of the latest technologies. Along with these activities, the Institute holds two key training activities: the annual Young Investigators Meeting, aimed at fostering interaction and knowledge exchange among our youngest researchers, and the Maimonides Commemorative Lecture, which includes a lecture given by a leading expert in Biomedicine, and the presentation of awards recognising the work of IMIBIC researchers with leading national and international scientists.

IMIBIC is similarly committed to the generation of talent and runs two postgraduate programmes in collaboration with the University of Córdoba: the Master's degree in Translational Biomedical Research and the PhD programme in Biomedicine. These programmes not only contribute to the professional qualification of students in the field of Biomedical Sciences and to the promotion of teaching, but also attract new scientific talent to the Institute.

» **TRAINING PROGRAM DIRECTOR:**

- Juan Manuel Castellano Rodríguez, PhD.

» **TRAINING OFFICER:**

- Inmaculada Varo Urbano
- David Luna Gómez



10.1 TRAINING PROGRAMS

PHD IN BIOMEDICINE

IMIBIC leads the PhD Programme in Biomedicine at the University of Córdoba. This programme, interdepartmental and multidisciplinary in scope, offers high-quality, advanced training and the development of human resources for teaching and research. In addition to promoting professional qualifications in the field of Biomedical Sciences, it also attracts new scientific talent to the Institute

In 2022, this PhD program was coordinated by Marco A. Calzado Canale

Website: <https://www.uco.es/estudios/idep/doctorado-programas-biomedicina>

MASTER'S DEGREES

IMIBIC leads the Master's degree in Translational Biomedical Research at the University of Córdoba. This programme has a dual focus: to train students specialising in this area, as well as personnel specialised in the techniques and methodologies of translational biomedical research, enabling them to carry out technical work in support of research in the field of biomedicine and health.

- Academic Director: Prof. Raúl M. Luque Huertas, PhD.
- Academic Co-Director: Prof. Antonio Jesús Martínez Fuentes. PhD.

Website: <https://www.uco.es/estudios/idep/investigacion-biomedica-traslacional>

COURSES AND WORKSHOPS

Numerous courses, seminars and other training activities in different research areas were held at the IMIBIC during 2022. These can be found in the annexes at the end of this report.

10.2 TRAINING ACTIVITIES

IMIBIC RESEARCH SEMINARS

Regular seminars and research events provide an opportunity to meet renowned national and international speakers covering a wide range of topics in biomedicine. IMIBIC research seminars promote networking and strengthen the knowledge of the Institute's research community. The Institute organises annual seminar series aimed at promoting interaction, sharing ideas, and strengthening links between IMIBIC scientists and recognised scientists from other research institutions. In 2022, a total of 15 external seminars were held.

Furthermore, a fortnightly cycle of intramural seminars, first launched in 2015, also gives young (preferentially postdoctoral) researchers from our Institute an opportunity to present work in progress. In 2022, a total of 7 intramural seminars were held.

10.3 INSTITUTIONAL EVENTS

13TH IMIBIC YOUNG INVESTIGATOR MEETINGS

IMIBIC Young Investigator Meetings provide an ideal environment for young scientists to enhance their skills and knowledge as well as an interface to foster translational research from basic experimental science to clinical medicine that will improve health and quality of life. The aim of these meetings is to promote inter-disciplinary research and, above all, high-quality training by sharing the results obtained by young researchers at IMIBIC and related institutions, as well as other groups at the University of Cordoba.

More specifically, the aims of IMIBIC Young Investigator Meetings are:

- To provide a platform to discuss the latest knowledge and methods in translational medical research.
- To promote interaction and the exchange of ideas between pre- and postdoctoral scientists and to strengthen links between research groups.
- To facilitate interdisciplinary actions and communication that bring together basic and clinical researchers.
- To encourage and provide high-quality scientific training for young researchers.
- To establish annual IMIBIC Meetings as a young, vibrant forum of reference for the research community and our young researchers in particular.

The 13th Meeting was held in the IMIBIC building on 13-14 October 2022. The programme included sessions representative of IMIBIC Scientific Programmes, as follows:



13th IMIBIC
**YOUNG
INVESTIGATORS
MEETING**

PROGRAMME

Day 1 (13th OCT)

08:30 – 09:00

Registration and Poster display

09:00 – 09:30

Opening ceremony (IMIBIC Assembly Hall)

09:30 – 11:00

SESSION I. Cancer I (IMIBIC Assembly Hall)

Chairs: Dr. Ana Gordon & Dr. David García.

→ **Ia. 09:30 – 09:45**

Tumor suppressor role of RBM22 in prostate cancer acting as a dual-factor regulating alternative splicing and transcription of key oncogenic genes. **Antonio Jesús Montero Hidalgo.**

→ **Ib. 09:45 – 10:00**

Adoptive transfer of human allogeneic Natural Killer cells for the improvement of anti-EGFR therapy in colorectal cancer: a preclinical study. **Carmen Navarrete Sirvent.**

→ **Ic. 10:00 – 10:15**

Left Atrial Strain Assessment in Long-Term Survivors of Childhood Acute Lymphoblastic Leukemia. **Consuelo Fernández-Avilés Irache.**

→ **Id. 10:15 – 10:30**

Laparoscopic Versus Open Primary Interval Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy (HIPEC) in Peritoneal Carcinomatosis from Epithelial Advanced Ovarian Cancer: a comparative study. **Manuel Durán Martínez.**

→ **Ie. 10:30 – 10:45**

Proteomic dysregulation of splicing machinery is associated to aggressive hepatocellular carcinoma. **Natalia Hermán-Sánchez.**

→ **If. 10:45 – 11:00**

Revealing DYRK2 as a new regulator of the key MAPK pathway and its implications in colorectal and breast cancer. **Lucía Suanes Cobos.**

11:00 – 11:30

Coffee Break (IMIBIC Cafeteria)

11:30 – 12:45

SESSION II. Multidisciplinary I (IMIBIC Assembly Hall)

Chairs: Dr. Pedro Jesús Gómez & Dr. Antonio Romero

→ **IIa. 11:30 – 11:45**

Impact of KPC-producing *Klebsiella pneumoniae* relative bacterial load on all-site infection and all-cause mortality in patients with intestinal colonization: a prospective cohort study. **Alejandra Méndez Natera.**

→ **IIb. 11:45 – 12:00**

A pain-free home-based exercise program reduced kidney disease progression respect to the usual care in patients with claudication: an observational study. **Anna Crepaldi.**

→ **IIc. 12:00 – 12:15**

SARS-CoV-2's accessory proteins role in endothelial dysfunction. **Antonio Romero Guillén.**

→ **IId. 12:15 – 12:30**

Non-sense mediated decay as a potential source of biomarkers in chronic liver disease. **Betsaida Ojeda Pérez.**

→ **IIe. 12:30 – 12:45**

Characterization of extra-musculoskeletal manifestations and their influence on the phenotype of spondyloarthritis. Data from REGISPONSER registry. **Ignacio Gómez García.**

12:45 – 13:45

Poster session I (IMIBIC Meeting & Multipurpose Room)

Chairs: Dr. María Soledad Avendaño, Dr. Mario Frías & Dr. Alexander Batista

→ **PSI.a.** Analysis of the contribution of p53 in the metabolic regulation of Kiss1 neurons at female puberty. **Silvia Daza Dueñas.**

→ **PSI.b.** Role of NADH-cytochrome b5 reductase 3 in acute kidney injury associated to massive intravascular hemolysis. **Cristina García Caballero.**

→ **PSI.c.** Quantification tool of intestinal microbiota for the prediction of developing diabetes mellitus type 2. **Javier Arenas Montes.**

→ **PSI.d.** Ecological and clinical impact of an antimicrobial stewardship program on the incidence of carbapenem resistant *Klebsiella pneumoniae*. **Teresa López-Viñau López.**

→ **PSI.e.** ZIF-8 nanoparticles incorporated in kidneys scaffolds: A novel approach in the uremic toxins depuration. **Victoria Pulido Escribano.**



- **PSI.f.** Determining the Difficulties of Students with Dyslexia via Virtual Reality and Artificial Intelligence: An Exploratory Analysis. **José Manuel Alcalde Llergo.**
- **PSI.g.** Lumbopelvic rhythm in patients with acute low back pain compared with axial spondyloarthritis and healthy subjects. **Sandra Alcaraz Clariana.**
- **PSI.h.** Design of novel mRNA vaccine candidates for induction of antibodies, TCD4+ and TCD8+ cell responses. **Amina Aldebis Moreno.**
- **PSI.i.** Inflammatory cytokines: definition of normal values in healthy population. **Paula Álvarez Romero.**
- **PSI.j.** Real-life validation of prognostic risk stratification according to ELN 2017 in AML patients. **Clara Aparicio Pérez.**
- **PSI.k.** The impact of expanding hepatocellular carcinoma as an indication for liver transplantation on the waiting list length and composition. **Ana Aparicio Serrano.**
- **PSI.l.** Analysis of the hypothalamic expression of the Prader-Willi Syndrome-related genes *Magel2* and *Ndn* and their predicted microRNAs throughout pubertal development in lean and obese female rats. **Álvaro Aranda Torrecillas.**
- **PSI.m.** The experience of childbirth and the subsequent appearance of a mental disorder. **Irene Cabedo Olaya.**
- **PSI.n.** Early and late intestinal complications after combined pancreas-kidney transplantation. **Rafael Calleja Lozano.**
- **PSI.ñ.** Pillar pain as a complication of carpal tunnel syndrome surgery. **Irene Calzado Álvarez de Lara.**
- **PSI.o.** Study of cyclic hypoxia, agitation and differential glucose supply in adipogenic differentiation. **Marta Camacho Cardeñosa.**
- **PSI.p.** Monitoring disease evolution and treatment response in pancreatic cancer patients using liquid biopsy-based epigenetic biomarkers. **Pablo Francisco Cano Ramírez.**
- **PSI.q.** Identification of novel molecular signatures associated with the therapeutic response to DMARDs and TNFi therapies in Rheumatoid Arthritis patients through high throughput proteomics. **Tomás Cerdó Ráez.**
- **PSI.r.** Prevalence and risk factors for peripheral artery disease in a population with coronary heart disease: from the cordioprev study. **Maria del Pilar Coronado Carvajal.**
- **PSI.s.** High throughput transcriptomic analysis of peripheral mononuclear cells identifies molecular alterations associated with the active clinical phenotype of Axial Spondyloarthritis. **Laura Cuesta López.**
- **PSI.t.** Potential anti-proliferative role of the Liver Enriched Antimicrobial Peptide 2 (LEAP2), a new component of the ghrelin system, in prostate cancer cells. **Isidoro Di Caro.**
- **PSI.u.** Aortic valve infiltrating pro-inflammatory cells in aortic stenosis patients. **Jose Joaquin Dominguez del Castillo.**
- **PSI.v.** Evaluation of the performance of artificial intelligence (AI) after one year of use in breast cancer screening practice. **Esperanza Elías Cabot.**
- **PSI.w.** Computer-assisted navigated piezoelectric resection and CAD-CAM designed PEEK prosthesis for the surgical resection of tumors affecting facial bones. A synergy of new technologies to improve the surgical results. **Orlando Estevez Cordero.**
- **PSI.x.** The impact of Robot-assisted and Virtual Reality-based Neuromotor Rehabilitation on Health-related Quality of Life: A Systematic Review and Meta-Analysis. **Naima Z. Farhane Medina.**
- **PSI.y.** Surgical treatment of cervicomediastinal goiter: Experience at a single centre. **Alba María Fernández González.**
- **PSI.z.** Threshold concepts applied to oncological surgical pathology. Preliminary results. **María José Gálvez Medina.**
- **PSI.aa.** Splicing machinery dysregulation as a source of novel diagnostic, prognostic and therapeutic targets in craniopharyngiomas. **Miguel Eduardo García García.**
- **PSI.bb.** Loss of metabolic health in normal-weight individuals: Identification of visceral adipose tissue biomarkers. **Olga García Ruiz.**
- **PSI.cc.** Analyzing the molecular mechanisms underlying the resistance to somatostatin analogues in Pheochromocytomas and Paragangliomas. **Víctor García Vioque.**
- **PSI.dd.** GSK-3 β is a regulatory kinase of colorectal cancer immune microenvironment and the response to immunotherapy. **Aurora Rivas Crespo.**
- **PSI.ee.** Immunotherapy followed by Cell Therapy in relapsed/refractory acute B cell lymphoblastic leukemia. **Ana Camila Gonzalez Teomiro.**
- **PSI.ff.** Management and knowledge of soft tissue tumors / sarcoma: Update of primary care physicians. **Raquel Gracia Rodríguez.**
- **PSI.gg.** SPARCC, MASES, LEI and MEI Indexes capture different patients with enthesitis in Axial Spondyloarthritis, Peripheral Spondyloarthritis and Psoriatic Arthritis. **Raquel Ena María Granados.**
- **PSI.hh.** DNA Repair profile and temozolomide resistance in glioblastoma cells. **Inés Grávalos Cano.**



→ **PSI.ii.** Obesity induces central hypogonadism and metabolic comorbidities via miRNA-137/325 mediated repression of hypothalamic kisspeptin. **Yolanda Guerrero Ruiz.**

→ **PSI.jj.** Mindfulness-based Interventions in Adolescents with Type 1 Diabetes Mellitus: A Systematic Review. **Tamara Gutiérrez Domingo.**

→ **PSI.kk.** Functional Changes of CD4 and CD8 T-Cell Subsets with Age and CMV Infection. **Fakhri Hassouneh.**

→ **PSI.ll.** Validity of the isometric contraction test for the diagnosis of muscle temporomandibular disorders, with DC/TMD axis I as gold standard. **Marcos Iglesias Peón.**

→ **PSI.lmm.** Upper limb muscle mechanical characteristics in women with multiple sclerosis: a case-control study. **Carmen Jurado Lora.**

→ **PSI.lnn.** Change in miRNA expression is induced by healthy diets and associated to the carotid intima-media thickness in patients with coronary heart disease: CORDIOPREV study. **Yelizaveta Krylova.**

→ **PSI.ññ.** COPD in Severe Mental Illness: A three years longitudinal study. **David Laguna Muñoz.**

→ **PSI.oo.** The effect of FGF23 blockade on blood pressure control in hypertension. **Rodrigo López Baltanás**

13:45 – 15:45

Lunch (IMIBIC Cafetería)

15:45 – 17:15

Session III. Nutrition, Endocrine and metabolic diseases I (IMIBIC Assembly Hall)

Chairs: Dr. María Isabel Martínez & Dr. Iván Arias

→ **IIIa.** 15:45 – 16:00

Dysregulation of splicing machinery as early biomarker of diabetic nephropathy: From the CORDIOPREV study. **Alicia Podadera Herrerros.**

→ **IIIb.** 16:00 – 16:15

Molecular and clinical implications of somatostatin receptor profile and somatostatin analogues treatment in high-grade astrocytomas. **Ana de la Salud De la Rosa Herencia.**

→ **IIIc.** 16:15 – 16:30

Role of Let-7b-5p and miR-191-5p in the development of early obesity and associated metabolic comorbidities. **Carmen Torres Granados.**

→ **IIIId.** 16:30 – 16:45

Basketball exercise reduced plasma cytokines in prepubertal children. Bipic-study. **Cristina Castro Collado.**

→ **IIIe.** 16:45 – 17:00

Lessons from lean but metabolically unhealthy individuals: new highlights on adipose tissue dysfunction. **Elena Garrido Rascón.**

→ **IIIIf.** 17:00 – 17:15

E-ducass Project: Educational strategy to improve cardiovascular health and food insecurity on a vulnerable population. **Esther Porras Pérez.**

17:15 – 18:30

SESSION IV. Multidisciplinary II (IMIBIC Assembly Hall)

Chairs: Dr. María Dolores Carmona & Dr. André Sarmiento

→ **IVa.** 17:15 – 17:30

MicroRNAs in lung epithelial cells expressing SARS-CoV-2 accessory protein ORF8 can regulate immunometabolism. **José Manuel Suárez Cárdenas.**

→ **IVb.** 17:30 – 17:45

Integrated high-throughput proteomics and machine learning analysis in systemic lupus erythematosus patients identify distinctive clinical profiles and novel biomarkers related to cardiovascular risk and lupus nephropathy. **Ismael Sánchez Pareja.**

→ **IVc.** 17:45 – 18:00

CMV in aortic stenosis. **Pablo Álvarez Heredia.**

→ **IVd.** 18:00 – 18:15

Effect of SARS-CoV-2 ORF7a on lung epithelial cells studying the microRNA and proteomic profiles. **Raúl Fernández Rodríguez.**

→ **IVe.** 18:15 – 18:30

Impact of ceftazidime-avibactam on clinical outcome in solid organ transplant recipients with bloodstream infections caused by carbapenemase-producing *Klebsiella pneumoniae* (INCREMENT-SOT Project). **Victor Gálvez Soto.**

Day 2 (14th OCT)

08:00 – 08:30

Registration and Poster display

08:30 – 10:00

Session V. Cancer II (IMIBIC Assembly Hall)

Chairs: Dr. Rafael González & Dr. Yolanda Jiménez

→ **Va.** 08:30 – 08:45

Mutational and phenotypic clonal evolution in relapsed-refractory acute myeloblastic leukemia. **Esther Prados De la Torre.**



→ Vb. 08:45 – 09:00
Orphan base specificity of abasic sites processing during DNA Base Excision Repair. **Marina Jordano Raya.**

→ Vc. 09:00 – 09:15
Breaking the mucin barrier: Discovering and testing new therapeutic targets in Pseudomyxoma peritonei. **María Carmen Vázquez Borrego.**

→ IVd. 09:15 – 09:30
Splicing factor SRSF6 as a novel therapeutic target for advanced prostate cancer. **Jesús Miguel Pérez Gómez.**

→ IVe. 09:30 – 09:45
Exploring the potential therapeutic role of somatostatin/cortistatin endocrine system in prostate cancer. **Prudencio Sáez Martínez.**

→ IVf. 09:45 – 10:00
Alteration in RNA metabolism unveils new therapeutic opportunities in pancreatic adenocarcinoma. **Ricardo Blázquez Encinas-Rey.**

10:00 – 10:30

Coffee Break (IMIBIC Cafetería)

10:30 – 11:30

Poster session II (IMIBIC Meeting & Multipurpose Room)

Chairs: **Dr. María Soledad Avendaño, Dr. Mario Frías & Dr. Alexander Batista**

→ PSII.a. Severe aortic stenosis, long-term survival analysis in patients treated with self-expandable prosthesis and surgery. **María Teresa Conejero Jurado.**

→ PSII.b. Proliferative T-cell response against SARS-CoV-2 in convalescent COVID-19 infected patients. **Raquel Fernández Moreno.**

→ PSII.c. Dysregulation and functional relevance of the RNA-exosome machinery in hepatocellular carcinoma. **Samanta Lozano de la Haba.**

→ PSII.d. High Phosphate intake promotes renal and cardiac fibrosis during chronic kidney disease. **Teresa Obrero Sojo.**

→ PSII.e. Impact of pulmonary artery pressure on early outcomes and survival after lung transplantation in patients with chronic obstructive pulmonary disease. **Eloisa Ruiz López.**

→ PSII.f. Association between Fibroblast Growth Factor 23 and pulse pressure in Chronic Kidney Disease Stage G5 patients. **Isabel López López.**

→ PSII.g. Quality of child development scales. A systematic review. **Sara María Luque de Dios.**

→ PSII.h. Novel insights to understand the potential of the somatostatin/cortistatin system in neuroendocrine tumors (NETs) and carcinomas (NECs). **Federica Mangili.**

→ PSII.i. Oncometabolic features of GSNOR-deficient colorectal tumors impact immune surveillance and impair response to immunotherapy. **Ana Mantrana Soldado.**

→ PSII.j. The key role of abnormal fat distribution for prediction metabolic disease. **Laura Martín Piedra.**

→ PSII.k. Obesity due to a high-fat diet impacts the development and progression of prostate cancer in the TRAMP mouse model. **Fernando Mata Ordóñez.**

→ PSII.l. Relationship between depression and pathological cognitive dysfunction in older people 65 years old. **María Morales Cabanillas.**

→ PSII.m. Characterization of the splicing process in pheochromocytomas and paragangliomas. **María Trinidad Moreno Montilla.**

→ PSII.n. Acute kidney injury associated to intravascular hemolysis increases chronic renal fibrosis. **Jose Luis Morgado Pascual.**

→ PSII.o. Serum magnesium and mortality risk in Chronic Kidney Disease (CKD). An independent effect of nutritional and inflammatory status. **Cayetana Moyano Peregrin.**

→ PSII.p. Spliceosome alterations in leucocytes from APS, SLE and SLE+APS patients are closely related to their main clinical features. **Laura Muñoz Barrera.**

→ PSII.q. Resistance to alkylating agents: role of the phosphatase PNKP. **Ariadna Muñoz Fernández.**

→ PSII.r. Adherence to the Mediterranean diet in childhood at risk of obesity: MELIPOP Study. **Belén Pastor Villaescusa.**

→ PSII.s. Improvement of left ventricular ejection fraction in patients with heart failure with reduced ejection fraction: mid-term clinical impact. **Jorge Perea Armijo.**

→ PSII.t. Biomechanical analysis of the voice, characterization method in Amyotrophic Lateral Sclerosis (ALS). **Margarita Pérez Bonilla.**

→ PSII.u. CYB5R3 overexpression and dietary nicotinamide riboside supplementation influence mitochondrial status: effects in mitochondrial complexes and mitochondrial population ultrastructure of kidney from female and male mice. **Miguel Pérez Rodríguez.**

→ PSII.v. Identification and characterization of novel positive allosteric modulators for CB1R. **Francisco José Ponce Díaz.**



- PSII.v. Phase I/II study of the single-arm efficacy and safety of the use of neutral argon plasma in the cytoreduction of miliary implants on the peritoneal surface. **Alfonso Carlos Pontes García.**
- PSII.w. Association between metabolic syndrome and uric acid: a systematic review and meta-analysis. **Elena Raya Cano.**
- PSII.x. SARS-CoV-2 infection increases CMV-associated cardiovascular risk. **Ester Irene Reina Alfonso.**
- PSII.y. Muscle mechanical properties of pelvic floor and paravertebral muscles, and lumbar range of motion in women with and without urge incontinence urinary: case-control study. **M^a Teresa Garzón Alfaro.**
- PSII.z. Evaluation of the in vitro and in silico interaction of a cationic peptide against colistin-resistant *P.aeruginosa* membrane models. **Sandra Patricia Rivera Sanchez.**
- PSII.aa. The novel multiagonist, GLP1-estrogen, improves the management of non-alcoholic fatty liver disease in lean and obese models of polycystic ovary syndrome. **Andrea Rodríguez Martín.**
- PSII.bb. Metabolic adaptation of female mice overexpressing CY5R3 and submitted to a caloric restriction intervention. **Luz Marina Sánchez Mendoza.**
- PSII.cc. S-nitrosoglutathione reductase deficiency in colorectal cancer confers metabolic vulnerabilities that can be therapeutically exploited. **María Teresa Sánchez Montero.**
- PSII.dd. Anti-glomerular basement membrane glomerulonephritis. A study in real life. **Marina Sánchez-Agesta Martínez.**
- PSII.ee. Could the primary cilium predict progression from actinic keratosis to squamous cell carcinoma?. **Alicia Sanz Zorrilla.**
- PSII.ff. Comparative Study of a Sjögren's Syndrome Cohort (Primary and Secondary). **José Miguel Sequí Sabater.**
- PSII.gg. Analysis of the potential role of hepatic kisspeptin in energy and metabolic homeostasis. **Esperanza Uceda Rodríguez.**
- PSII.hh. Oxidative environment and redox homeostasis in a rare malignant disease: Pseudomyxoma Peritonei. **Francisca Valenzuela Molina.**
- PSII.ii. Ferroptosis is involved in acute kidney injury associated to massive intravascular hemolysis. **Mercedes Vallejo Mudarra.**
- PSII.jj. Prognostic value of RAS mutation status changes in circulating tumor DNA of metastatic colorectal cancer patients. **Alicia Vargas Aliaga.**

- PSII.kk. Gut microbial composition as a diagnostic tool for colorectal cancer. **Ana María Vega Rojas.**
- PSII.ll. The role of physical activity on psychological well-being in children and adolescent with type 1 diabetes: preliminary data of a cross-sectional study. **Joaquín Villacéija Rodríguez.**
- PSII.mm. Adipokines and hepatokines as potential biomarkers of hepatocellular carcinoma. **Javier Manuel Zamora Olaya.**

11:30 – 13:00

Session VI. Nutrition, Endocrine and metabolic diseases II (IMIBIC Assembly Hall)

Chairs: Dr. Clementina López & Dr. Cristian Rodelo

- VIa. 11:30 – 11:45
Personalized diagnostic and therapeutic potential of miR-191-5p in the pathophysiological relationship between obesity and prostate cancer. **Francisco Porcel Pastrana.**
- VIb. 11:45 – 12:00
The role of intestinal microbiota in the different prevalence of coronary disease between genders. **Helena García Fernández.**
- VIc. 12:00 – 12:15
Impaired metabolic and inflammatory profile in adult patients with a history extra-uterine growth restriction. **Laura Palomino Fernández.**
- VId. 12:15 – 12:30
Micronutrients and their implications in the incidence of type 2 Diabetes Mellitus. Pieces of evidence from the CORDIOPREV study. **Lorenzo Rivas García.**
- VIe. 12:30 – 12:45
Effect of diet on the expression of microRNAs and its relationship with aging in patients with coronary heart disease: CORDIOPREV study. **Maite Sánchez Giraldo.**
- VIf. 12:45 – 13:00
Novel multiagonist therapy for efficient management of metabolic complications polycystic ovary syndrome. **Victor Serrano López.**

13:00 – 14:00

Plenary Lecture: Immunometabolism and Inflammation. Dr. Maria Mittlebrunn (Centro de Biología Molecular Severo Ochoa, Madrid, Spain)

14:00 – 14:30

Awards and Closing ceremony



This edition consisted of 8 sessions (2 on cancer, 2 on nutrition and frailty, 2 were multidisciplinary and 2 poster sessions) and two presentation formats: lectures and poster talks. A total of 117 papers were received and the number of registered attendees was 248.

12TH MAIMONIDES COMMEMORATIVE LECTURE AND IMIBIC AWARDS

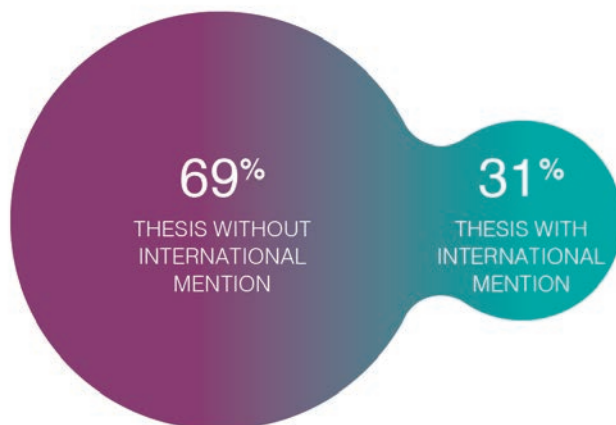
The aim of this initiative is to recognise the biomedical research carried out by IMIBIC staff and to highlight the importance of the results obtained at the Institute. The 2022 “Enrique Aguilar Benítez de Lugo” Prize for the most outstanding scientific publication led by IMIBIC researchers in collaboration with international groups was awarded to Consolidated Group GC05 “Systemic and chronic inflammatory autoimmune diseases of the locomotor system and connective tissue” (doi: 10.1136/anrheumdis-2021-220308). The award for the best clinical research work went to Consolidated Group GC09 “Nutrigenomics. Metabolic Syndrome” (doi: 10.1161/STROKEAHA.120.033214).

Each year, an outstanding biomedical scientist is invited to present the “Maimónides Lecture”, which focusses on the latest knowledge in basic, applied, and/or translational biomedical science of excellence. In 2022, the guest speaker was Dr. Maria Neira, director of Public Health and Environment at the World Health Organization, who works to raise awareness of the public health challenges posed by climate change and air pollution.



10.4 RESULTS OF TRAINING ACTIVITIES

» THESES PRESENTED: 2021/2022 ACADEMIC YEAR



RESEARCH STAYS

IMIBIC is committed to promoting stays for the training of its PhD students at national and international reference centres in biomedical research, providing opportunities to experience research in foreign settings, facilitating the integration of graduates into the scientific community, and creating networks. In fact, the Institute's "Plan Propio" (Own Plan) includes actions to promote these stays.

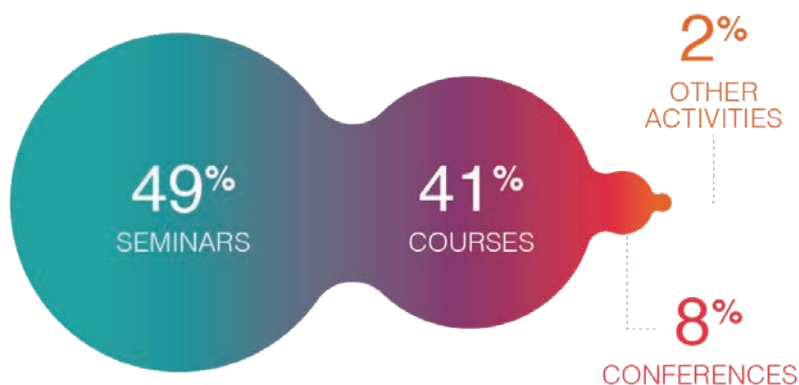
Twelve researchers from the IMIBIC completed a research stay at a national or international centre in 2022. Eight of these were students of the PhD programme in Biomedicine, who will therefore be able to opt for the "International Doctorate" mention.

External visitors are also invited to carry out their research at our Institute. A total of 20 visiting scientists stayed at IMIBIC during 2022.

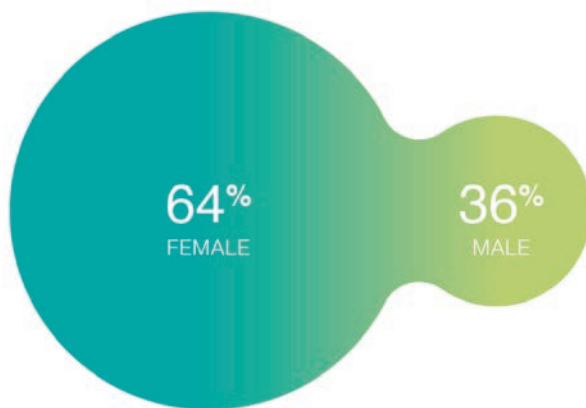
TRAINING ATTENDANCE IN 2022

The total number of participants in all training activities held at IMIBIC in 2022, including courses, conferences, seminars and other activities, was 608. Participants were predominantly women.

TRAINING ACTIVITIES BY TYPE



PARTICIPATION IN TRAINING ACTIVITIES:





**SCIENTIFIC REPORT
IMIBIC 2022**

INNOVATION AND TECHNOLOGY TRANSFER





The main objective of the Innovation and Technology Transfer Plan is to strengthen IMIBIC's existing capabilities in order to create a strong ecosystem to support innovation and translational research to the Spanish National Health System. More specific objectives are to promote and increase effective transfer with an impact on the National Health System and society, to encourage transfers to the productive sector, to promote public-private collaboration, and to guarantee the sustainability and quality of the Innovation Unit and the UCAIB for Technological Innovation. The two units work closely together to transform the ideas of IMIBIC inventors into minimum viable products and to scale them according to TRL levels.

The following indicators are implemented by the IMIBIC Innovation and Transfer Unit:

- Patent registration and licensing.
- Knowledge transfer to the productive sector.
- Development of new healthcare products.
- Implementation of new clinical processes.
- Creation of spin-offs and start-ups.
- Clinical Practice Guidelines.

These indicators were integrated into the Innovation and Technology Transfer Plan (2021-2025) in full alignment with European, national and regional policies.

As a result of actions carried out in 2022, 13 patents or intellectual property registrations were applied for, 5 exploitation license agreements were signed, 4 prototypes were developed by the UCAIB for Technological Innovation, and the pathway for performing surgical planning services in the CMU for neurosurgery was established.

In accordance with the Innovation and Technology Transfer Plan, contacts continue to be made with companies to establish collaborations or service provision agreements with companies for the development of innovations or validation of their technologies. More than 27 such contacts with companies have been made.

In addition, we initiated a presentation of the Innovation Unit's portfolio of services to different Clinical Management Units and IMIBIC research groups to publicise new services available to the groups and to increase the number of prototype developments made.

Creation of companies: the Innovation and Technology Transfer Unit has been advising Dr. Carlos Pérez, a researcher belonging to research group GC05 "Systemic and Chronic Autoimmune Diseases of the Locomotor System and Connective Tissue" on the creation of a company, which led to the constitution of EBT COBIOMIC BIOSCIENCE SL in August 2022. COBIOMIC BIOSCIENCE SL is the first company in Andalusia involving the participation of a Foundation from the RFGI [a member of the Network of Research Management Foundations] (FIBICO) and a University (UCO).

The funding obtained through the ISCIII/ Strategic Action in Health 2022 call for the implementation of innovation projects was €192,390. These funds will be used to develop a diagnostic and prognostic tool for hormone-dependent cancers, a software tool to correct gender disparities in access to liver transplantation, and to identify phenotypes, targets and therapeutic biomarkers in patients with psoriatic arthritis.

Two applications were submitted to the ISCIII-CDTI call and two to the Public-Private call of the State Research Agency. Also noteworthy is the granting of an application to the ESAL 2022 call, which will enable the first Biotech Hackathon in Andalusia to be held.

In 2022, the internal call for the IMIBIC 2022 Innovation Awards was launched, which was well received by researchers. A total of 20 applications were submitted in four categories.

One of the milestones of 2022 was the acquisition by IMDEEC [the Municipal Institute for Economic Development and Employment of Córdoba] of the building in Rabanales 21 that will house Córdoba BIOTECH. This is a technology-based business incubator, in which FIBICO, the UCO and IMDEEC are partners. The bio-incubator is expected to be operational in 2023. The purpose of BIOTECH is to incubate biotech companies that will contribute to the growth of an entrepreneurial ecosystem in the city of Córdoba.

In 2022, IMIBIC continued to carry out the actions of the ITEMAS platform (Innovation in Medical and Health Technologies) funded by the Carlos III National Health Institute (ISCIII). It also continued as coordinator of the Quality Commission. IMIBIC was also included in the 3D Bioprinting Hub of the ISCIII Biobanks and Biomodels Platform. Finally, IMIBIC organised the ITEMAS 2022 Conference, which had more than 150 attendees, including researchers, management staff from the different IIS, staff from investment vehicles, and technology centres and companies.

The IMIBIC Innovation Unit also successfully passed the Quality Management System recertification audit, in accordance with the UNE 166.002:2021 standard that has been implemented at IMBIC for years.

EVOLUTION OF RESULTS

	2016	2017	2018	2019	2020	2021	2022
PATENTS	9	16	13	11	5	17	5
Utility Model				2	6	1	1
Intellectual property registry				1	3	1	4
PCTs	6	6	3	9	2	5	3
LICENCES		2	2		1	3	5
COMPANIES							1

27 and 9 collaborations/service agreements were signed with companies in 2022.

12

SCIENTIFIC REPORT IMIBIC 2022

The background features a series of vertical color bands in shades of purple, blue, and red. On the left side, there are vertical brushstrokes in various colors including orange, green, and yellow, creating a textured, artistic effect.

BIOMEDICAL RESEARCH SUPPORT UNITS



12.1 ISOTOPE AND PRECLINICAL IMAGING UNIT

STAFF

Eduardo Muñoz Blanco, PhD

Supervisor

Miguel Ángel Rodríguez Martín

Technician

BRIEF DESCRIPTION

The Preclinical Imaging Service (PIS) is a highly advanced facility providing non-invasive, in vivo imaging of the structure and function of body organs and tissues in preclinical animal models.

The equipment is located in the IMIBIC animal facility, which has modern premises of approximately 800 m² and capacity for housing and experimental management of >3,500 rodents. It is ideally situated to provide interdisciplinary support in cardiovascular biology, oncology, neuroscience and physiology studies, among others.

The main purpose of the service is to supply high-quality imaging support to the rest of the research groups in IMIBIC.

EQUIPMENT AND FACILITIES

» ISOTOPE UNIT

The unit has two laboratories dedicated to work with both γ and β radioactive isotopes. One is located on floor -2 and the other on the third floor.

The unit has been authorized by the Nuclear Safety Council since December 2014 to work with the following isotopes:

ISOTOPES	MAXIMUM ACTIVITY (MBQ)
Carbon (C-14)	370
Tritium (H-3)	370
Phosphorus (P-32)	370
Phosphorus (P-33)	370
Sulfur (S-35)	370
Chrom (Cr-51)	370
Iodine (I-125)	370

» EQUIPMENT

- Gamma Counters. 3 units:
 - Make: Wizard
 - Model: 2470-0100 Beta counter
- UN Beta Counter.1 unit:
 - Make: Tricard
 - Model: 2810 TR
- MicroBeta Counter.1 unit:
 - Make: Microbeta2
 - Model: 2450-0020
- Cell harvester
- A sample preparer
 - Make: Janus
- Two refrigerated ultracentrifuges with capacity for 200 samples.
- Three gas cabinets exclusively for working with radioactive isotopes, two with lead guillotines, one with a methacrylate guillotine.
- Two radiation detectors:
 - Make: Lamse
 - Model: RM10013-RDM

» PRECLINICAL IMAGING UNIT

• **PET / MR 3T** is the only combined magnetic resonance and PET equipment available in the country. The PET equipment is based on highly sensitive, continuous LYSO crystal technology with 2 rings with 8 detectors, and has a transaxial field of view (FoV) of 80 mm, an axial FoV of 148 mm, and total FoV of 285 mm (axial) by moving the table, MRI-compatible silicon photo-multipliers, sensitivity 5%, up to 9% (NEMA standard) and sub-millimetre resolution (≤ 0.7 mm). The MRI equipment is 3 Tesla with 18 cm cryogen-free magnet, no cooling line required. Magnet homogeneity is ± 0.1 ppm (DSV 5 cm) and ± 0.05 ppm (DSV 3.5 cm), necessary to work with diffusion sequences, and localized spectroscopy with a gradient system capable of providing 450 mT / m.

The PET / MR has an automatic positioning system for the animal in both the PET and MRI modalities, and a touchscreen with integrated camera to facilitate positioning and monitoring.

This equipment was installed in June 2018 and will be available for use after an appropriate set-up procedure, to be done in the near future.

• **μ CT (SkyScan 1176 model)** is an X-ray microtomography system (90 kV source) enabling 3D spatial resolution of less than 10 μ m, and a respiratory gating system for prospective or retrospective extraction of respiratory motion during image emission. The system features a 12-bit, distortion-corrected, 11-megapixel refrigerated X-ray chamber (4000x2670) with fibre-optic coupled scintillator.

Full-body scanning capability of rats and mice: 68mm or 35mm scan diameter, scan length up to 200mm by multiple, automatically connected scanners. This μ CT equipment can carry out longitudinal tests with less than 10 mG radiation exposure, as well as coregistration of PET and MRI images.

MAIN SERVICES

Training in the handling of β and γ counters.

- I-125 labelling of proteins.
- Identification of protein levels in serum, plasma and other biofluids using the RIA technique.
- In situ hybridization (ISH) with ^{33}P -labelled probes.
- Radioactive techniques for analysis of cell death and proliferation.
- Consultation on the different isotopic techniques used in the laboratory.
- Protocol optimization.
- Advice on experimental design, selection of equipment and supervision of procedures.
- Advice during data acquisition and imaging procedures using MRI, microCT and PET.

» SPECIFIC APPLICATIONS:

- MRI Applications:
 - Structural analysis of soft tissues and body composition (compartmentalization).
 - Analysis of structures by diffusion (diffusion-weighted imaging).
 - Analysis of metabolic composition by spectroscopy.
 - Analysis of brain activity using fMRI.
- MicroCT Applications:
 - Structural analysis.
- PET Applications:
 - Analysis of metabolic activity (normal and tumour tissue).

The infrastructure necessary to house the PET-MR and MicroCT preclinical imaging systems inside the Animal Experimentation Unit was designed in collaboration with the Radiological Protection Service of the University of Córdoba and the Diagnostic Radiology and Nuclear Medicine Unit of the HURS. This work was carried out in order to define optimal equipment and workflows prior to bidding for equipment.

KEY FACTS

NUMBER OF IMIBIC USERS: 6

NUMBER OF EXTERNAL USERS: 1

NUMBER OF ONGOING PROJECTS: 2

COURSES AND TRAINING SESSIONS: 2

NUMBER OF MEETINGS WITH IMIBIC GROUPS: 7

NUMBER OF MEETINGS WITH EXTERNAL GROUPS: 1

PARTICIPATION IN INTERLABORATORY COMPARISON STUDIES: 1 (BIONAND PRECLINICAL IMAGING DEPT.)

PROJECTS

1. GE09. Antonio Romero: "Caracterización molecular del pseudomixoma peritoneal y desarrollo de biomarcadores y terapias diana".
2. GC13. Juan Muñoz y Juan Miguel Díaz-Tocados: "Afectación ósea en el daño renal". "Papel de la vía PI3K/AKT/mTOR en la regulación de las alteraciones del metabolismo mineral en la enfermedad renal crónica. Implicaciones en la regulación de la síntesis de FGF23". "Papel de la Fosfatasa PTEN en el Desarrollo de las Alteraciones Oseas Asociadas a la Enfermedad Renal Crónica y la Regulación de la Síntesis Osteocítica de FGF23 y Esclerostina."
3. Grupo de Fisiopatología ósea y biomateriales. Hospital La Paz (Madrid). Nuria Vilaboa: "Hidrogeles que responden a la energía infrarroja y contienen adenovirus de alta capacidad. Aplicación en regeneración ósea, RTI2018-095159-B100 (Ministerio de Ciencia e Innovación).

COURSES AND WORKSHOPS

1. Bruker webinar: A versatile use of SPECT/CT in the development of theranostic tracers for different disease models.
2. Optimax & Tecnasa webinar: Radioterapia guiada por imágenes 2D proporcionando imágenes multimodales.
3. Molecubes webinar: Practical aspects of an imaging study: live in vivo scanning.

12.2 ANIMAL EXPERIMENTATION UNIT



STAFF

Nahúm Ayala Soldado

Director of SAEX

Anabel Pozo Salas

Clinical diagnostic laboratory technician –MINECO

Estefanía Escudero Jabonero

Technician in pathological anatomy and cytology – MINECO

Ana Rama Moral

Clinical biological laboratory technician -POEJ

BRIEF DESCRIPTION

IMIBIC's Animal Experimentation facilities are part of the SAEX of the University of Cordoba. The purpose of this service is to provide the biomedical community, other public research centres and private companies with the animals, facilities, equipment, materials and specialized personnel necessary to carry out research projects and/or teaching tasks that require the use of animal models. The fundamental objective of the animalarium service is to guarantee the maintenance and well-being of the animals, as well as to offer different techniques for their study, given the range of equipment available in our unit.

This IMIBIC service is designed for the breeding, housing and use of laboratory animals (rats and mice), as well as for pig experimentation. Its facilities and personnel comply with current Spanish and European legislation (Directive 2010/63/EU, European Commission Recommendation 2007/526/EC, Spanish Royal Decree 53/2013 and Order ECC/566/2015 of the Spanish Ministry of Economy and Competitiveness).

The facilities of the IMIBIC animal experimentation unit, coordinated by the Animal Experimentation Service of the University of Córdoba, were opened in 2017.

EQUIPMENT AND FACILITIES

The unit comprises:

- A treatment room equipped with body composition measurement equipment, a respirometry chamber (with capacity for 10 animals) and optogenetic equipment. 7 rooms for housing rodents.
- 1 healing / metabolism room: This room is equipped with a respirometry system, two racks for metabolic cages, optogenetic and quantitative analysis equipment as well as equipment for MRI of body composition.
- 4 multi-purpose rooms for experimental procedures with animals: two rooms for use with rats and two for use with mice. The rooms are equipped with a replacement cabinet, 2 gas extraction cabinets, analytical scales, combi refrigerators and other basic laboratory material.
- 1 multi-purpose room, with PET-MR and micro CT equipment.
- Operating Theatre: Suitable for rodent and larger animal surgery (rodents and pigs), equipped with 3x 3D laparoscopy towers, 7 TV video monitors, 3 large animal anaesthesia machines, 6 surgery tables, 2 rodent anaesthesia systems with 4 seats, 1 rodent anaesthesia system with 2 seats, 6 gas towers, 1 surgical microscope for large animals, 1 high-end ultrasound, 3 magnifying glasses, 1 microscope, 1 C-arm and a surgical robot.
- Quarantine Zone: 5 ventilated racks for rats / mice, 1 replacement cabinet and 1 triple gate SAS system.
- 1 large animal (pig) room: 6 transport cages and 1 isolation cage.
- Laboratory 1 is equipped with micro-CT/PET/MR for rodents, a gamma library, a ventilated cabinet for 6 animals and an anaesthesia machine.
- The operating theatre consists of 6 surgery workstations for pigs (operating table and gas system), 3 anaesthesia machines, 3 laparoscopy towers, 1 surgical magnifying glass, 1 arc light and 1 ultrasound scanner.

There are also 4 laminar flow hoods, 2 gas extraction hoods, 2 hot plates for rodents, 1 microscope, 3 magnifying glasses, 4 scales.

The rederivation procedure has now been implemented and micro-CT/PET/MR is expected to be launched shortly.

KEY FACTS

NUMBER OF IMIBIC USERS: **60**

NUMBER OF EXTERNAL USERS: **0**

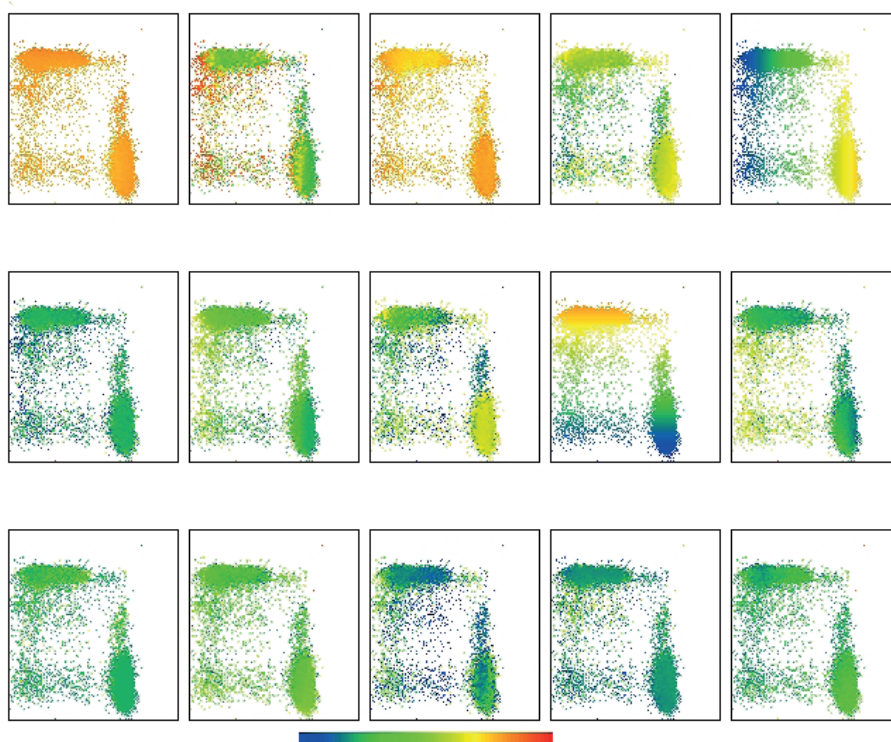
PROJECTS

1. 30/01/2018/009 /Kisspeptinas y pubertad. Nuevos aspectos fisiológicos e implicaciones fisiopatológicas en alteraciones puberales asociadas a pubertad /Manuel Tena Sempere/GC-10.
2. 23/08/2018/126 / Papel de las kisspeptinas en el control del metabolismo y balance energético. Implicaciones fisiológicas y fisiopatológicas/Manuel Tena Sempere/GC-10.
3. 09/08/2019/140 / Desafiando la hipótesis KND y mediante edición genómica con CRISPR-Cas9: Evaluación del papel de la neuroquímica B y la dinorfina en las neuronas kiss1 en el control de la fertilidad/Manuel Tena Sempere/GC-10.
4. 09/08/2019/141 / Investigación traslacional sobre el hipogonadismo incluido por obesidad: bases fisiopatológicas e implicaciones para la mejora diagnóstica y terapéutica/Manuel Tena Sempere/GC-10.
5. 10/09/2020/109 / Análisis del papel de las taquiquininas en el control de la ovulación: caracterización de las funciones del sistema sustancia-P/Receptor de taquiquininas tipo I (Tac1/Tacr1) /Manuel Tena Sempere/GC-10.
6. 04/06/2020/074 / Implicaciones fisiopatológicas y valor diagnóstico de miRNAs candidatos involucrados en el desarrollo temprano de obesidad y enfermedad metabólica. Estudio CHILDEM/ Juan Roa Rivas/GC10
7. 22/02/2021/019 / Mecanismo sensores del estado metabólico y nutricional en neuronalKiss1- Implicaciones en el control de la pubertad y sus alteraciones en condiciones de la obesidad de inicio temprano / Manuel Tena Sempere / GC10.
8. 22/02/2021/018 / Análisis del uso terapéutico del tungstato sódico para el tratamiento del síndrome poliquístico (SOP) empleando modelos preclínicos / Manuel Tena Sempere / GC10
9. 1/06/2020/071 / Estudio del efecto de fármacos en el modelo de traumatismo cerebral inducido/Carmen María Navarrete Rueda/GC-04.
10. 23/03/2018/034 / Estudio del efecto de derivados cannabinoides en el modelo de esclerodermia inducida por angiotensina II/Belén Palomares Cañero/GC-04.
11. 31/03/2022/057 / Estudio del efecto de fármacos en modelo de isquemia extremidades inferiores /Adela García Martín / GC04
12. 15/05/2018/088 / Nuevos mecanismos moleculares en la interacción patológica entre obesidad y diversos tipos de cáncer endocrinometabólicos: Identificación de nuevos biomarcadores diagnósticos, pronósticos y terapéuticos/Raúl Miguel Luque Huertas/GC-27.
13. 05/06/2018/098 / Mecanismos moleculares implicados en los procesos de adhesión y migración celular: efecto del tratamiento de enfermedad renal crónica sobre la función endotelial/Fátima Guerrero Pavón/GC-07.
14. 06/07/2018/113 / Caracterización de los cambios en Wnt inducidos por esclerosina y su repercusión en el trastorno mineral, óseo y vascular asociado a la enfermedad renal crónica / Yolanda Almadén Peña / GC13

15. 14/03/2018/026 / Efecto del calcimimético AMG641 sobre el remodelado óseo en un modelo de enfermedad renal/Yolanda Almadén Peña./ GC13
16. 16/11/2017/155 / Efectos de los probióticos sobre la función renal, la microbiota y el desarrollo de complicaciones vasculares asociadas a la enfermedad renal/Yolanda Almadén Peña/GC-13.
17. 12/12/2019/196 / Desarrollo de un modelo de ratón de Pseudomixoma peritoneal con xenoinplante humano/Manuel Tena Sempere/GE-09.
18. 15/03/2022/040 Estimulación inmunogénica basada en terapia con células T autólogas combinada con inhibidores PDL1 y MEK en los subtipos moleculares de cáncer colorrectal / Silvia Guil Luna / GC06
19. 23/09/2022/115 Identificación de biomarcadores diagnósticos, pronósticos y terapéuticos en tumores neuroendocrinos y cáncer de páncreas / Alejandro Ibáñez Costa / GC08

12.3 FLOW CYTOMETRY AND ADVANCED OPTICAL MICROSCOPY UNIT

12.3.1 FLOW CYTOMETRY



STAFF

Esther Peralbo Santaella, PhD

Head of Unit. Flow Cytometry Technical Specialist- Contract, Assignment of Technicians to Common Research Support Structures program; Funding Agency: ANDALUSIAN HEALTH SERVICE; Reference: S.A. 0008/22.

BRIEF DESCRIPTION

The mission of the Unit is to offer IMIBIC and hospital researchers, as well as other public and private sector institutions, access to high performance equipment covering a wide range of applications in the field of flow cytometry, and to provide technical expertise and training. The Unit also provides scientific-technical advice on experimental design, sample preparation, cytometry data analysis and interpretation of results.

EQUIPMENT AND FACILITIES

Analysers:

» **BD LSRFortessa SORP**: 5 lasers (355, 405, 488, 561 and 640 nm) capable of analysing up to 18 fluorescence parameters + FSC/SSC. Filter for violet SSC.

» **BD FACSCanto II**: 3 lasers (405 nm, 488 nm and 633 nm). Capable of analysing 8 fluorescence parameters + FSC/SSC. Multi-tube carousel loader (up to 40 tubes). Filter for violet SSC.

» **BD FACSCalibur**: 1 laser (488 nm). Capable of analysing 3 fluorescence parameters + FSC/SSC.

Cell sorter:

» **BD FACSAria III**: 3 lasers (407, 488 and 633 nm) and capable of analysing 13 parameters simultaneously (11 fluorescence parameters + FSC/SSC). Four-way and single-cell sorting capabilities. Sorted cells: can be collected into tubes, onto plates or slides. Temperature control. Aerosol management option (AMO).

Others:

» **PC workstation** with Flow Cytometry data analysis software **BD FlowJo v10. (NEW)**

MAIN SERVICES

- Self-use (without facility operator assistance) of flow cytometry analyzers (only for IMIBIC users duly trained by us to use the equipment).
- Operator-assisted use of analyzers on demand.
- Cell sorting: only provided as an operator-assisted service.
- Flow cytometry data analysis on demand. The Unit also offers registered users access to a PC workstation with BD FlowJo data analysis software.
- Advice on experimental and multicolor panel design, sample preparation methods, interpretation and presentation of data, and writing of flow cytometry section in Material and Methods.
- Development/implementation of flow cytometry assays/applications according to user needs.

KEY FACTS

NUMBER OF IMIBIC USERS: **26 (13 RESEARCH GROUPS)**

NUMBER OF EXTERNAL USERS: **1 (UNIVERSITY OF CORDOBA)**

NUMBER OF INTERNAL PROJECTS SUPPORTED: **16**

COURSES AND TRAINING SESSIONS: **3**

NEW INTERNAL SERVICES: **1 (PC workstation with BD FlowJo v10 software for flow cytometry analysis)**

FEATURED ARTICLES

Articles in which the Unit's support is acknowledged:

- Roa, Juan et al. "Dicer ablation in Kiss1 neurons impairs puberty and fertility preferentially in female mice." *Nature communications* vol. 13,1 4663. 9 Aug. 2022.
- Valle-Arroyo, Jorge et al. "Humoral/Cellular Immune Discordance in Stem Cell Donors: Impact on Cytomegalovirus-Specific Immune Reconstitution after Related Hematopoietic Transplantation." *Transplantation and cellular therapy* vol. 28,10 (2022): 703.e1-703.e8.

PROJECTS

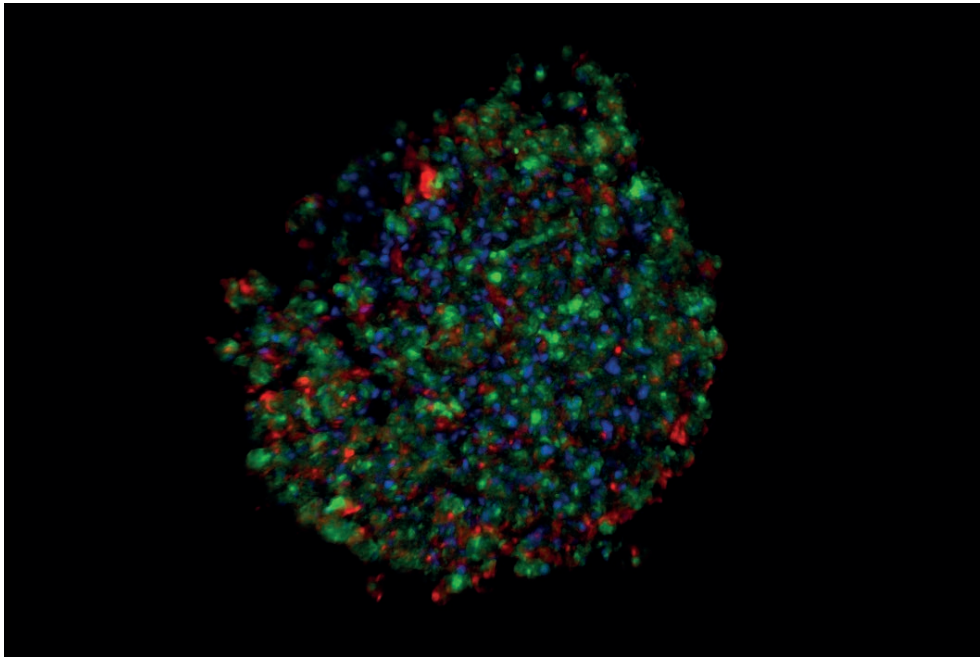
1. PECOVID-0053-2020. Identificación de biomarcadores de riesgo asociados a la respuesta inmunológica frente a la infección por SARS-CoV-2. Alejandra Pera Rojas, Juan Molina Alcaide. GC01
2. PI19/00075. Aortic stenosis immunopathology (ASim). Alejandra Pera Rojas. GC01
3. CV20-81659. Análisis comparativo de la respuesta de linfocitos T específicos de SARS-CoV-2 generados tras la resolución de la infección en pacientes graves versus leves/asintomáticos: Proyecto COVID-MEMORY. Sara Cantisán Bohórquez. GC03

4. PMP21/00119. Análisis integrado mediante tecnologías ómicas e inteligencia artificial para la identificación e implementación de herramientas de medicina personalizada en las espondiloartritis. Eduardo Collantes Estévez. GC05
5. PID2019-105256RB-I00T. Nitric oxide and metabolic reprogramming in colorectal cancer: identification of novel therapeutic targets. Antonio Rodríguez Ariza. GC06
6. P20-00967. La reprogramación metabólica mediada por óxido nítrico como diana terapéutica en cáncer colorrectal. Antonio Rodríguez Ariza. GC06
7. PI2000997. La actividad funcional de las células “natural killer” y la citotoxicidad mediada por células dependientes de anticuerpo para la predicción de la respuesta al tratamiento anti-EGFR en cáncer colorrectal. Enrique Aranda Aguilar. GC06
8. SEN21/01. Perfil de citoquinas linfocitarias y desarrollo de anticuerpos anti-HLA en pacientes trasplantados de órganos sólidos con uremia. María Luisa Agüera Morales. GC07
9. P18-RT-4093. Translational research on obesity-induced hypogonadism: Pathophysiological basis and implications for improved diagnosis and treatment. Manuel Tena Sempere. GC10
10. PID2020-118660GB-I00. Nutrient and metabolic sensing in Kiss1 neurons as key mechanism for the control of puberty: Implications for pubertal disorders associated to early-onset obesity. Manuel Tena Sempere. GC10
11. PI21/01770. Caracterización del Papel Fisiopatológico de miRNAs Circulantes Desregulados en el Hipogonadismo Inducido por Obesidad. María Soledad Avendaño Herrador. GC10
12. PI21/00654. Estudio del papel de FGF23 como inductor de hipertensión arterial y disfunción vascular en pacientes con enfermedad renal crónica. Juan Rafael Muñoz Castañeda. GC13
13. PI18/01610. Desarrollo preclínico de CAR-T anti CD19 universales con subpoblaciones predeterminadas de memoria y efectoras y expresión inducible del CAR. Inmaculada Concepción Herrera Arroyo. GC14
14. PI21/01935. Evaluación de la intervención nutricional personalizada junto con la aplicación de exosomas derivados de MSC en la capacidad regenerativa y cicatrización de úlceras cutáneas en diabéticos. Antonio Casado Díaz, Alfonso Calañas Continente. GC17
15. PI18/01659. Caracterización de exosomas derivados de MSC y su efecto combinado con 25 hidroxivitamina D3 e inhibidores de la DPP4 sobre la cicatrización en diabéticos de úlceras cutáneas. Antonio Casado Díaz, José Manuel Quesada Gómez. GC17
16. PEER-0048-2020. Estabilidad genómica y regulación de la expresión génica en craneofaringiomas: Papel fisiopatológico y búsqueda de oportunidades diagnósticas, pronósticas y terapéuticas. Raúl Luque Huertas, M^a Ángeles Gálvez Moreno. GC27

COURSES AND WORKSHOPS

1. Course: “FUNDAMENTOS Y APLICACIONES BIOMÉDICAS DE LA CITOMETRÍA DE FLUJO”. 1st (January) and 2nd (September) Edition. Training activity accredited by the Andalusian Agency for Healthcare Quality-ACSA (1.18 credits), linked to the Biomedicine PhD Program Training Plan at the University of Cordoba.
2. Course: “Introducción al manejo del software de análisis para Citometría BD FlowJo” (in collaboration with Becton Dickinson).

12.3.2 ADVANCED OPTICAL MICROSCOPY UNIT



STAFF

Gema García Jurado, PhD

Head of Unit. Technical Specialist in Microscopy– Contract, ISCIII Biobanks and Biomodels Platform. PT20/00079.

BRIEF DESCRIPTION

The Advanced Optical Microscopy Unit of IMIBIC is available to IMIBIC researchers and to public and private users in biomedical research.

The purpose of the service is to provide comprehensive support to researchers as well as scientific and technical advice and support on experimental design, sample preparation, image processing analysis and data interpretation.

EQUIPMENT AND FACILITIES

Equipment:

- **Zeiss LSM 710 Spectral Confocal Laser Scanning Microscope:** inverted motorized stand. 7 laser lines: 405, 458, 488, 514, 543, 594 and 633 nm. Scanning module with 3 spectral R/FL detection channels (PMTs) and 1 transmitted light channel (PMT). Large integrated incubation chamber.
- **Leica THUNDER Imager 3D assay:** Motorized inverted microscope and software with THUNDER Computational Clearing. 4 Filter cubes for DAPI, FITC, Rhod and Cy5. Illumination: epifluorescence, brightfield and phase contrast.
- **Zeiss PALM MicroBeam. Laser Microdissection:** one excitation laser line (355nm) fully motorized, with high precision cutting and catapulting, and “cap check” system. Transmitted light techniques (bright field, phase contrast), 4 filter cubes for DAPI, FITC, Red and Cy5.
- **Zeiss Axio Vert.A1** inverted **fluorescence** microscope. Illumination: brightfield and epifluorescence. Filter cubes for DAPI, FITC and Cy3. Digital monochrome CCD camera.
- **Leica DM2000 LED** Upright microscope with LED **transmitted-light** illumination. Digital camera color HD.
- **Nikon Eclipse Ti-S** inverted **fluorescence** microscope. Illumination: brightfield, contrast phase and epifluorescence. Filter cubes for DAPI, FITC and Cy3. Digital camera color.
- **Image Analysis Workstation:** AIVIA CellBio, FIJI, LAS X, Zen Blue, QuPath, CellPose.

Applications

The main applications carried out in this Area include:

- Laser scanning confocal microscopy
- Automated widefield microscopy
- High content screening
- Live 3D imaging
- On-line computational clearing
- Laser cutting
- Spectral imaging and linear unmixing
- Image processing and analysis

MAIN SERVICES

- Self-use (without facility operator assistance) of microscopy equipment.
- Operator-assisted use of instruments.
- Image processing and analysis.
- Advice and support on experimental design, sample preparation methods, image interpretation and presentation of results.
- Development/implementation of microscopy assays/applications, and image analysis tools according to user needs.

KEY FACTS

In 2022, the Advanced Optical Microscopy Unit achieved the requirements for a Quality Management System in accordance with the ISO 9001:2015 Quality Standard.

New equipment and services added to the Microscopy Unit include:

- An advanced high-resolution, high-speed widefield fluorescence microscopy system for automating 2D and 3D image capture (THUNDER Imager 3D assay imaging system, Leica).
- Laser Microdissection Service for fluorescent and histology specimens dissection- Image Analysis service with workstation and licensed software (AIVIA).

This Unit provided technical support and scientific-technical advice to 11 Consolidated Research Groups of IMIBIC, 2 Emerging Research Groups and 1 Associated Research group.

NUMBER OF IMIBIC USERS: **56**

NUMBER OF EXTERNAL USERS: **3**

COURSES AND TRAINING SESSIONS: **31**

FEATURED ARTICLES

A total of eight scientific articles using data generated by the Unit were published during 2022. Articles acknowledging the support of the Unit are listed below.

Guerrero F, Pulido V, Hamad S, Aljama P, Martín-Malo A, Carrillo-Carrión C. *Incorporating zeolitic-imidazolate framework-8 nanoparticles into kidney scaffolds: a first step towards innovative renal therapies*. *Nanoscale*. 2022 Dec 8;14(47):17543-17549. doi: 10.1039/d2nr04246k. PMID: 36421023.

Navarro-Ruiz MDC, López-Alcalá J, Díaz-Ruiz A, Moral SDD, Tercero-Alcázar C, Nieto-Calonge A, López-Miranda J, Tinahones FJ, Malagón MM, Guzmán-Ruiz R. *Understanding the adipose tissue acetylome in obesity and insulin resistance*. *Transl Res*. 2022 Aug;246:15-32. doi: 10.1016/j.trsl.2022.02.008. Epub 2022 Mar 5. PMID: 35259527.

PROJECTS

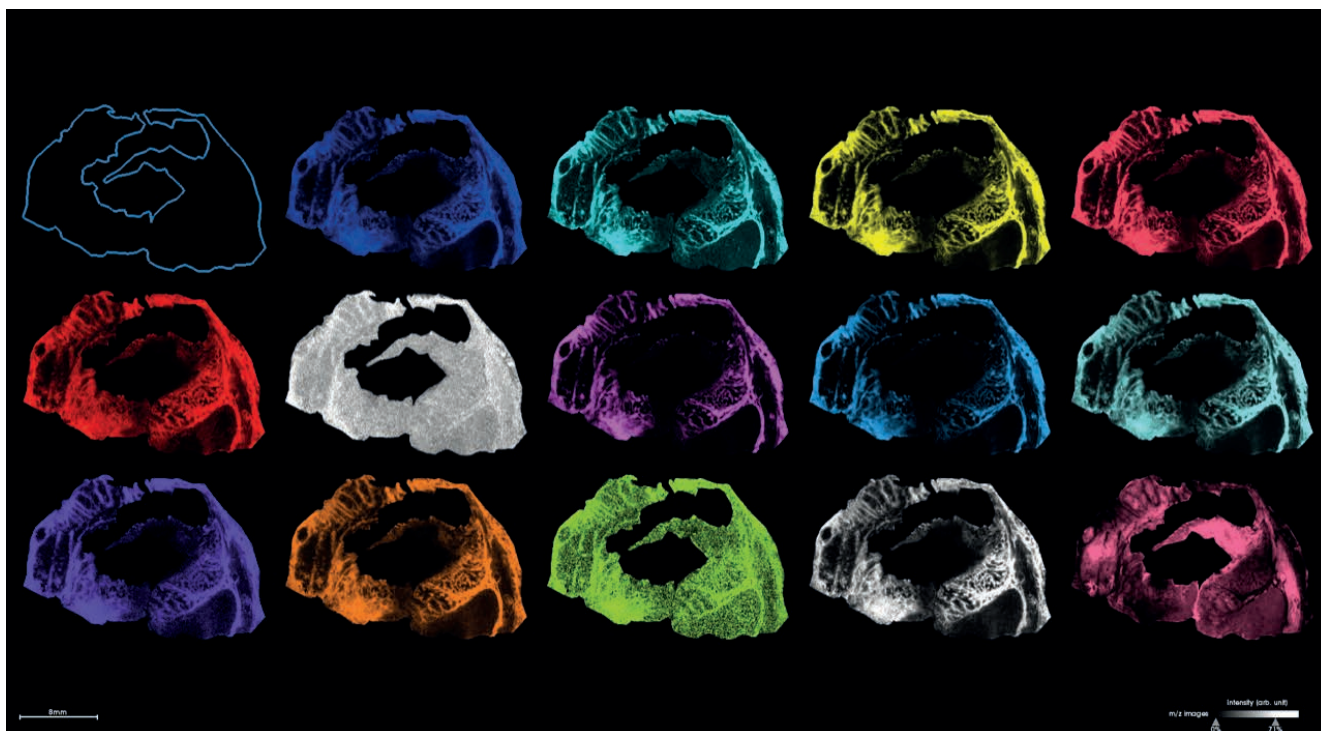
1. Liberación de células tumorales circulantes tras la ablación local del hepatocarcinoma. Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI18/01736.
2. Nuevas Fronteras en Imagen Molecular: Integración de Radiogenómica y Metabólica en la Mejora Diagnóstica del Cáncer de Pulmón. Funding entity: Agencia Andaluza de Conocimiento. Junta de Andalucía. PY20_00470
3. Nuevas Funciones de la Quinasa DYRK2 sobre el control de la Proliferación y el Ciclo Celular. Modulación de la Ruta de MAPK/ERK y Sistema Ubiquitina Proteosoma. Ministerio de Economía y Competitividad. PID2021-124314OB-I00.
4. Nuevos mecanismos de control de la proteína supresora de tumores FBXW7 y su papel en la carcinogénesis pulmonar.
5. Derivados aminoquinonas del cannabidiol como activadores de PP2A. Implicaciones en neuroinflamación y remielinización.
6. Desarrollo preclínico del VCE-005.1, un triterpeno hidroxamato, para el tratamiento de arteriopatías periféricas y otras patologías cardíacas. Ministerio de Ciencia, Innovación y Universidades. RTC-2017-6109-1.
7. Nitric oxide and metabolic reprogramming in colorectal cancer: identification of novel therapeutic targets (PID2019-105256RB-I00).
8. La reprogramación metabólica mediada por óxido nítrico como diana terapéutica en cáncer colorrectal (P20-00967).
9. La actividad funcional de las células "natural killer" y la citotoxicidad mediada por células dependientes de anticuerpo para la predicción de la respuesta al tratamiento anti-EGFR en cáncer colorrectal (PI2000997).
10. Bioingeniería Regenerativa: Modelo in vitro de recellularización de un scaffold renal con células mesenquimales. Funding Agency: FIBICO. Reference: PI-0268-2018-FIB
11. Desarrollo y validación de nuevos nanofármacos para el tratamiento de la enfermedad metabólica asociada a obesidad e hipogonadismo. Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: DTS20/00117.
12. Implicaciones fisiopatológicas y valor diagnóstico de miRNAs candidatos involucrados en el desarrollo temprano de obesidad y enfermedad metabólica. Estudio CHILDEM Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI19/00257.
13. Caracterización del Papel Fisiopatológico de miRNAs Circulantes Desregulados en el Hipogonadismo Inducido por Obesidad Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI21/01770.
14. CRISPR/Cas9 technology for conditional (cell-specific) genome editing in somatic cells Funding Agency: BRITISH SOCIETY FOR NEUROENDOCRINOLOGY; Reference: BSE-PSG-2021-02.
15. Suplementos de Magnesio como tratamiento de la progresión de la fibrosis renal y cardiaca. Funding Agency: CONSEJERÍA DE SALUD Y CONSUMO; Reference: PI-0071-2021.
16. Estudio del papel de FGF23 como inductor de hipertensión arterial y disfunción vascular en pacientes con enfermedad renal crónica. Funding Agency: CONSEJERÍA DE SALUD Y CONSUMO; Reference: PI-0169-2020.

17. Basic and clinical studies related to the role of magnesium on renal and cardiac fibrosis progression. Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI20/00660.
18. Estudio del papel de fgf23 como inductor de hipertensión arterial y disfunción vascular en pacientes con enfermedad renal crónica. Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI21/00654.
19. Reparación de sitios abásicos inducidos por agentes metilantes de ADN en células vegetales y humanas: papel de una ruta independiente de AP endonucleasas Funding Agency: AGENCIA ESTATAL DE INVESTIGACIÓN; Reference: PID2019-109967GB-I00.
20. Altered splicing process in chronic liver disease progression and hepatocarcinogenesis: a novel source for diagnostic, prognostic and therapeutic targets Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI20/01301.
21. Caracterización de nuevos mecanismos y posibles dianas terapéuticas implicadas en la progresión del daño renal en patologías asociadas a acumulación de hemoglobina Funding Agency: CONSEJERÍA DE SALUD Y CONSUMO; Reference: PIGE-0052-2020-FEDER.
22. Caracterización de nuevos mecanismos y posibles dianas terapéuticas implicadas en la progresión del daño renal en patologías asociadas a acumulación de hemoglobina. Funding Agency: CONSEJERÍA DE SALUD Y CONSUMO; Reference: 116200130052.
23. Estudio de nuevos mecanismos y dianas terapéuticas implicadas en el daño renal agudo y crónico en patologías asociadas a acumulación renal de hemoglobina Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI17/00130.
24. Novel mechanisms and therapeutic targets involved in the progression of hemoglobin associated renal damage Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI20/00375.
25. Descifrando la heterogeneidad de los tumores neuroendocrinos mediante una aproximación spliceosómica y de biología del ARN: potencial valor diagnóstico y terapéutico Funding Agency: Agencia estatal de investigación; Reference: PID2019-105201RB-I00.
26. Exploring cell communication pathways in the adipose tissue for novel nanomedicine applications in obesity. PI: Ana Gordon Bermúdez-Coronel. Funding entity: Ministry of Science, Innovation and Universities. RTI2018-095736-J-I00
27. Caracterización del matrisoma del tejido adiposo y papel de la remodelación de la matriz extracelular en la resistencia a insulina asociada a obesidad. Convocatoria 2019 de proyectos de I+D+i, RETOS DE LA SOCIEDAD, MICINN. (IMIBIC/ Universidad de Córdoba).
28. PY18-1761, Impacto de la Remodelación de la Matriz Extracelular Sobre la Plasticidad Celular en El Tejido Adiposo en Obesidad Consejería de Economía, Conocimiento, Empresas y Universidad, Junta de Andalucía. (IMIBIC/Universidad de Córdoba).
29. Caracterización de exosomas derivados de MSC y su efecto combinado con 25 Hidroxivitamina D3 e inhibidores de la DPP4 sobre la cicatrización en diabeticos de úlceras cutáneas. PI18/01659.
30. Generación y evaluación in vivo de matrices bioartificiales descelularizadas y gamma irradiadas a partir de xenoinjertos porcinos para su aplicación en terapias avanzadas en córnea y cartílago Funding Agency: CONSEJERÍA DE SALUD Y CONSUMO; Reference: 116190130194
31. Development of Adipose Tissue-Based Therapies for Treatment of Corneal Endothelial Dysfunction. Funding Agency: INSTITUTO DE SALUD CARLOS III; Reference: PI21/01829

COURSES AND WORKSHOPS

- 44 specific training sessions for research groups in the use of microscopy equipment, technical applications and image analysis related to the Unit's equipment:
- 3 technical application seminars were given in the area of Advanced Optical Microscopy:
 - "Laser Microdissection - Bridging the gap between Microscopy and Molecular Biology". Monika Stitch, Senior Application Specialist Light Microscopy, Zeiss.
 - "Los datos en su contexto: Microscopía 3D automatizada para muestras grandes". Luis Muñoz, Imaging Specialist, Miltenyi Biotec España.
 - "Adquisición de imágenes multiview en especímenes vivos y órganos completos clarificados". Jaques Paysan, 3D Application Specialist, Zeiss.

12.4 IMIBIC MASS SPECTROMETRY AND MOLECULAR IMAGING UNIT (IMSMI)



STAFF

Eduardo Chicano Gálvez, PhD

Core Facility Coordinator.

Mass Spectrometry Specialist: LC-MS, MS Imaging. Bioinformatics and data analysis.

- Recipient of a competitive contract under the “Assignment of Technicians to Common Research Support Structures” call for proposals; Funding Agency: ANDALUSIAN HEALTH SERVICE; Reference: RF2-0003-2020.

Ángela Peralbo Molina, PhD

Mass Spectrometry Specialist (Lipidomics and metabolomics)

- Recipient of a competitive contract under the “Assignment of Technicians to Common Research Support Structures” call for proposals; Funding Agency: ANDALUSIAN HEALTH SERVICE; Reference: RF2-0013-2022

Pilar Luna García

Support technician.

- Wet lab, sample preparation and lab maintenance support - Operational Programme for Youth Employment and Youth Employment Initiative (POEJ 2021). Junta de Andalucía, 2021. May 2022.

BRIEF DESCRIPTION

The Mass Spectrometry and Molecular Imaging Unit (IMSMI) at IMIBIC provides highly specialised support in the latest mass spectrometry techniques available to researchers and users who require it. The Unit specialises in offering services in three of the major omics, namely, proteomics, lipidomics and metabolomics. It is also highly specialised in molecular imaging (MS Imaging).

The IMSMI Unit provides researchers with state-of-the-art technologies in the field and offers its services to IMIBIC research groups, as well as to the University of Cordoba, Reina Sofia University Hospital, other universities, hospitals, and private sector companies.

This Unit has four main lines of work:

- I. The Clinical Proteomics line, consisting of high-performance liquid chromatography (Evosep One) coupled with mass spectrometry (LC-MS/MS), which gives researchers and users access to label-free quantitative clinical proteomic analysis in liquids (DDA, DIA-PASEF and PRM-PASEF). Studies that can be developed range from small pilot experiments and small populations to large experiments with hundreds of samples requiring superior speed and quality.
- II. The Lipidomics line, consisting of ultra-high performance liquid chromatography coupled with mass spectrometry (LC-MS/MS). It provides a service, using a targeted or untargeted approach, for high resolution identification and quantification of lipid species in samples.
- III. The Metabolomics line, consisting of ultra-high performance liquid chromatography coupled with mass spectrometry (LC-MS/MS). It offers a service, using a targeted or untargeted approach, for high resolution identification and quantification of metabolites in samples.
- IV. Molecular Imaging (MS imaging), which provides researchers and users with spatial information about metabolites, lipids, proteins/peptides directly from tissue and biopsy samples.

The IMSMI Unit provides individualised support tailored to the user's needs, including project planning/experimental design, sample preparation, mass spectrometry analysis and basic and advanced data analysis, with the latest developments available in its area of expertise.

EQUIPMENT AND FACILITIES

- Q-TOF mass spectrometer, MALDI-TOF, TIMSTOF-Flex (Bruker) (Last update:2022)
- Q-TOF mass spectrometer, TIMSTOF-Pro (Bruker) (Last update: 2021)
- Q-TOF mass spectrometer, Triple TOF 5600+ (Sciex) (Last update: 2014)
- MALDI-TOF/TOF Mass spectrometer, 5800 (Sciex) (Last update: 2014)
- EVOSEP ONE (Evosep) (Last update: 2021)
- ELUTE UHPLC (Bruker) (Last update: 2021)
- nanoHPLC: Eksigent LC400 (Sciex) (Last update: 2014)
- Sprayer: HTX M5 (HTX Technologies) (Last update: 2021)
- Sprayer: Sunchrom Suncollect (Sunchrom, Friedrichdorf, Germany) (Last update: 2014)
- Main programs (and programming languages) used for data analysis: Protein Pilot, Comet and X! Tandem, Proteowizard, TransProteomicsPipeline, MS-Fragger for protein identification; Peak View, Marker View, Skyline, DIANN, MS-Fragger for protein quantification and spectral library generation; Tissue View, MSiReader, Spectralanalysis, Cardinal, SCILS for Maldi Imaging MS. R, Python and Matlab for general analysis purposes. MetaboScape and TASQ for metabolomics (lipidomics workflow) (Last update: 2018 - 2021)
- PaSER: Parallel Search Engine in Realtime (Bruker) (Last update: 2021)
- Spectronaut: DIA analysis for protein identification and quantification (SN18, Last update: 2023)
- Basic laboratory equipment for sample preparation (Last update: 2014)

MAIN SERVICES

- Identification and characterization of proteins by LC-MS/MS: DDA-PASEF
- Quantitative Proteomics:
 - DIA-PASEF
 - DIA-SWATH
 - PRM-PASEF
 - Mass clinical proteomics analysis using Evosep One
- Lipidomics and Metabolomics: Identification, characterization and/or quantification of small molecules in a wide range of samples.
- MALDI mass spectrometry imaging (Proteomics/Lipidomics/Metabolomics)
- Project supervision and collaboration
- Training in the software used for data analysis

KEY FACTS

NUMBER OF IMIBIC USERS: **15**

NUMBER OF EXTERNAL USERS: **15**

NUMBER OF PUBLICATIONS: **4**

NUMBER OF MEETINGS WITH USER GROUPS: **196**

NUMBER OF TECHNICAL INTERVENTIONS IN THE UNIT: **1103**

PARTICIPATION IN INTERLABORATORY COMPARISON STUDIES: **1**

QUALITY CERTIFICATES: **1**

FEATURED ARTICLES

1. The NtrYX Two-Component System of *Paracoccus denitrificans* Is Required for the Maintenance of Cellular Iron Homeostasis and for Complete Denitrification under Iron-Limited Conditions. Alfonso Olaya-Abril, Víctor M Luque-Almagro, Jesús Hidalgo-Carrillo, Eduardo Chicano-Gálvez, Francisco J Urbano, Conrado Moreno-Vivián, David J Richardson, María Do-

lores Roldán. Int J Mol Sci. 2022 Aug 15;23(16):9172. doi: 10.3390/ijms23169172.

2. Discriminator for Cutaneous Leishmaniasis Using MALDI-MSI in a Murine Model. Journal of the American Society for Mass Spectrometry, 2022. Barajas-Solano,C., Muñoz,B., Chicano-Gálvez,E. Escobar,P., & Mejía-Ospino,E.
3. Características clínicas y estudio de marcadores de cáncer broncogénico en una matriz no invasiva mediante proteómica. Rev Esp Patol Torac 2022; 34 (1) 04-82. M.S. Arenas-De Larriva, A. Fernández-Vega, E. Chicano Gálvez, B. Jurado-Gámez, I. Ortea.
4. Multi-laboratory experiment PME11 for the standardization of phosphoproteome analysis. Nuria Colomé et al. Journal of Proteomics, Vol 251, 16 January 2022, 104409.

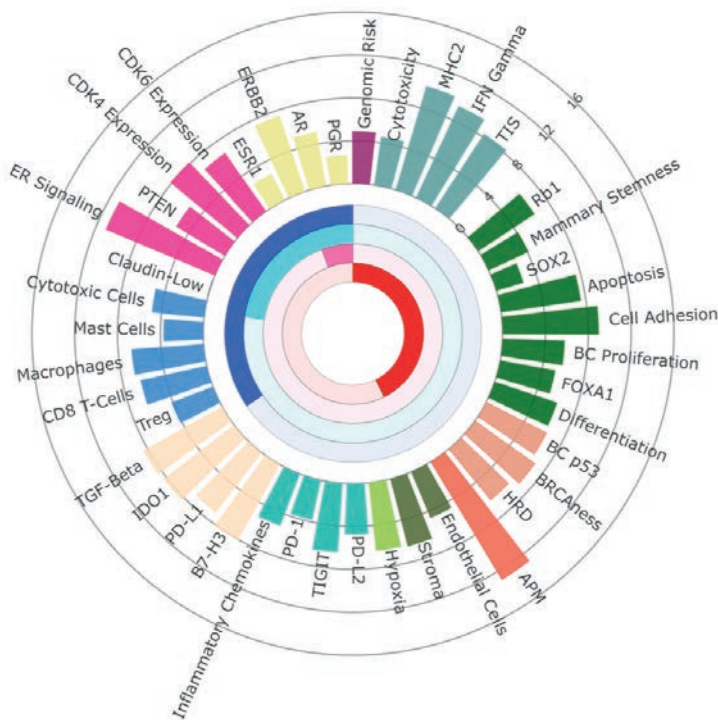
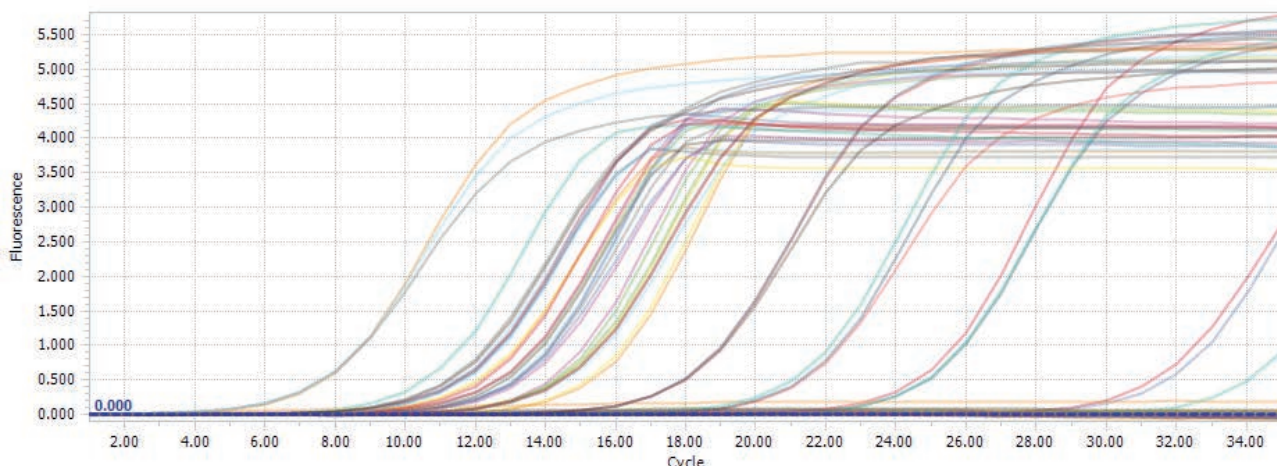
PROJECTS

1. Characterization of different omics levels using MS-imaging, from lipidomics to proteomics, and detection of neurotransmitters in model organism brain. LP-CSIC-UAB Proteomics Unit.
2. Proteomic study of nasopharyngeal aspirates in neonates. Pediatric Unit, Puerta del Mar Hospital, Cádiz.
3. Massive proteomic analysis of patients with hepatic steatosis. GC26. Clinical Virology and Zoonoses.
4. Pilot proteomic analysis of cell lines exposed to anticancer treatments. GC30 Molecular Hepatology.
5. Proteomic MS-imaging analysis of radiologically invisible prostate cancer tissues. GE05 Genitourinary System Disorders.
6. MS-imaging proteomic study of the human olfactory bulb. Proteomics Unit, IdISNA-Navarrabiomed.
7. Development of MS-imaging technology applied to metabolite detection in cell cultures. University of Valencia.
8. Proteomic analysis in fibroblast cultures. IBIS, IBIS Proteomics Unit.
9. MS-imaging proteomic study for analysis of response to a pharmacological candidate in leishmaniasis-affected skin. GC03 Infectious Diseases.
10. Pilot metabolomic analysis for metabolite monitoring in fibroblast culture. GC06 New Therapies in Cancer.
11. Establishment and development of a measurement method for monitoring a low molecular weight compound in dialyzed patients. CG13 Calcium Metabolism. Vascular Calcification.
12. Method establishment in HURS Microbiology Area; MALDI-TOF for measurement and characterization of specific intact proteins from *Klebsiella pneumoniae*.
13. Massive proteomic analysis, identification of proteins, and quantitative analysis of differential expression in human THP1 cells under 4 different conditions. Cardiovascular Regenerative Therapy and Applied Proteomics Group. INIBICA.
14. Massive proteomic analysis of *Pseudomonas pseudoalcaligenes* cultures. Department of Biochemistry and Molecular Biology, University of Córdoba.
15. Identification and characterization of proteins from protein extract obtained from Iberian newt eggs. GE07 Visual Quality.
16. Quantitative proteomic comparison between two samples obtained from primary cultures: mouse embryonic hearts versus derived epithelium. Development and Cardiovascular Disease Group. UMA-IBIMA.
17. Lipidomic profiling of patients using two different sample types (blood and fibroblasts) by LC-MS/MS. Mainly sphingolipids (monohexosylceramide, lactosylceramide, ceramides), glucocerebroside, cholesterol, and oxysterols. Movement Disorders Group. IBIS.
18. Proteomic analysis of immunoprecipitated cell culture samples for enrichment in proteins related to an interaction of interest (interactomics). GC11 Adipocyte Metabolism and Differentiation. Metabolic Syndrome.
19. Study to determine changes in the proteomic profile of the human SHSY5Y cell line after differentiation with a neurogenesis-inducing compound. GC04 Inflammation and Cancer.
20. Proteomic analysis of plasma from patients with neurodegenerative diseases to search for useful biomarkers in early detection. Vascular Pathophysiology Group. National Hospital for Paraplegics, Toledo.
21. Proteomic analysis of mouse renal and hepatic tissue under different stress conditions. GE06 Renal and Vascular Damage Pathophysiology.
22. Massive proteomic analysis of mouse brain tissue with human xenografts. Neuropsychopharmacology and Psychobiology Group. INIBICA.
23. Development and implementation of a proteomic analysis system in LCM sections in collaboration with the Advanced Microscopy Unit of IMIBIC.

COURSES AND WORKSHOPS

1. Master's degree in Translational Biomedical Research. Subject Proteomics
2. Open seminars via social networks (Twitter chats)
3. Individualised advanced training for research staff: Proteomics/Metabolomics/MS Imaging.
4. Mentoring of pre-doctoral students and students in professional training.
5. Post-doctoral short-term internships for advanced mass spectrometry analysis
6. Attendance at International and National congress and scientific publications.

12.5 GENOMICS UNIT



STAFF

Álvaro Jiménez Arranz

Head of Genomics Unit. Senior Genomics & Clinical Genomics Specialist - Recipient of a competitive contract from the 2015 call for “Ayudas para la Vinculación de Técnicos de Apoyo a ECAIs” (SSPA).

Beatriz Domingo Escudero

Senior Genomics Technical Specialist - Contract financed with FIBICO-IMIBIC own funds.

Pilar Rubín González de Canales

Laboratory Technician - Recipient of a competitive contract from the 2020 call for “Ayudas para Personal Técnico de Apoyo”(MICINN).

BRIEF DESCRIPTION

The Genomics Service provides researchers with cutting-edge equipment, as well as scientific and technical advice on the development of various analytical techniques used in the comprehensive study of DNA and RNA. This allows researchers to obtain high-quality results for the development of outstanding translational biomedical research.

The Genomics Unit offers its services to researchers at IMIBIC and in other public and private institutions. The Unit works closely with other Research Support Services, such as Bioinformatics, Proteomics and Cytometry.

EQUIPMENT AND FACILITIES

The resources currently available in the Genomics Unit are:

- **Illumina MiSeq**

» MiSeq is an Illumina sequencing technology based on SBS (sequencing by synthesis), which is currently the most widely adopted NGS (next generation sequencing) technology in the world for its speed, accuracy and quality. This sequencer can generate up to 15 Gb/run and 2x300bp paired-end reads, leading to greater accuracy, especially in problematic areas such as those involving homopolymers. The MiSeq system allows researchers to perform DNA-Seq, RNA-Seq, Methyl-Seq and ChIP-Seq analysis, which have a wide range of applications.

- **nCounter DX / NanoString technology**

» The NanoString nCounter analysis system uses a novel molecular barcoding technique linked to specific probes that can detect and count hundreds of targets in a single reaction without amplification, so that users can profile large numbers of mRNA, miRNA and DNA molecules simultaneously with gold standard sensitivity and reproducibility. Its applications include gene expression analysis, gene fusion, copy number variation (CNV) and simultaneous analysis of mRNA and miRNA.

» These applications, together with its Dx/CE-IVD certification for healthcare-quality analysis, make nCounter a tool with high potential for clinical use. One example is the FDA-approved and CE-marked in vitro diagnostic (CE-IVD) assay for breast cancer, Prosigna-PAM50, based on molecular analysis of gene expression profiles of 50 genes. This test classifies the tumor into one of 4 intrinsic subtypes related to disease prognosis and choice of treatment.

- **Digital PCR (dPCR): QX200 Droplet Digital PCR System**

» Droplet digital PCR offers a more precise and sensitive alternative to conventional qPCR for absolute quantification and detection of rare alleles without the need for standards or endogenous controls due to droplet partitioning.

- **Quantitative PCR (qPCR)**

The Unit has 3 qPCR platforms for genotyping and gene expression studies:

» Light Cycler 96 (96-well platform)

» 7900 HT Fast (384-well platform)

» Biomark HD-Juno (High-throughput nanofluidics platform)

For IMIBIC research staff, the Unit offers the possibility of using the qPCR platforms on a self-service basis (without technical operator).

- **Other**

The Unit has additional equipment for the quantification, quality analysis and determination of the size of nucleic acid fragments:

» DeNovix DS-11 (Spectrophotometer)

» Quantus (Fluorometer)

» 2200 TapeStation (Microelectrophoresis)

The Unit has been awarded several grants to fund new qPCR equipment (96 and 384 wells) and a new single-cell genomic analysis system. This will make it possible, among other things, to analyze and compare gene expression profiles between individual cells.

MAIN SERVICES

- Technical support and scientific and methodological advice in the choice and optimization of genomic techniques
- Design support for NGS or nCounter target panels
- Technical and scientific support in the use of qPCR platforms and probe design
- Nucleic acid quality controls (spectrophotometry, fluorometry and microelectrophoresis).
- nCounter analysis of targeted gene expression panels (up to 800 genes).
- PAM50 breast cancer prognostic gene signature (Prosigna™) analysis.
- nCounter analysis of customized panels for the detection of target fusion genes.
- nCounter screening of up to 800 miRNAs in tissue, peripheral blood cells and serum/plasma.
- Gene expression and genotyping studies using real-time PCR
- Absolute quantification by droplet digital PCR (viral load analysis etc.)
- Liquid biopsy (cfDNA): Rare mutation detection by ddPCR, and NGS analysis of SNVs, indels, CNVs and fusions.
- Analysis of SNVs, indels and CNVs in peripheral blood cells and tissue by NGS or nCounter assay.
- Characterization of bacterial populations by 16S rRNA sequencing and shotgun sequencing.
- Targeted sequencing for the characterization of Mycobacteria and SARS-CoV-2 (epidemiological monitoring protocol)
- RNA-seq
- ChIP-seq
- DNA methylation analysis by NGS.
- NGS library preparation.
- NGS (Next Generation Sequencing) by Illumina MiSeq.
- Training and support in the use of data analysis software related to Unit technology
- Project supervision and partnerships

KEY FACTS

In 2022, the Genomics Unit continued the trend of a steady increase in the number of projects and users since it was established in 2015; 19,971 research and clinical diagnostic samples were analysed in 2022 using Unit technologies and 145 users were supported. Users belonged to 25 of the 48 IMIBIC groups, 2 departments of the University of Córdoba (Genetics Department-Faculty of Sciences, and Pathological Anatomy Department-Faculty of Veterinary Science) and 3 departments of the Reina Sofia University Hospital (Pathological Anatomy, Oncology and Microbiology). External centres that requested our services included the CIMA-Center for Applied Medical Research, Navarra, the CUN/UNAV-Navarra University Clinic, ULL-University of La Laguna-Tenerife, UCLM-University of Castilla-La Mancha, UCM-Complutense University of Madrid, TTD-Group for the Treatment of Digestive Tumours, and the GEICAM-Spanish Breast Cancer Research Group.

Previously implemented protocols and services have been improved in accordance with the principles of good laboratory practice (GLP) to guarantee the quality, reproducibility and reliability of the results. New oncology- and microbiology-based services have been developed using NGS, including TMB (Tumour Mutational Burden) analysis in tissue, sequencing of *Mycobacterium*, and virome analysis of vertebrate tissue to discover potentially pathogenic viruses that could involve zoonotic diseases. The Unit also participated in interlaboratory validation studies using clinical samples of the Plasma-SeqSensei Colorectal and Breast Cancer RUO kits from Sysmex, aimed at detection of mutations in cfDNA of patients with colorectal and breast cancer, respectively, to test for drug response and monitoring.

The Genomics Unit of IMIBIC has been accredited as a Clinical Genetics Unit since 2021 and is a member of a multidisciplinary team, together with several departments of the Reina Sofia University Hospital (HURS), working on the implementation of genomic diagnostic protocols in the Andalusian Public Health Service. The Unit carries out services developed in conjunction with the Departments of Anatomic Pathology, Oncology and Microbiology of the HURS, such as the PAM50-breast cancer prognostic gene signature (Prosigna™) test and is a member of the Research Committee in Molecular Clinical Oncology, focused on the evaluation of NGS as a diagnostic, prognostic and therapeutic tool for oncology patients.

The Unit participates in the Pharmacogenetics Working Group of the SCRn (Spanish Clinical Research Network) of the Carlos III Institute of Health, in the Pethema Foundation program for the implementation of NGS as a diagnostic tool for myeloid leukemia, and collaborates with the TTD (Group for the Treatment of Digestive Tumors) and GEICAM (Spanish Breast Cancer Research Group) groups. The Unit is part of several laboratory networks, such as the EATRIS network (European Infrastructure for Translational Medicine), Innolabs and the Novartis laboratory network for clinical trials.

In 2022, the Genomics Unit also obtained ISO 9001:2015 certification for its quality management system and has received several grants from the 2021 call of the “Programa Estatal de Investigación y Equipamiento Científico-Técnico” (MICINN) for the financing of new qPCR equipment (96 and 384 wells) and a new single-cell genomic analysis system.

NUMBER OF IMIBIC USERS: **145 (25 IMIBIC GROUPS)**

NUMBER OF EXTERNAL USERS: **11 (7 EXTERNAL CENTRES)**

NUMBER OF PUBLICATIONS: **9**

NUMBER OF ONGOING PROJECTS: **N/A**

COURSES AND TRAINING SESSIONS: **8**

FEATURED ARTICLES

- A total of nine scientific articles were published in 2022 using Genomics Unit equipment:
- High-throughput RNA sequencing transcriptome analysis of ABC-DLBCL reveals several tumor evasion strategies. Serrano López J, Jiménez-Jiménez C, Chutipongtanate S, Serrano J, Rodríguez-Moreno M, Jiménez Á, Jiménez Y, G Pedrero S, Laínez D, Alonso-Domínguez JM, Llamas Sillero P, Piris MÁ, Sánchez-García J. *Leuk Lymphoma*. 2022 Aug;63(8):1861-1870. doi: 10.1080/10428194.2022.2056173. Epub 2022 Apr 4. PMID: 35379068 (GC16)
- Identification of molecular pathways and protein-protein interactions in adipose tissue-derived mesenchymal stromal cells (ASCs) under physiological oxygen concentration in a diabetic rat model. Paco-Meza LM, Carmona M, Cañadillas S, Lopez-Díaz A, Muñoz-López F, Jimenez-Arranz A, Guler I, Herrera C. *Iran J Basic Med Sci*. 2022 Feb;25(2):155-163. doi: 10.22038/IJBMS.2022.59004.13107. PMID: 35655589; PMCID: PMC9124531 (GC14)
- Impact of FLT3-ITD Mutation Status and Its Ratio in a Cohort of 2901 Patients Undergoing Upfront Intensive Chemotherapy: A PETHEMA Registry Study. Ayala R, Carreño-Tarragona G, Barragán E, Boluda B, Larráyoiz MJ, Chillón MC, Carrillo-Cruz E, Bilbao C, Sánchez-García J, Bernal T, Martínez-Cuadron D, Gil C, Serrano J, Rodríguez-Medina C, Bergua J, Pérez-Simón JA, Calbacho M, Alonso-Domínguez JM, Labrador J, Tormo M, Amigo ML, Herrera-Puente P, Rapado I, Sargas C, Vazquez I, Calasanz MJ, Gomez-Casares T, García-Sanz R, Sanz MA, Martínez-López J, Montesinos P. *Cancers (Basel)*. 2022 Nov 24;14(23):5799. doi: 10.3390/cancers14235799. PMID: 36497281; PMCID: PMC9737662 (GC16)
- CORDIOPREV Investigators. Long-term secondary prevention of cardiovascular disease with a Mediterranean diet and a low-fat diet (CORDIOPREV): a randomised controlled trial. Delgado-Lista J, Alcalá-Díaz JF, Torres-Peña JD, Quintana-Navarro GM, Fuentes F, García-Ríos A, Ortiz-Morales AM, González-Requero AI, Pérez-Caballero AI, Yubero-Serrano EM, Rangel-Zuñiga OA, Camargo A, Rodríguez-Cantalejo F, López-Segura F, Badimon L, Ordovas JM, Pérez-Jiménez F, Pérez-Martínez P, López-Miranda J. *Lancet*. 2022 May 14;399(10338):1876-1885. doi: 10.1016/S0140-6736(22)00122-2. Epub 2022 May 4. PMID: 35525255 (GC09)
- Splicing machinery is impaired in rheumatoid arthritis, associated with disease activity and modulated by anti-TNF therapy. Ann Rheum Ibáñez-Costa A, Pérez-Sánchez C, Patiño-Trives AM, Luque-Tevar M, Font P, Arias de la Rosa I, Roman-Rodríguez C, Abalos-Aguilera MC, Conde C, González A, Pedraza-Arevalo S, Del Río-Moreno M, Blázquez-Encinas R, Seguí P, Calvo J, Ortega Castro R, Escudero-Contreras A, Barbarroja N, Aguirre MA, Castaño JP, Luque RM, Collantes-Estévez E, López-Pedraza C. *Dis*. 2022 Jan;81(1):56-67. doi: 10.1136/annrheumdis-2021-220308. Epub 2021 Oct 8. PMID: 34625402; PMCID: PMC8762032 (GC05)

- Oral Acid Load Down-Regulates Fibroblast Growth Factor 23. Vidal A, Pineda C, Raya AI, Rios R, Espartero A, Muñoz-Castañeda JR, Rodriguez M, Aguilera-Tejero E, Lopez I. *Nutrients*. 2022 Feb 28;14(5):1041. doi: 10.3390/nu14051041. PMID: 35268016; PMCID: PMC8912769 (GC13)
- Effect of aflibercept plus FOLFIRI and potential efficacy biomarkers in patients with metastatic colorectal cancer: the PO-LAF trial. Élez E, Gómez-España MA, Grávalos C, García-Alfonso P, Ortiz-Morales MJ, Losa F, Díaz IA, Graña B, Tolodano-Fonseca M, Valladares-Ayerbes M, Polo E, Salgado M, Martínez de Castro E, Safont MJ, Salud A, Ruiz-Casado A, Tabernero J, Riesco MDC, Rodríguez-Ariza A, Aranda E. *Br J Cancer*. 2022 Apr;126(6):874-880. doi: 10.1038/s41416-021-01638-w. Epub 2021 Dec 22. PMID: 34937947; PMCID: PMC8927487 (GC06)
- Dysregulation of splicing variants and spliceosome components in breast cancer. Gahete MD, Herman-Sanchez N, Fuentes-Fayos AC, Lopez-Canovas JL, Luque RM. *Endocr Relat Cancer*. 2022 Aug 1;29(9):R123-R142. doi: 10.1530/ERC-22-0019. PMID: 35728261 (GC27)
- T1 bladder carcinoma with variant histology: pathological features and clinical significance. Lopez-Beltran A, Blanca A, Cimadamore A, Montironi R, Luque RJ, Volavšek M, Cheng L. *Virchows Arch*. 2022 May;480(5):989-998. doi: 10.1007/s00428-021-03264-6. Epub 2022 Feb 4. PMID: 35122124; PMCID: PMC9033727 (GE05)

COURSES AND WORKSHOPS

- Specific training for research groups in experimental design, technical applications and data analysis related to Unit equipment:
 - Training in data analysis using R-based software, NSolver: Groups GC01, GC06 and GC24
 - Training in the Nanostring custom panel design tool, nDesign: Groups GC06 and GE05
 - Training in ddPCR data analysis using QuantaSoft analysis software: Groups GC06 and GE09
 - Training in NGS data analysis using BaseSpace Sequence Hub: Groups GC06 and GC24
 - Training in qPCR data analysis using LC96, 7900HT and Biomark HD analysis software: Groups GC03, GC04, GC05, GC07, GC08, GC11, GC13, GC16, GC22, GC27, GC29, GE06 and GE09
- Three application workshops were held in the area of “Advanced Genomics: techniques and applications”: “Demo *single-cell* system-Dolomite Bio Nadia”, “qPCR applications-Taqman Array Cards” and “Next Generation Cytogenomics: Optical Genome Mapping (OGM) for the detection of SVs in complex human genomes”.

12.6 CLINICAL RESEARCH UNIT



STAFF

Juan de la Haba Rodríguez, PhD
Clinical Research Coordinator

Samuel Hidalgo Ríos, MD
María Esther Pacheco Rodríguez, PhD
Clinical Pharmacologist

Antonio Luque Pineda
José Carlos Garrido Gracia, PhD
María Ruiz García
Javier Barba Ramírez
Rodrigo Rayo Castillo
Fiama Tibaldi Trejo
Clinical Trial Managers

Juan María Marín Fernández
María Dolores Díaz Ruano
Miguel Puentes Aguado
Miguel Ángel Gutiérrez-Ravé Pereda
Nurses

Rubén Sánchez Nieves
Elena Parrado González
Inmaculada Gálvez Membrives
Nursing Assistants

BRIEF DESCRIPTION

The IMIBIC Clinical Research Unit is responsible for promoting clinical research at IMIBIC and at the Reina Sofia University Hospital as well as establishing collaborations with other research centres.

The Unit focuses on clinical trial development including design, feasibility, regulatory affairs, launch, management, monitoring, pharmacovigilance, data management, statistics and delivery of clinical assistance. All operations are GCP compliant.

The IMIBIC Clinical Research Unit consists of two facilities: The Provincial Hospital Clinical Research Unit and the General Hospital Clinical Research Unit. Both are adapted to perform phase I-IV clinical trials on patients.

The Unit's Clinical Research Plan is included in the 2021-2025 Strategic Plan and contains a set of indicators to enable quantitative monitoring, which are monitored and reported by the Clinical Research Committee, which meets every six months.

Finally, it is highlighted that the IMIBIC Clinical Research Unit is part of the SCREN Platform (Spanish Clinical Research Network ISCIII).

EQUIPMENT AND FACILITIES

- 10 doctor's consulting rooms and a storeroom
- 2 hospital wards, each containing: an emergency trolley with semi-automatic defibrillator and emergency medication, intravenous fluids, an insulin pump, heating trolleys, oxygen outlets in all positions and an audio-visual system
- 14 armchairs and rooms with 3 single beds, all with ongoing monitoring
- Paediatric area
- 12-lead ECGs
- Measuring boards and scales
- Blood pressure monitor in each office
- Customised bathrooms
- Individual lockers for patients
- 2 living rooms for patients
- 2 waiting rooms for patients and family
- 1 multi-purpose room
- 2 laboratories for sample processing and centrifuges
- Freezers (-80°C and -20°C)
- 2 storerooms for materials
- High-definition ultrasound scanner
- 2 offices for study coordinators
- 2 offices for the CRA
- 1 meeting room
- 1 training room
- 5 archives

MAIN SERVICES

- Methodological support
- Launch and regulatory affairs
- Study development
- Monitoring
- Pharmacovigilance
- Delivery of clinical assistance
- Feasibility and start-up support processes for pharmaceutical companies, contract research organisations (CROs), and Investigators

KEY FACTS

- NUMBER OF NEW PHASE I AND II CLINICAL TRIALS: **38**
- NUMBER OF NEW INDEPENDENT CLINICAL STUDIES (CLINICAL TRIALS, OBSERVATIONAL STUDIES AND CLINICAL INVESTIGATIONS WITH MEDICAL DEVICES) PROMOTED BY IMIBIC INVESTIGATORS: **7**
- NUMBER OF CLINICAL TRIALS (MANAGEMENT AND/OR MONITORING BY CLINICAL RESEARCH UNIT): **30**
- ANNUAL INVOICING FOR CLINICAL STUDIES (CLINICAL TRIALS, OBSERVATIONAL STUDIES AND CLINICAL RESEARCH WITH MEDICAL DEVICES) PROMOTED BY THE PHARMACEUTICAL INDUSTRY, AND TOTAL VALUE OF FINANCIAL REPORTS SIGNED DURING THE YEAR: **4.263 m€ (invoicing) and 7.427 m (total value of financial reports signed)**
- PHARMA OR CRO CLINICAL TRIAL PROPOSALS RECEIVED BY CLINICAL RESEARCH UNIT FORWARDED TO INVESTIGATORS: **175**

FEATURED ARTICLES

1. Trigo-Rodríguez M, Cárcel S, Navas A, et al. Role of IP-10 to Predict Clinical Progression and Response to IL-6 Blockade With Sarilumab in Early COVID-19 Pneumonia. A sub-analysis of the SARICOR Clinical Trial. *Open Forum Infect Dis.* 2023;10(4):ofad133. Published 2023 Mar 11. doi:10.1093/ofid/ofad133
2. Merchante N, Cárcel S, Garrido-Gracia JC, et al. Early Use of Sarilumab in Patients Hospitalized with COVID-19 Pneumonia and Features of Systemic Inflammation: the SARICOR Randomized Clinical Trial. *Antimicrob Agents Chemother.* 2022;66(2):e0210721. doi:10.1128/AAC.02107-21
3. Páez-Vega A, Gutiérrez-Gutiérrez B, Agüera ML, et al. Immunoguided Discontinuation of Prophylaxis for Cytomegalovirus Disease in Kidney Transplant Recipients Treated With Antithymocyte Globulin: A Randomized Clinical Trial. *Clin Infect Dis.* 2022;74(5):757-765. doi:10.1093/cid/ciab574

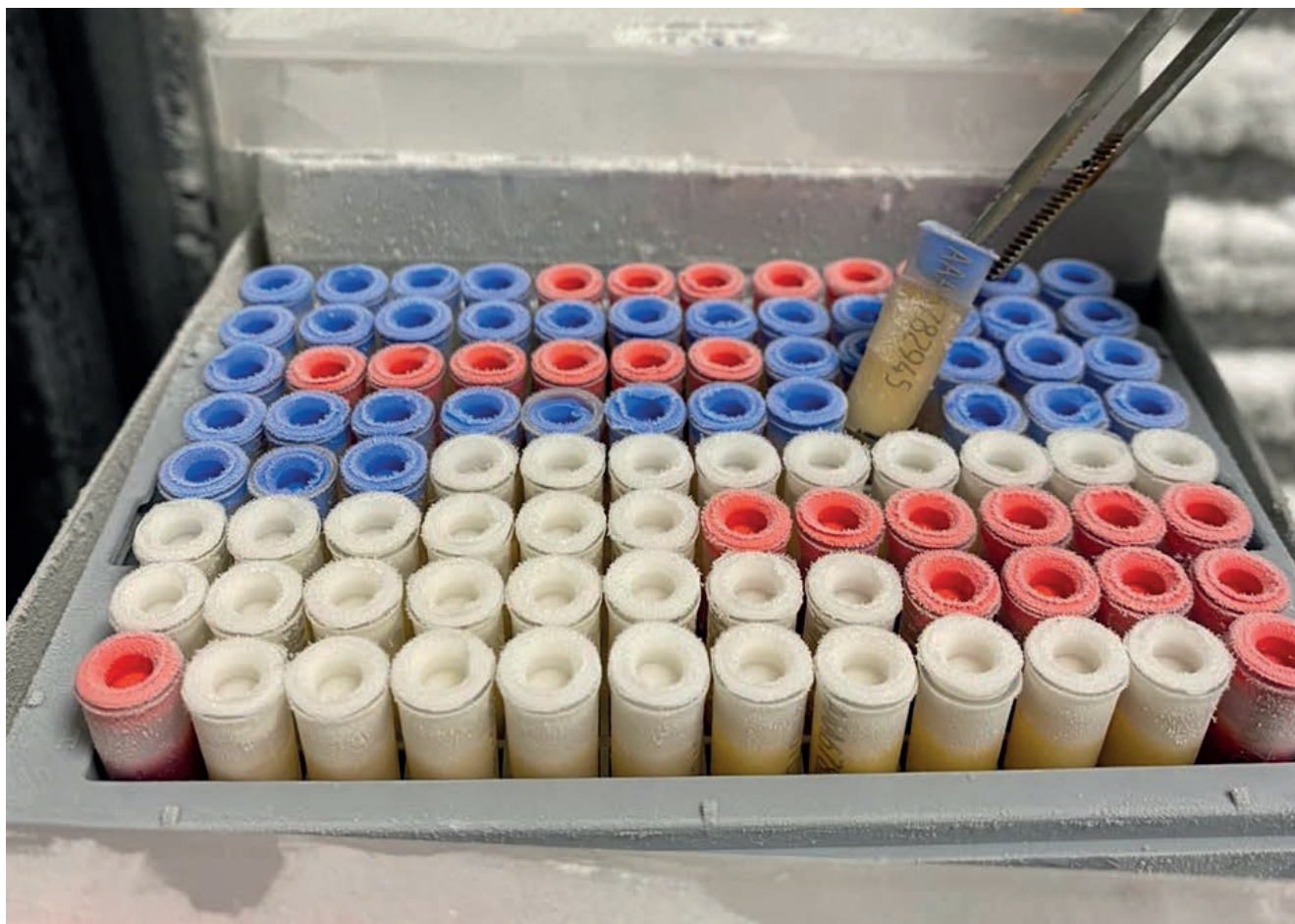
PROJECTS

1. IMI-REL / Terapia de rescate con imipenem-relebactam en la infección producida por *Pseudomonas aeruginosa* resistentes a carbapenemas / Dr. Isabel María Machuca Sánchez / GC03
2. InTime EMCOVID / Influencia de los Tratamientos Modificadores de la Enfermedad en los pacientes con Esclerosis Múltiple y COVID-19 / Dr. Eduardo Agüera Morales / GC28
3. NAFLD-AR-PSA / Mecanismos patológicos involucrados en la enfermedad hepática asociada a la artritis inflamatoria / Dr. Nuria Barbarroja Puerto / GC05
4. OFT-CICLON-2022 / Estudio observacional de la refracción bajo cicloplejía en niños mediante análisis de imagen y pruebas no invasivas / Dr. Miguel González Andrades / GE07
5. PRADARM / Volumen renal total mediante resonancia magnética y tomografía computerizada como biomarcador pronóstico en pacientes con poliquistosis renal autosómica dominante del adulto y como herramienta de valoración al tratamiento / Dr. Daniel José López Ruiz / GA08
6. PROA-KPC / Impacto clínico y ecológico de un programa de optimización de antimicrobianos en la incidencia de infecciones por *Klebsiella pneumoniae* productora de KPC en un hospital de alta endemicidad / Dr. Teresa López-Viñau López / GC03
7. VHEBEM / Inmunogenicidad de la vacuna frente al virus de la Hepatitis B en la Esclerosis Múltiple / Dr. Eduardo Agüera Morales / GC28

COURSES AND WORKSHOPS

1. I Conference on Research of the North Sanitary Area of Córdoba, 30 March, 2022
2. Workshop Clinical Documentation: Students CES Ramón y Cajal Córdoba, 7 Nov, 2022
3. Good Documentation Practices in Clinical Research, José Carlos Garrido Gracia, 8 Nov, 2022.
4. Master in Translational Biomedical Research: Clinical trials module, 11 Nov, 2022

12.7. BIOBANK UNIT



STAFF

Rosa M^a Ortega Salas, PhD
Scientific Manager

José Carlos Cáceres (July-December)

Alba Aguilera García (January-May)

Fernando López López

Technicians

BRIEF DESCRIPTION

IMIBIC is part of the ISCIII Biobanks and Biomodels Platform, an initiative of the Carlos III Health Institute. The Biobank Unit is a research support platform whose main role is to serve as a link between doctors, researchers and patients donating biological samples for biomedical research purposes, ensuring compliance with all the legal and ethical guarantees in force. The IMIBIC Biobank is part of the Andalusian Public Health System Biobank (SSPA), an initiative of the Department of Equality, Health and Social Policy of the Regional Government of Andalusia. It is a member of the thematic network of Hospital Biobanks belonging to the Carlos III Institute of Health (ISCIII), and a subprogram of Thematic Networks for Cooperative Research in Health (RETICS).

EQUIPMENT AND FACILITIES

The Unit has its own laboratory resources for sample processing (safety booths, PCR cabinet, cryostat microtome, floating bath, centrifuge, histology water bath, automated tissue processor for paraffin embedding, paraffin wax dispenser, etc.) and other equipment such as:

- TissueSAFE: fully automated preparation of tissue samples under vacuum.
- Tissue Arrayer: assembles different tissue samples in a single 3D matrix for subsequent histological analysis.
- QIAcube: Automated compact system for analysis of DNA, RNA, plasmids and proteins from different samples.

For sample storage, there are currently three types of freezer: one for temperatures of 4°C, two for temperatures of -20°C, and seven for -80°C. There is also a room to store paraffin blocks at room temperature.

MAIN SERVICES

The service portfolio is divided into four main areas:

- Custody: storage of samples at different temperatures.
- Processing: transformation of multiple types of biological sample according to the procedures and technical criteria generally used by researchers in their projects.
- Provision of human samples and data on human health and disease research, selected according to the specific clinical and diagnostic criteria of researchers.
- Technical, scientific and ethical consultancy concerning the collection, storage, and management of human samples in biomedical research.

In 2021, the quality management system of the Cordoba Biobank node of the Andalusian Public Health System (SSPA) Biobank system was certified according to ISO 9001:2015, the international standard regulating quality management systems. The scope of the quality management system implemented in the provincial nodes of the Biobank covers the provision, custody and processing of blood products or derivatives, tissues, substances or biological samples of human origin, and human embryonic and adult stem cell lines for use in research and teaching. The certificate was renewed in 2022.

KEY FACTS

NUMBER OF IMIBIC USERS: **21**

NUMBER OF EXTERNAL USERS: **4**

FEATURED ARTICLES

1. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. PMID: 33038489. DOI: 10.1016/j.canlet.2020.10.010. Cancer Lett. 2021 Jan 1;496:72-83
2. Dysregulated splicing factor SF3B1 unveils a dual therapeutic vulnerability to target pancreatic cancer cells and cancer stem cells with an anti-splicing drug. PMID: 34857016. DOI: 10.1186/s13046-021-02153-9. J Exp Clin Cancer Res. 2021 Dec 2;40(1):382
3. Limited Value of Single Sampling for IgM Antibody Determination as a Diagnostic Approach for Acute Hepatitis E Virus Infection. PMID: 34232097. DOI: 10.1128/Spectrum.00382-21. Microbiol Spectr. 2021 Sep 3;9(1):e0038221.
4. In1-Ghrelin Splicing Variant as a Key Element in the Pathophysiological Association Between Obesity and Prostate Cancer. PMID: 34255835. DOI: 10.1210/clinem/dgab516. J Clin Endocrinol Metab. 2021 Nov 19;106(12):e4956-e4968
5. The long non-coding RNA GHSROS reprograms prostate cancer cell lines toward a more aggressive phenotype. PMID: 33585078. DOI: 10.7717/peerj.10280. PeerJ. 2021 Feb 1;9:e10280
6. Orthohepevirus C infection as an emerging cause of acute hepatitis in Spain: First report in Europe. PMID: 35167911. DOI: 10.1016/j.jhep.2022.01.028. J Hepatol. 2022 Aug;77(2):326-331

PROJECTS

- Subvención para las Unidades de las Plataformas ISCIII de apoyo a la I+D+i en Biomedicina y Ciencias de la Salud de la Acción Estratégica en Salud 2017-2020. Código expediente PT20/00079. Grant for Units of ISCIII Platforms supporting R&D +i in Biomedicine and Health Sciences, Strategic Health Action 2017-2020. File code PT20/00079.

COURSES AND WORKSHOPS

- Workshop "Aspectos éticos y legales en la gestión y utilización de muestras biológicas humanas en proyectos de investigación"[Ethical and legal aspects in the management and use of human biological samples], 1-2 February, 2022.



PLATFORM ISCIII
BIOBANKS AND
BIOMODELS

ISCIII PLATFORM BIOBANKS AND BIOMODELS

IMIBIC currently belongs to the ISCIII Biobanks and Biomodels Platform, supporting R & D+ i in Biomedicine and Health Sciences, Strategic Health Action 2017-2020. File code PT20/00079.

The ISCIII Biobanks and Biomodels Platform is an initiative of the Carlos III Health Institute.

The Coordination team has organised the Platform's structure into four scientific-technological HUBS: Biobanks, Organoids, Animal Models and 3D Printing. This structure facilitates the management and provision of biological samples and associated clinical data. In order to promote and expand scientific-technological resources in biomedical research, ISCIII-BB services include organoids, animal models and 3D printing. (<https://www.isciii-biobanks-biomodels.es/en/>).

The ISCIII Biobanks and Biomodels Platform has joined the European Biobanking Infrastructure (BBMRI-ERIC) as an observing member, acting as the national node in BBMRI-ERIC, one of the leading research platforms in the European Union.



The objective of the BIOBANK HUB is to improve the competitiveness of Spanish biomedical and health research by providing researchers with centralized access to collections and data associated with the samples.



ORGANOID HUB offers the highest quality cutting-edge services in the guidance, validation and production of organoids from adult stem cells and pluripotent stem cells.

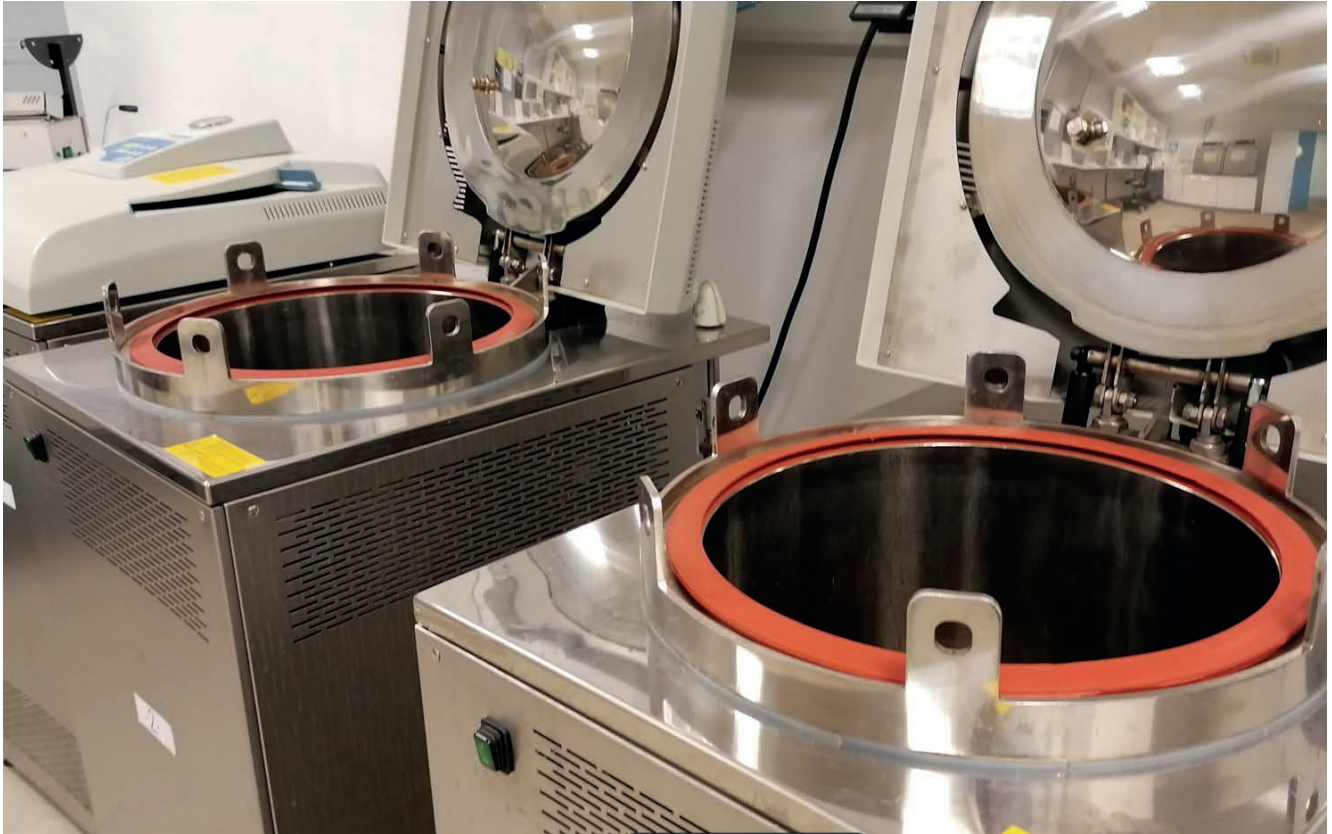


The ANIMAL MODEL HUB offers the highest quality cutting-edge services and guidance for the development and execution of animal experimentation models covering a wide range of species, as well as numerous experimental techniques.



The 3D (BIO)PRINTING HUB offer the highest quality consultancy in the delivery of cutting-edge 3D bioprinting and printing services, as well as numerous experimental techniques.

12.8 GENERAL PROCEDURES UNIT



STAFF

Esther Rivero Cortés,
Laboratory Manager-

BRIEF DESCRIPTION

The IMIBIC General Procedures Support Unit provides laboratory management services that are essential for the smooth overall organization of the Maimonides Biomedical Research Institute of Córdoba. These include providing technical support, organizing and supervising the technical, research and administrative activities of the research laboratories. More specifically, the Unit is responsible for the facilities, rooms and scientific equipment used by researchers for common and independent purposes in order to ensure the optimal and uninterrupted operation of laboratory experimental procedures, that quality standards and good laboratory practice are maintained, and to ensure the correct use and sustainability of specialized scientific equipment.

EQUIPMENT AND FACILITIES

- Centrifuge Room
 - Beckman Optima XPN100 ultracentrifuge
 - Beckman Optima L90K ultracentrifuge
 - Beckman Avanti J-26XP centrifuge
 - Kubota 2800 refrigerated centrifuge
 - Eppendorf 5810-R refrigerated centrifuge
 - Eppendorf 5424 centrifuge
 - Nanodrop Thermo ND 1000
 - Stratagene MX3005P qRT-PCR system
 - VC50 sonicator
 - Other auxiliary equipment
- Multiple equipment Room
 - Merck Millipore Advantage A10 water purification system
 - MilliQ Merck Millipore Q-POD ultrapure water dispenser
 - Bioplex Biorad Pro II

- Laminar flow hood for working with bacteria
- Comecta S-100D Orbital Shaking Incubator
- Other auxiliary equipment
- Sterilization Room
 - Selecta Presoclave-II autoclave
 - Selecta Presoclave-II autoclave
 - Selecta Presoclave-II autoclave
 - Memmert UN110 oven
 - Memmert UN110 oven
 - Ultra turrax Selecta Omni GLH 02 homogenizer / disperser
 - Ultra turrax Selecta Omni GLH 02 homogenizer disperser
 - Crison pHmeter GLP 21
 - Denver Instrument TP-214 precision balance
 - Selecta ultrasons water bath sonicator
 - Omni Sonic RUPTOR 400 sonicator
 - MilliQ Merck Millipore Q-POD ultrapure water dispenser
 - Other auxiliary equipment
- Histology Laboratory
 - Leica CM 1860 UV cryostat
 - Leica ST4020 automatic stainer
 - Leica TP1020 automatic tissue processor
 - Leica Arcadia H and C heated paraffin embedding station
 - Leica ST 5010 autostainer XL
 - Leica DM 2000LED microscope
 - Bio-Rad Universal Hood II for Bio-Rad's Molecular Imager Gel Doc and ChemiDoc Systems
 - Memmert UN110 oven
 - Other auxiliary equipment
- Temporary freezer storage
 - Deep freezer (-80°C) Thermo Scientific UFX60086V
 - Deep freezer (-80°C) Eppendorf Cryocube F570-86
 - Deep freezer (-80°C) Thermo Scientific UXF60086V
 - Deep freezer (-80°C) Thermo Scientific UXF60086V
 - Deep freezer (-80°C) Effimed UFV-800

MAIN SERVICES

- Management, technical support, and supervision of the correct use of scientific equipment in IMIBIC rooms and facilities, as well as of common auxiliary equipment belonging to IMIBIC (fume cupboards, autoclaves, centrifuges, etc.).
- Implementation and promotion of Good Laboratory Practices at IMIBIC.
- Management of usage logs and booking system for scientific equipment.
- Care and maintenance of laboratory equipment shared by IMIBIC groups.
- Drafting of documentation (technical instructions, protocols, reports, standard operating procedures, equipment lists, etc.) for documentary records.
- Autoclave treatment of research group materials in the sterilization room.
- Supervise the proper management and disposal of laboratory waste in compliance with the regulations. Coordinate with the External Prevention Service in cases of doubt or suggestions. Provide training support for laboratory waste management.
- Implementation and monitoring of the Trebol Program of Good Environmental Practice at IMIBIC, in compliance with the University of Córdoba.
- Cold storage management to ensure the proper use of available space in the event of failure of freezers belonging to the various research groups.
- Mentoring and training of new laboratory technicians.
- Provision of any other support and management of general procedures that may arise.

KEY FACTS

NUMBER OF IMIBIC USERS: **All technical and research staff at the centre**

NUMBER OF PUBLICATIONS:

NUMBER OF ONGOING PROJECTS: **2**

COURSES AND TRAINING SESSIONS: **2**

NUMBER OF MEETINGS WITH IMIBIC GROUPS: **1**

- Ibáñez-Costa A, Blázquez-Encinas R, Alors-Pérez E, Fuentes-Fayos AC, **Rivero-Cortés E**, Herrera-Martínez AD, Gálvez-Moreno MA, Barlier A, Robledo M, Luque RM, Castaño JP. Molecular and functional study of somatostatin receptors in pheochromocytomas and paragangliomas. The virtual 18th Annual ENETS Conference 2021

PROJECTS

1. PI-0038-2019. CONSEJERÍA DE SALUD Y FAMILIAS. Clinical-molecular evolution after bariatric surgery, reversion, metabolic comorbidities, diabetes, hepatic steatosis, splicing, miRNA, inflammosome. Aura Dulcinea Herrera Martínez (GC08)
2. PI-0152-2019. CONSEJERÍA DE SALUD Y FAMILIAS. Therapeutic role of bioactive compounds in extra virgin olive oil in the pathological association of prostate cancer and obesity. Antonio León González (GC27)

COURSES AND WORKSHOPS

1. Laboratory Waste Management Training at IMIBIC
2. IMIBIC Trébol Programme Workshop

12.9 TECHNOLOGICAL INNOVATION UNIT



STAFF

David Requena Polonio

Innovation and Technology Transfer Coordinator

Miguel de Alba Aparicio

Software engineering technician

Ignacio Isla Cros

Software technician

Ana Lara Jiménez

Industrial design engineering technician

BRIEF DESCRIPTION

Technological Innovation. One of our basic functions is to apply the new information and communication technologies in the different research groups so that they can be used for projects according to need, without the research team having to spend extra time learning them. Advisory and consulting services are available to provide the most appropriate technological solutions.

Our main objective is to design and develop scientific-technological and industrial projects for research and clinical staff, as well as medical device prototypes.

Our laboratory is well equipped for the design and construction of 3D design prototypes, with 3D printing, electronic systems and development of software solutions. This is a huge advantage when it comes to innovation development and technology transfer related to rapid prototyping of systems in the medical field.

EQUIPMENT AND FACILITIES

- FDM 3D printers (2 units): Ultimaker S5 equipped with Air Manager S5 and Material Station.
- SLA 3D printers (2 units): Formlabs Form 3 and Form 3B+ with Form Wash, Form Finish Kit, Resin Tank and Build Platform.
- 3D design software: Solidworks 2022
- CNC machine with protective cover: Stepcraft 840
- Testing stations for electronic devices and PCBs.
- Hanmatek SD1 and Proskit welding posts
- Oscilloscope: Hantek Dso5202p, 2 channels, 200Mhz, 1GSa / s.
- Laboratory power supply (2 units): Velleman LABPS23023. Power supply: RPS 24V 5th
- Digital multimeter: Lomvum T28B
- Apple Mac Mini for iOS app development
- monoFab SRM-20 desktop milling machine
- LS900 laser cutting machine with camera
- Interactive table: Tactable TSP-55
- 3D holographic display: HoloFan 3DH Rd-100 PRO
- BYAKKO LD 3000 6090 CNC machine
- Einscan Pro HD 3D scanner with design pack
- 4WD Mecanum Robot kit
- Dremel 4000 tool kit
- Promax function generators
- Euromex binocular loupes
- Welding post with flexible arms

MAIN SERVICES

- 3D modeling and 3D printing with FDM and SLA technology.
- Design and manufacturing of devices, electronic and electromechanical equipment in general.
- Electronic circuit prototyping (with FPGA, microcontrollers, DSP, AO, etc.)
- PCB schematics and design, PCB circuit assembly with different substrates (maximum size 229x305mm).
- Infrared and hot air soldering / desoldering (BGA), SMD component mounting and through-hole technology
- Low-level programming: microcontrollers, FPGA reconfigurable hardware devices, etc.
- Software development
- Design and implementation of algorithms
- Database construction and instrument data capture
- Engineering and consulting

KEY FACTS

NUMBER OF IMIBIC USERS: **40**

NUMBER OF EXTERNAL USERS: **123**

NUMBER OF ONGOING PROJECTS: **6**

COURSES AND TRAINING SESSIONS: **5**

PRIZES OR GRANTED RECEIVED: **1**

REGISTERED PATENTS: **1** (patent with a participating team member) PCT U202131930 Anti-sores device.

NUMBER OF MEETINGS WITH IMIBIC GROUPS: **18**

NUMBER OF MEETINGS WITH EXTERNAL GROUPS: **15**

PARTICIPATION IN INTERLABORATORY COMPARISON STUDIES

PROJECTS

1. AYUDAS A LA I+D+I, EN EL ÁMBITO DEL PLAN ANDALUZ DE INVESTIGACIÓN, DESARROLLO E INNOVACIÓN (PAIDI 2020)/ Creación y Desarrollo de la Unidad de Ingeniería Biomédica e Innovación Tecnológica de Córdoba (CIBiT) asociada al Instituto Maimónides de Investigación Biomédica de Córdoba (IMIBIC)/ GRANTS FOR R + D + I, WITHIN THE SCOPE OF THE ANDALUSIAN RESEARCH PLAN / Creation and development of the Cordoba Biomedical Engineering and Technological Innovation Unit (CIBiT) linked to the Maimonides Institute for Biomedical Investigation of Córdoba (IMIBIC) /Miguel González Andrades
2. Radiology app. Development of an app for tele-training in radiological medical imaging/ Marina Álvarez/ UGC Radiología.
3. Website and app for testing children to check that growth is in line with biological age (DAUCO).
4. Website to calculate gender equity model for liver allocation (GEMA)/Manuel Rodríguez Perálvarez/UGC Digestive.
5. Bibliography search tool EACO/Juan Ruano/UGC Dermatología
6. Grants for a Hackathon (ESAL 2022)/ Grants call aimed at non-profit organizations for the development of guidelines that promote the socioeconomic development of a municipality in 2022.
7. Management tool for the mental health unit (HURS) GLADIS/Fernando Sarramea/UGC Mental health.

COURSES AND WORKSHOPS

1. Training: How to use the recently acquired CNC Machine BYAKKO LD 3000 6090
2. Webinar: 3D Bioprinting applied to regenerative medicine
3. Course: Industrial and Intellectual Property: What protection is available when entering the marketplace?
4. Course: Adding intellectual property rights to a project
5. Course: Docker for developers.

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COMMUNICATION & RRI

SOME INTERESTING FACTS

- Number of events: **102**
- Number of news items in mass media: **>500**
- Number of website visits: **70,779**
- Number of visits to IMIBIC:
 - Institutional: **6**
 - Educational: **49**
- Number of people visiting IMIBIC: **1,656**
- Interaction data on social media: **>1,000,000**

IMIBIC - RRI ACTIONS IN 2022

Scientific dissemination activities aimed at secondary school students: most of these scientific dissemination activities, adapted to the age/level of the participating students, the characteristics of the school and type of activity, were of the following types:

- **-School Visits Programme 2022.** These visits are aimed, for the most part, at upper level secondary school students (Bachillerato and ESO). During 2022, IMIBIC hosted 15 visits as part of this programme, with a total of 232 students and 23 teachers. Various educational centres from our city took part in these visits, among them: CES Lope de Vega, IES Blas Infante, Colegio Fundación Zalima, IES Fidiana and IES Villarrubia.
- **Presentation of IMIBIC as part of the School Visits Programme of the University Hospital Reina Sofía de Córdoba (HURS).** We have been involved in this activity for 11 consecutive years. The Institute participated in 13 organised visits, which were attended by 624 high school students and 26 teachers from various schools in Córdoba and the province.

Scientific dissemination activities for other social groups: The activities in this section, adapted to the characteristics, age and interests of the participating social groups, included:

- **Programme of visits to IMIBIC for students of Higher Level Training Cycles. (CFGS):** These visits are mainly aimed at students in the higher level training cycles of the Health family. In 2022, IMIBIC hosted 3 visits as part of this programme, with a total of 43 students and 5 teachers. Several educational centres in our city took part in these visits, such as CES Ramón y Cajal, IES Antonio M^a Calero and IES Fuensanta.
- **Programme of visits to IMIBIC for students from the University of Cordoba:** These visits are aimed at students from the Advanced Polytechnic School of Córdoba and the Faculty of Education Sciences and Psychology of the University of Cordoba. During 2022, IMIBIC hosted 6 visits as part of this programme, with a total of 94 students and 7 lecturers.

Projects and events related to Responsible Research and Innovation (RRI) carried out or held during 2022 included, among others:

The E-ducass project: this project was funded by the ISCIII as part of the Strategic Action in Health. The project is aligned with health literacy and focuses on novel solutions for vulnerable populations with health inequalities.

European Researchers Night: This year's event was aimed at 70 students from various schools in Córdoba (CES Lope de Vega, IES Fidiana, the British School of Córdoba and IES Medina Azahara). Students enjoyed a discussion between researchers on health research and the different professional research profiles, and visited the IMIBIC facilities.

II Family Research Day: The aim of this IMIBIC activity is to raise awareness among children of the importance and value of research and innovation in health, with the involvement of their fathers, mothers, aunts and uncles, and/or grandparents in this endeavour. We welcomed 140 children to this event and held a number of research workshops for different age groups.

IMIBIC Challenge: This initiative consisted of participants running, walking or swimming 85,000 kms in order to promote healthy habits, give visibility to biomedical research and encourage philanthropy in research.

Within the framework of the RRI actions, also worth highlighting are the participation of key non-scientific actors in some of the internal committees, including the Equality, Training, Innovation and Clinical Research Committees, as well as the grants for Open Access publications as part of IMIBIC's Own Plan (*Plan Propio*).



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**SCIENTIFIC REPORT
IMIBIC 2022**

GOALS FOR 2023





THE INSTITUTIONAL GOALS FOR THE YEAR 2023, APPROVED BY THE GOVERNING COUNCIL OF THE INSTITUTE, ARE AS FOLLOWS

To encourage and support research groups in applications for projects and calls for Human Resources, Network and International Funding Projects, and to propose different institutional support measures.

To encourage generational replacement and the search for young talent in different areas of Primary Care.

To take advantage of the capabilities of the Technological Innovation Unit and the Bioincubator as means of helping create an ecosystem for idea generation, business development and industrialisation of our environment.

To ensure compliance with the objectives associated with the incorporation of new researchers/staff through the Investigo Program in order to further their training and the development of new research careers.

SCIENTIFIC REPORT

IMIBIC 2022

