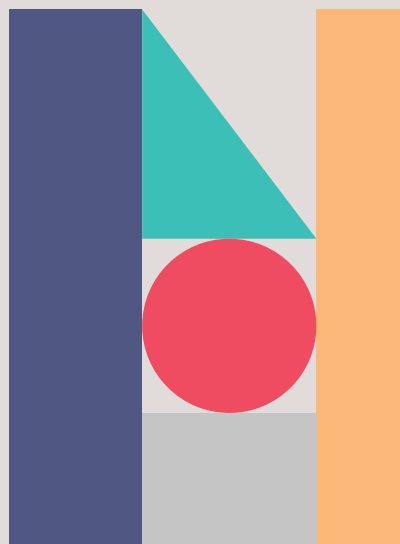
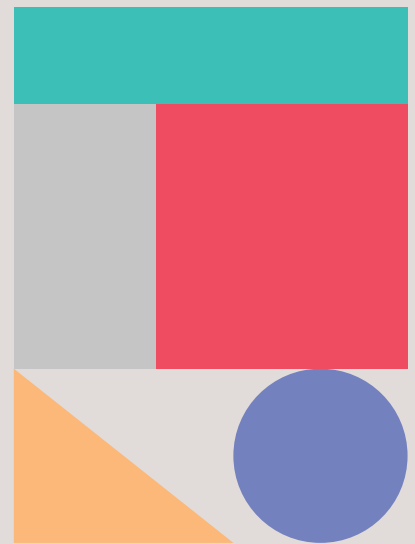
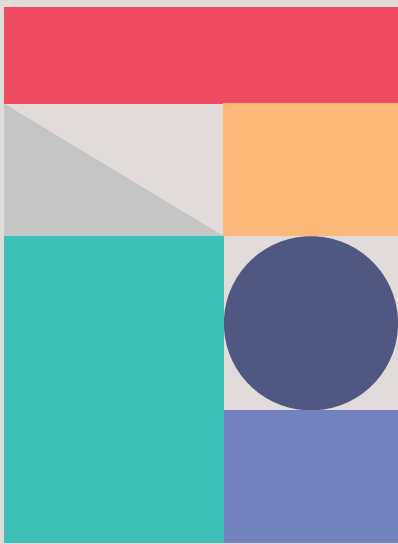


SCIENTIFIC REPORT

IMIBIC 2021



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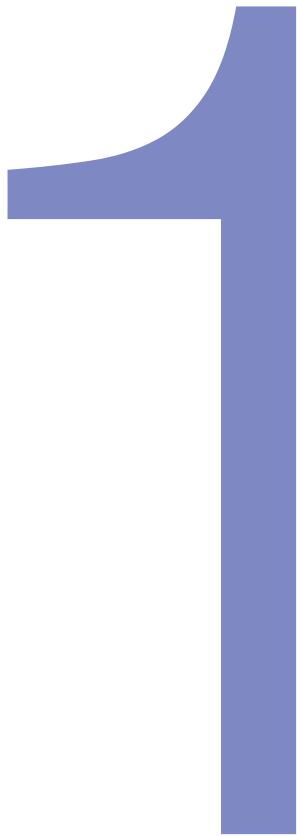




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DIRECTOR'S FOREWORD FOR 2021 SCIENTIFIC REPORT



Pablo Pérez Martínez
Scientific Director



María del Mar Malagón Poyato
Deputy Scientific Director

This report provides a summary of IMIBIC's activity during 2021, which was a special year for the Institute, marking the beginning of the new Strategic Plan for 2021-2025, and the reaccreditation periodically required by the Carlos III Health Institute (ISCIII). We include below a link to the executive summary of the Strategic Plan, should the reader wish to consult it: <https://www.imibic.org/documents/imibic/Resumen%20Ejecutivo%20PE%202021-2025.pdf>. The opening lines of this letter therefore are aimed at thanking all those who participated in the design of the Plan and who helped secure reaccreditation by reaching the maximum quality standard, as has been confirmed by the ISCIII itself. Beyond the considerable management work involved, the process has been most fruitful and rewarding for the institution, since it has enabled us to reflect, share new ideas, identify areas for improvement and propose future projects at different levels of the Institute, redesigning and laying the foundations for the coming years, which, together with the implementation of the new strategic plan, will allow IMIBIC to continue to grow. The process has also served to set more ambitious goals for the future and to design an itinerary that will allow us to advance both wisely and sustainably and position us, at a higher level of excellence, as an international benchmark, on a par with the large research institutions that lead the field in this most pioneering branch of science.

During 2021, 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 research institute such as ours. The growing activity of the Innovation Unit, as well as of the rest of IMIBIC's technology units, some of which have also been strengthened with the latest equipment, guarantees IMIBIC's position at the forefront of translational research.

One of IMIBIC's main assets is its human capital. In 2021, 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.

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 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. IMIBIC's current good health, as certified by the ISCIII with the recent reaccreditation, will surely contribute to this. Finally, in order to align ourselves with the new requirements of the Carlos III Health Institute, we will work on aspects related to the 6 principles of Responsible Research and Innovation: ethics, gender equality, responsible governance, open access, science education and public engagement.

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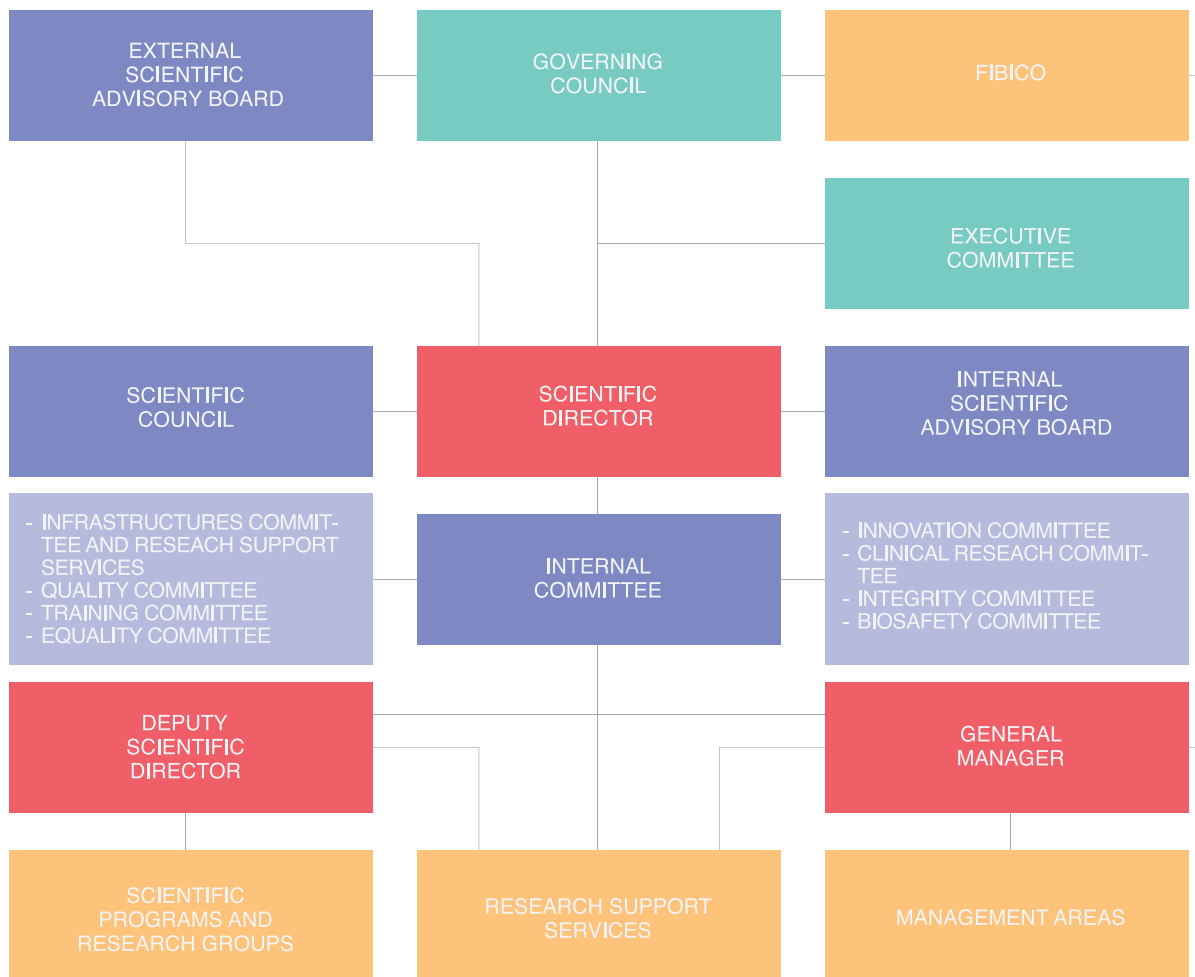
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GOVERNANCE AND STRUCTURE

2.1 ORGANIZATION CHART

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



A. 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 Families of the Regional Government of Andalusia
 - Dr. Isaac Túnez Fiñana**
General Secretary of Research, Development and Innovation in Health, Regional Ministry of Health and Families
 - Dr. Valle García Sánchez**
Managing Director of the Reina Sofia University Hospital and President of FIBICO
- Two representatives from the Regional Ministry of Economic Transformation, Knowledge, Industry and Universities
 - 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
- Two representatives from the University of Córdoba
 - Mr. Antonio J. Cubero Atienza**
Vice-Rector for Coordination, Infrastructure and Sustainability
 - Ms. Luisa M. Rancaño Martín**
Managing Director
- 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

To facilitate efficient decision making, on July 27, 2015, the Governing Council adopted an agreement to create an Executive Committee. 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.

» 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 decisions are not legally binding. It was created on July 9, 2009, under the name of 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. These members must be able to demonstrate individually 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 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 Hospital La Princesa Health Research Institute (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:

- **Pablo Pérez Martínez** Scientific Director
- **Álvaro Granados del Río** General Manager
- **M^a del Mar Malagón Poyato** Deputy Scientific Director
- **Juan de la Haba Rodríguez** Coordinator of Clinical Research
- **Fernando Sarramea Crespo** Coordinator of Active Ageing and Frailty Program
- **Manuel Tena Sempere** Coordinator of Nutrition, Endocrine and Metabolic Diseases Program
- **Antonio Rivero Román** Coordinator of Infectious and Immunological Diseases and Organ Transplantation Program
- **Marco A. Calzado Canale** Coordinator of Cancer (Oncology and Oncohematology) Program
- **Marina Álvarez Benito** Coordinator of Chronic and Inflammatory Diseases Program
- **Raúl Luque Huertas** Designated representative of the Training Committee
- **Eduardo Muñoz Blanco** Designated representative of the Innovation Committee
- **Miguel González Andrades** Emerging Researcher
- **Elena Yubero Serrano** Emerging Researcher
- **Nuria Barbarroja Puerto** Emerging Researcher
- **Laura Martín Piedra** Predoctoral Researcher
- **Juan Manuel Jiménez Vacas** Predoctoral Researcher (until May 2021)
- **Ana Mantrana Soldado** Predoctoral Researcher (from May 2021)

» 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 Sofia 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.

B. INDIVIDUAL BODIES

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 COORDINATION

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. INTERNAL COMMITTEES

» QUALITY COMMITTEE

This Committee ensures that quality and ethical codes are maintained 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 Biomedical Research.

- | | |
|---|------------------------------|
| • Dr. Juan Manuel Castellano Rodríguez | Postdoctoral Researcher GC10 |
| • Ms. Inmaculada Varo Urbano | Training Officer |
| • Dr. Pablo Pérez Martínez | Scientific Director |
| • 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. Luis A. Pérula de Torres** Principal Investigator GC12
- **Dr. Joaquín Toro Santiago** Head of the 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. Maria Saarela** International Project Manager
- **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 (from November 2021)
- **Ms. Isabel de Castro Burón** Communications Officer (from November 2021)
- **Mr. Rafael Blanco Moreno** Teacher of Biology, Ategua Secondary School, Castro del Río

» EQUALITY 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
- **Ms. Marisa Escabias Parejo** Quality Specialist
- **Dr. Pablo Pérez Martínez** Scientific Director
- **Mr. Álvaro Granados del Río** General Manager
- **Ms. Miriam Cruzado Caballero** Head of the Research Management Unit
- **Dr. Antonio Romero Ruiz** Emerging Researcher GE09
- **Dr. Alejandra Pera Rojas** Researcher GC01
- **Dr. Álvaro Jiménez Arranz** Senior Technical Specialist, Research Support Service: Genomics
- **Dr. Eduardo Chicano Galvez** Senior MS-Imaging and Proteomics Specialist (from May 2021)
- **Ms. Higinia Romero Crespo** External Member

» INFRASTRUCTURES COMMITTEE AND RESEARCH SUPPORT SERVICES

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, ResearchSupport 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 GC10
- **Dr. Feliciano Priego Capote** Principal Investigator GC21
- **Dr. Esther Rivero Cortés** Senior Technical Specialist in General Procedures (from July 2021)

» CLINICAL RESEARCH COMMITTEE

The Clinical Research Committee carries out the IMIBIC Clinical Research Plan.

• Dr. Juan de la Haba Rodríguez	Coordinator of Clinical Research
• Mr. Antonio Luque Pineda	Clinical Trial Manager
• Dr. Pablo Pérez Martínez	Scientific Director
• Mr. Álvaro Granados del Río	General Manager
• Ms. Esther Pacheco Rodríguez	Clinical Pharmacologist
• 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. Cristina Aguado Taberné	Researcher GC12 (until May 2021)
• 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 Rodríguez	Researcher GC12 (from May 2021)
• Mr. Ángel Cañadilla Moyano	External Member (from May 2021)

» INNOVATION COMMITTEE

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

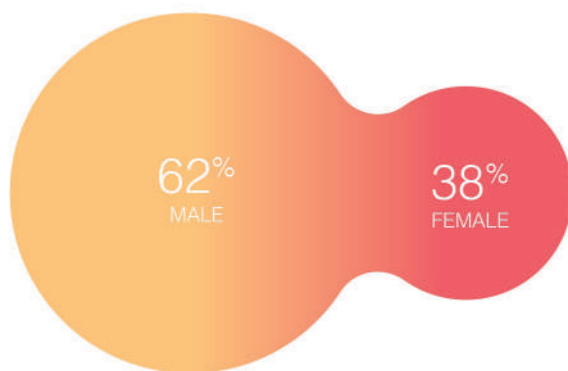
• Dr. Pablo Pérez Martínez	Scientific Director
• Dr. Luis Fernández Formoso	Project Manager
• Dr. M^a del Mar Malagón Poyato	Deputy Scientific Director
• Mr. Álvaro Granados del Río	General Manager
• Dr. Marina Álvarez Benito	Principal Investigator GA08
• Dr. Eduardo Muñoz Blanco	Principal Investigator 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	Co-Principal Investigator GC27
• 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

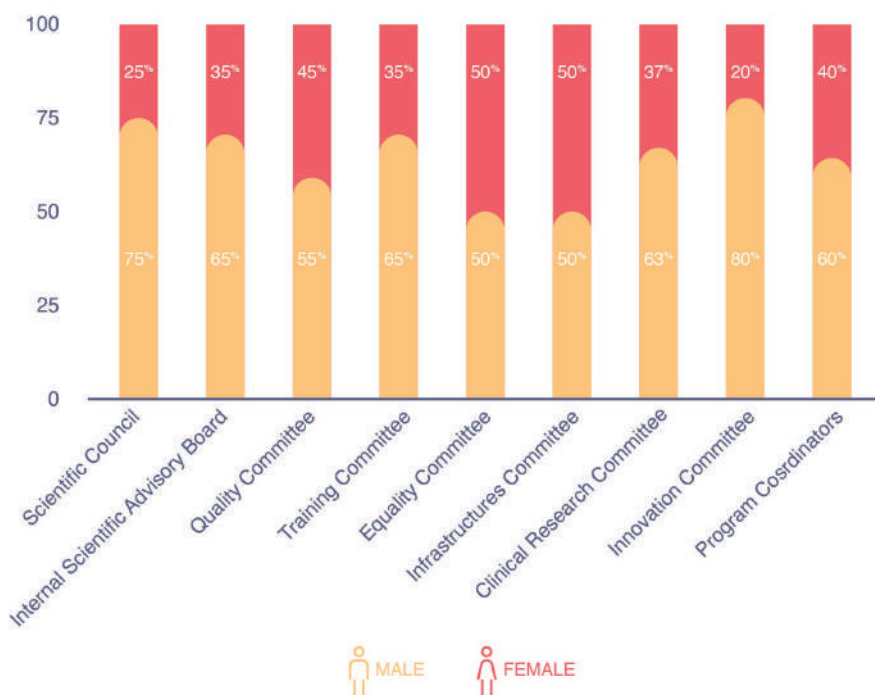
All IMIBIC research groups must be incorporated into the scientific programs corresponding to the main thematic areas in which IMIBIC research is being carried out at any given time:

- ACTIVE AGEING AND FRAILTY
 - 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

» INTERNAL COMMITTEES MEMBERS BY GENDER



» INTERNAL BODIES AND COMMITTEES BY GENDER



2.2 SCIENTIFIC STRUCTURE

IMIBIC research activities are organized into five scientific programs, each comprising different research groups. These scientific programs target important, widespread health problems, identifying areas in which the Institute's researchers can combine their efforts in transversal collaborative projects that address and provide answers 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. Likewise, the programs are designed to encourage 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, its relationship to quality of life and the search for new strategies in patient care. It includes the following lines of research:

- Immunology and senescence
- Attention and care of the chronically ill
- Frailty and quality of life in the elderly

» NUTRITION, ENDOCRINE AND METABOLIC DISEASES

This program is oriented towards studying metabolic disorders and the endocrine system, with particular interest in 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, with special emphasis on 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
- Diseases of the locomotor, musculoskeletal system and connective tissue
- Neurological diseases
- 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

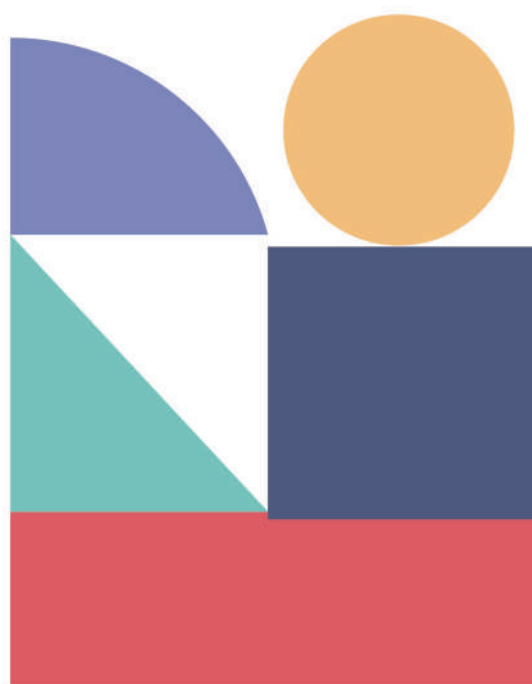
*Note: The program to which each group is attached is highlighted in bold.

CODE	IMIBIC GROUPS and PROGRAMS	PROGRAMS	PRINCIPAL INVESTIGATOR(S)
GC01	Immunology and Allergy	1, 3, 4, 5	Rafael Solana Lara
GC02	Oxidative and Nitrosative Stress in Acute and Chronic Liver Disease	3, 4, 5	Manuel de la Mata García Jose Antonio Bárcena Ruiz
GC03	Infectious Diseases	3	Julián de la Torre Cisneros
GC04	Inflammation and Cancer	2, 4, 5	Eduardo Muñoz Blanco Marco Antonio Calzado Canalé
GC05	Systemic and Chronic Inflammatory Autoimmune Diseases of the Locomotor 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	1, 3, 5	Alejandro Martín Malo Pedro Aljama García
GC08	Hormones and Cancer	2, 4, 5	Justo P. Castaño Fuentes
GC09	Nutrigenomics. Metabolic Syndrome	1, 2, 5	José López Miranda Francisco Pérez Jiménez Javier Delgado Lista Pablo Pérez Martínez
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, 3, 4, 5	Luis Ángel Pérula de Torres
GC13	Calcium Metabolism. Vascular Calcification	2, 5	Mariano Rodríguez Portillo Juan R. Muñoz Castañeda
GC14	Cellular Therapy	4, 5	Inmaculada Concepción Herrera Arroyo
GC15	Invasive Cardiology and Cell Therapy	5	Manuel Pan Álvarez-Ossorio
GC16	Cellular Biology in Haematology. Hypercoagulability	3, 4	Joaquín Sánchez García Francisco Velasco Gimena

CODE	IMBIC GROUPS and PROGRAMS	PROGRAMS	PRINCIPAL INVESTIGATOR(S)
GC17	Physiopathology of the Vitamin D Endocrine System, Biotechnology and Aging	1	José Manuel Quesada Gómez
GC18	Translational Research in Solid Organ Transplantation Surgery	3, 4, 5	Francisco Javier Briceño Delgado
GC19	Artificial Vision Applications	1, 4, 5	Rafael Medina Carnicer
GC20	Genetics and Behavioural Diseases	4, 5	Manuel Ruiz Rubio Juan Antonio Moriana Elvira
GC21	Metabolomics and Identification of Bioactive Compounds	1, 2, 4, 5	Feliciano Priego Capote María Dolores Luque de Castro
GC22	Epigenetics	4	María Teresa Roldán Arjona
GC23	Metabolism in Childhood	2, 5	María Mercedes Gil Campos
GC24	Clinical and Molecular Microbiology	3	Luis Martínez Martínez
GC25	Knowledge Discovery and Intelligent Systems in Biomedicine	1, 2, 3, 4	Sebastián Ventura Soto
GC26	Clinical Virology and Zoonosis	3	Antonio Rivero Román
GC27	OncObesity and Metabolism	4	Raúl M. Luque Huertas Manuel David Gahete Ortiz
GC28	Neuroplasticity and Oxidative Stress	1, 2, 5	Eduardo Agüera Morales
GC29	Inflammatory Immune-Mediated Cutaneous Diseases	4, 5	Juan Alberto Ruano Ruiz
GE04	Applied Psychology	1, 2	Bárbara Luque Salas
GE05	Genitourinary Diseases	2, 4	Julia Carrasco Valiente
GE06	Pathophysiology of Renal and Vascular damage	5	Juan A. Moreno Gutiérrez
GE07	Visual Quality	3	Miguel González Andrades
GE08	Comprehensive Nursing Care. Multidisciplinary Perspective	1, 2, 4, 5	Pablo Jesús López Soto
GE09	Research in Peritoneal and Retroperitoneal Oncological Surgery	4	Álvaro Arjona Sánchez Antonio Romero Ruiz
GA01	Lung Transplants. Thoracic Neoplasms	3, 4	Ángel Salvatierra Velázquez
GA03	Pneumology	2, 4, 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	Ramón Cañete Estrada
GA08	Radiology	4, 5	Marina Álvarez Benito
GA09	Cardiovascular Pathology	3, 5	Ignacio Muñoz Carvajal
GA10	Nuclear Medicine	2, 4	Juan Antonio Vallejo Casas
GA11	Learning and Artificial Neural Networks	3	César Hervás Martínez
GA12	Severe Mental Illness-Health Alerts	1, 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

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GOALS & HIGHLIGHTS IN 2021

3.1 GOALS FOR 2021

The institutional objectives marked for the year 2021 and approved by the Institute's Governing Council are outlined below.

GENERAL GOALS	INDICATORS/TARGETS	RESULTS IN 2021
APPROVAL OF THE STRATEGIC PLAN 2021-2025	Drafting of the Strategic Plan 2021-2025 and subsequent approval by the Governing Board	100% COMPLETED
OBTAINING REACCREDITATION BY THE NATIONAL INSTITUTE OF HEALTH CARLOS III (ISCIII)	Reaccreditation as a Health Research Institute by the ISCIII for the next four years.	100% COMPLETED

3.2 HIGHLIGHTS

» NEW STRATEGIC PLAN 2021-2025:

The new Strategic Plan of the Institute for the five years from 2021 to 2025 was approved by the Governing Council on March 3rd, 2021. The development of the new strategy was a joint effort with wide participation of research, administrative and management staff. Focusing on continuous improvement and the transversal concepts of quality and sustainability, the new plan builds upon five strategic lines - Excellent Science, Innovation and Tech transfer, Internationalisation, Talent & Training, and Responsible Research and Innovation (RRI). The main objectives of the new Strategic Plan are to consolidate the Institute's growth, strengthen internationalisation and clinical research as the driving force behind the translation of knowledge to clinical practice, as well as ensure handover generational handover of researchers of the institute.

» REACCREDITATION OF IMIBIC AS HEALTH RESEARCH INSTITUTE BY THE NATIONAL INSTITUTE OF HEALTH CARLOS III, WITH A HIGH LEVEL OF COMPLIANCE WITH THE SET OBJECTIVES:

The documentation required for the reaccreditation by the ISCIII of IMIBIC as a Health Research Institute was prepared in 2021. This process concluded with the visit of the ISCIII's audit team in May. The auditors' report highlighted the consolidation of IMIBIC as a recognized centre for research and innovation in biomedicine. It emphasized the importance of the support IMIBIC enjoys not only on behalf of its patrons but also of its research community and the city of Córdoba. The results of the audit also pointed out areas of improvement, such as collaboration between the research groups in the areas of the different research programmes, ensuring an adequate generational handover, as well as translating the research results into clinical practice. All these areas requiring improvement were taken into account in the development of the Strategic Plan 2021-2025, including specific actions scheduled for the coming years, some of which have already been implemented throughout 2021.

» INCREASE IN SCIENTIFIC PRODUCTION:

In 2021, IMIBIC's scientific production increased by 20% in comparison with 2020 and exceeded 600 publications. Likewise, the quality of publications has improved remarkably. The Crown quality indicator for the year 2021 - 2.95 points - represents an increase of more than 80% since 2018.

» RESEARCH SUPPORT SERVICES

In 2021 IMIBIC acquired new equipment for the Mass Spectrometry Unit (IMSMI). Thanks to an investment of more than 1.5M euros, co-financed with FEDER funds awarded by the Ministry of Science and Innovation, the Unit was equipped with two new high-resolution mass spectrometry equipment that allows us to offer not only to the researchers of IMIBIC but also to external users the latest technology for proteomic, metabolomics and lipidomic analyses, and molecular imaging.

Furthermore, last year the Technological Innovation Unit was opened. It will allow the development of projects and prototypes with high technology readiness levels and potential for take-up in patient care. A new 3D Bioprinter for a cell culture room has also been set up, thus reinforcing the services of the Platform of Biobanks and Biomodels in coordination with the activity of the ISCIII Biobanks and Biomodels Platform, of which our Unit is a member.

» HUMAN RESOURCES:

The number of researchers who joined the institute thanks to different public and private calls last year has increased. In 2021, 60 researchers counted with competitive funding for their contracts, representing an almost 40% increase in comparison with the previous year. Concerning the generational handover among the clinical research staff, it is worth noting that four researchers were awarded the Río Hortega fellowship, which is the maximum ever achieved by the institute in this program. Furthermore, 19 technical and support staff joined IMIBIC thanks to competitive grants awarded by the Ministry of Science and Innovation.

» RESPONSIBLE RESEARCH AND INNOVATION (RRI):

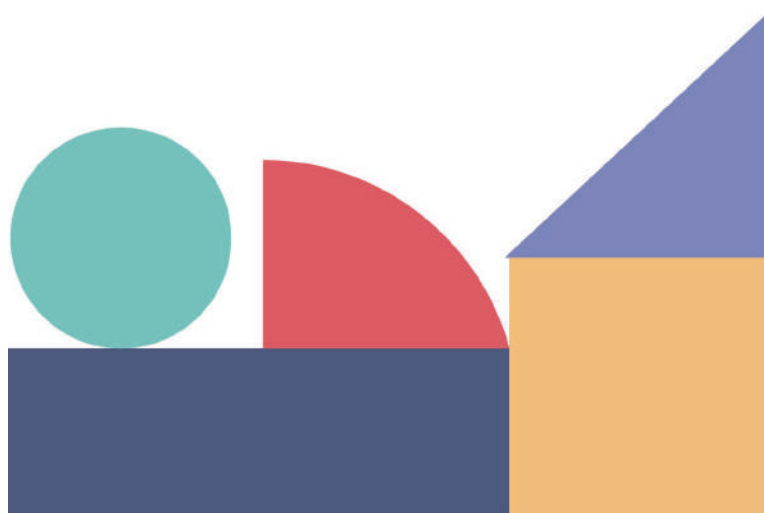
In recent years, the Institute's management has been making a great effort in the area of RRI, demonstrated by the organisation of the following activities:

- The Communication Unit organised events and actions aimed at raising funds from society. A donations section was set up on the website and the "Friends of IMIBIC" association is currently being created for managing donations from individuals and companies.
- Patronage funds increased, including funds from the Asociación Egabrense contra el Cáncer, from the pharmaceutical company Janssen, and donations for the e-DUCASS project.
- Work was carried out on the preparation of the Equality Plan 2022-2026 and its adaptation to comply with the Royal Decree 901/2020, of 13 October, which regulates equality plans and their registration.
- FIBICO-IMIBIC received the renewal of the CONCILIA CÓRDOBA 2021 award. It recognizes the Institution's good practices in the area of work-life balance.
- Various citizen science actions were developed, including the e-DUCASS project. This project aims to educate the most vulnerable populations in the city of Cordoba about healthy eating habits and lifestyles, through the use of new technologies and social networks.
- An action in collaboration with GEICAM under the slogan "Make history with your story" recruits women who have had gestational breast cancer or who have had breast cancer and want to have children.
- In the area of gender equality, an event on women's leadership in science and business was launched in November.
- IMIBIC's Plan Propio awarded 15 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.

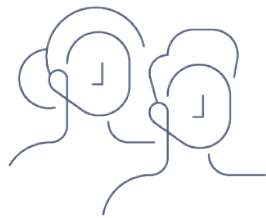
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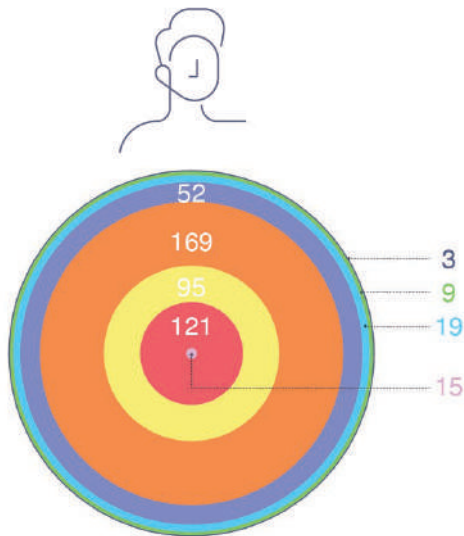
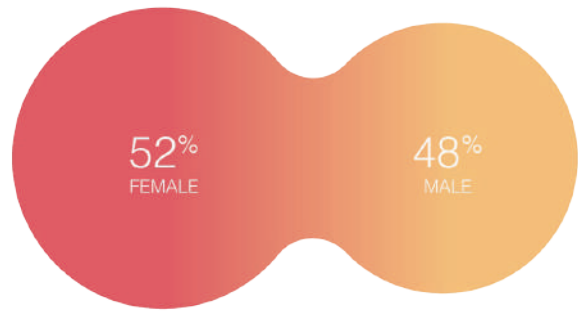
STAFF



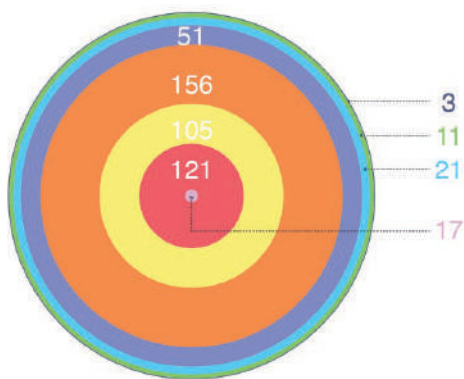
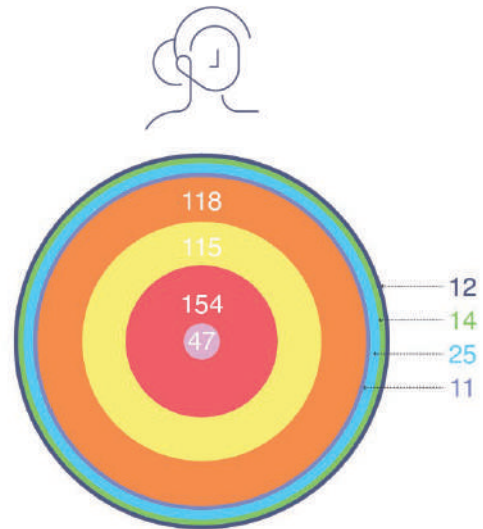


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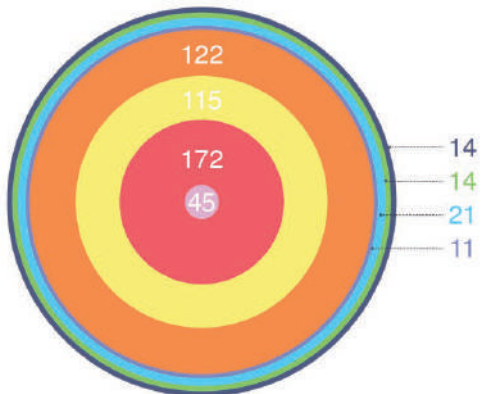
* This data includes all IMIBIC staff (researchers, support staff and administrative staff)



2020

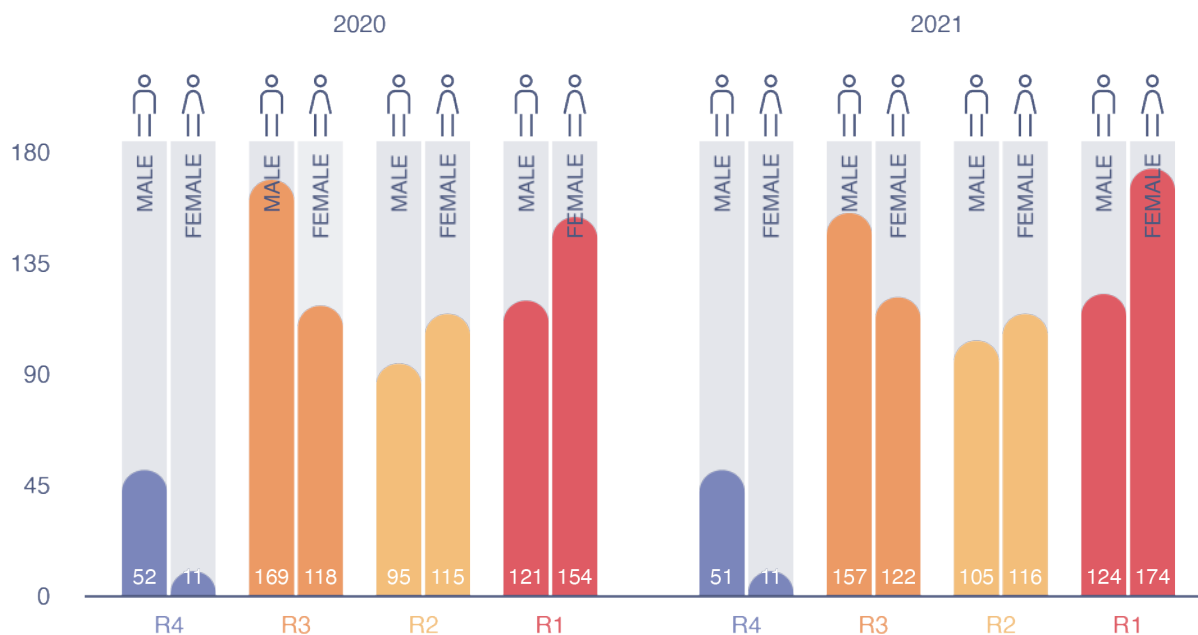


2021



- | | |
|---|-----------------------------------|
| N NURSES | R3 ESTABLISHED RESEARCHERS |
| MS MANAGEMENT STAFF | R2 RECOGNISED RESEARCHERS |
| RSU IMIBIC RESEARCH SUPPORT SERVICES | R1 FIRST STAGE RESEARCHERS |
| R4 LEADING RESEARCHERS | T TECHNICANS |

» RESEARCH STAFF 2021

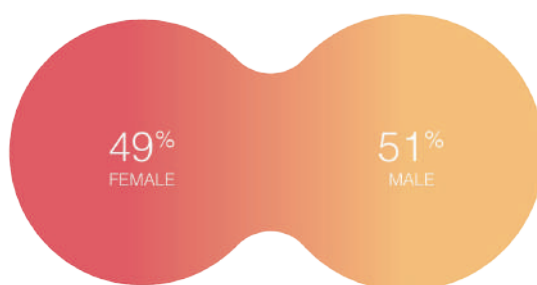


Note: R1-R4 relate to the profile descriptors for research careers provided by EURAXESS, according to HRS4R.

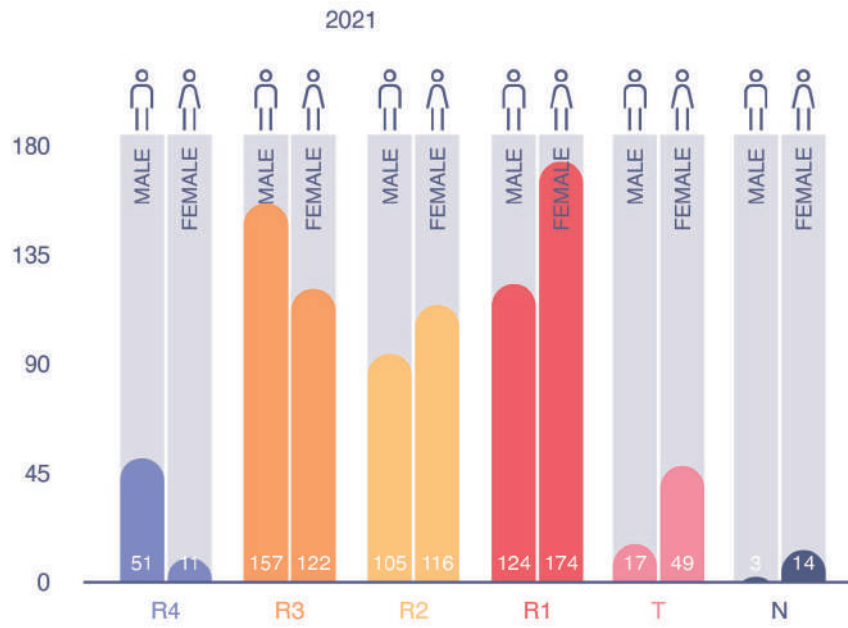
GENDER PERSPECTIVE

IMBIC, through its Equality Plan, is committed to implementing actions aimed at promoting gender parity in all personnel groups. The increase in female R3 researchers observed over the last few years has guaranteed the presence of more female leading researchers in the years to come.

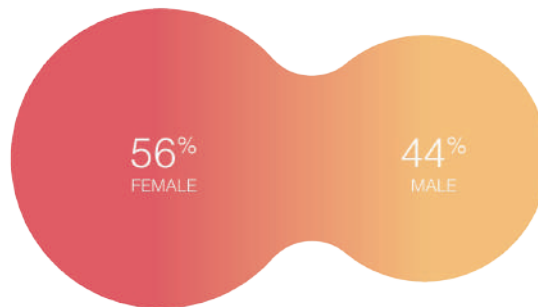
» RESEARCH STAFF 2021



» ALL PERSONNEL IN 2021



» MANAGEMENT STAFF 2021



» IMIBIC RESEARCH SUPPORT SERVICES 2021



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SCIENTIFIC REPORT
IMIBIC 2021





5.1 R&D&I MANAGEMENT UNIT

At IMIBIC, the mission of the R&D&i Management Unit is to offer a comprehensive service to research staff through a single resource: the project manager. Its main objective is to provide the support needed by these professionals to manage and develop their scientific projects well, as well as the necessary endorsements and closure with the funding bodies. Additionally, the ideas produced by the researchers will be protected by intellectual or industrial property following the standards for innovation management established by the UNE 166002: 2014 regulations.

» TEAM MEMBERS:

- Miriam Cruzado Caballero
Head of Unit
- Luis María Fernández Formoso
Project Manager (*since October 2021, he has been working as Head of Innovation and Technology Transfer*)
- Inmaculada González Granados
Project Manager
- Manuel Aguilar Panadero
Project Manager
- Carlos Lázaro Guevara
Project Manager
- José Carlos Prieto Baena
International Project Manager
- Maria Saarela
International Project Manager
- Laura Bocero Fernández
Assistant Technician for Administrative Support

5.2 FINANCIAL AND HUMAN RESOURCES UNIT

» MANAGEMENT

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

The activity of the Unit is aligned with the mission of the Institute, and is therefore deeply committed to the management of Research and Innovation in the province of Cordoba.

» SERVICES OFFERED BY THIS UNIT INCLUDE:

- Financial support to R+D+i projects
- Maximization of economic resources
- Management of agreements, contracts and private donations
- Human Resource Management
- Invoicing/billing and maintenance services associated with Clinical Trials and Observational Studies
- Budgetary control of activities
- Design and setting 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
- Florencio Muñoz Encinas
Accountant and Human Resources Specialist
- Silvia Miranda Castellano
Human Resources Specialist
- Raquel Berdud Arias
Grants & Projects Administrator
- Marcos Notario Ríos
Grants & Projects Administrator
- María 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
- Soledad María Cruz Moleón
IT Systems Assistant

5.3 CORPORATE DEVELOPMENT

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

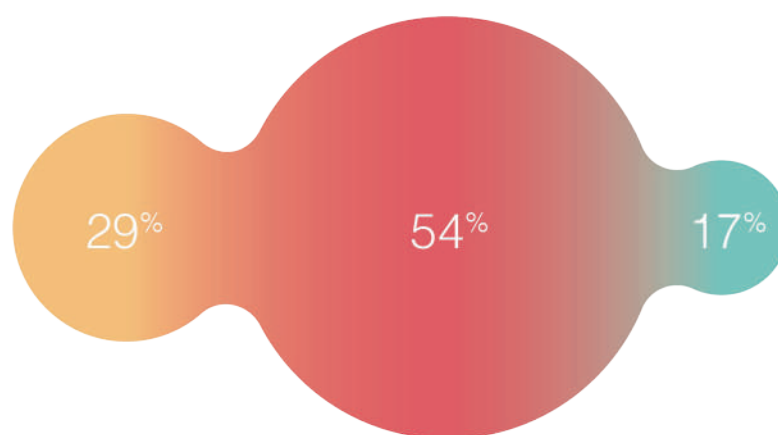
» THE MAIN SERVICES OFFERED BY THIS UNIT INCLUDE:

- Increasing the visibility of the Institute in the province and elsewhere
- Managing fundraising through sponsorship and patronage
- Promotion and dissemination of research results
- Providing support to researchers in the preparation and coordination of events
- Managing the Institute's website and social media accounts
- Producing 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 (*voluntary staff*)
- Estefanía Azcona Corrales
Management Controller
- M^a Dolores Ruiz Polo
Management Controller
- Marta Granados Aguirre
Administrative Assistant

» MANAGEMENT STAFF 2021



- I+D+i UNIT
- FINANCIAL AND HUMAN RESOURCES UNIT
- CORPORATE DEVELOPMENT UNIT

6

SCIENTIFIC REPORT
IMIBIC 2021



FUNDING



FUNDING

FIBICO is the financial and legal entity that hosts IMIBIC. The tables below present the approved financial statements of FIBICO for 2020-2021 (*in € thousands*).

» PROFIT & LOSS ACCOUNT

	2020	2021
REVENUES	9.093	10.540
COSTS OF GOODS	976	1.322
PERSONNEL	5.347	4.919
OTHER EXPENSES	2.330	3.481
DEPRECIATION	415	821
NET INCOME	25	0,975

» BALANCE SHEET

Assets	2020	2021
Non-current assets	7.990	5.462
Accounts receivable	8.751	7.745
Cash & equivalents	14.121	9.995
Current assets	22.872	17.740
Total Assets	30.862	23.202
Liabilities		
Non-current liabilities	7.983	8.303
Current liabilities	19.228	10.857
Equity	3.650	4.042
Total liabilities	30.862	23.202

» OVERHEADS

The breakdown of revenues based on project overheads (OH) in 2021 is as follows (*in € thousands*):

OH from research projects	384
Private projects	114
Other	16
	514
Clinical trials	656

The accreditation guide for research institutes stipulates 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 and co-financing of contracts. IIS own projects for emerging groups. etc.” In accordance with this, at least 233.000 € should be allocated for these purposes.

In 2021, IMIBIC assigned these funds as follows:

- a. Co-financing required for competitive calls for research talent (Miguel Servet, Sara Borrell, private entities, etc.): €243.000.
- b. IMIBIC’s PP included a plan to facilitate the presence of IMIBIC’s researchers in Open Access journals with a total endowment of €41.000.

In addition, as part of its own programme to promote clinical research, the Institute also finances the recruitment of staff needed in the Institute’s clinical research areas. Staff expenditure associated with clinical research (nurses, coordinators, administrative staff, and so on) increased to 368.000 €.

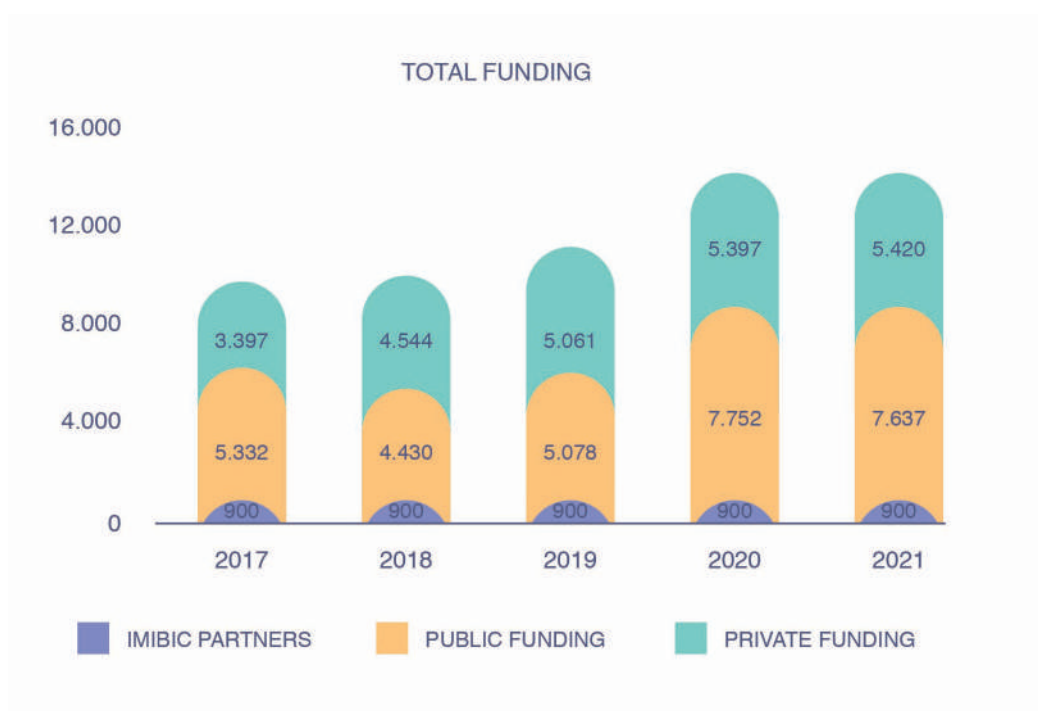
FUNDING

In terms of funding, 2021 continued the positive trend of 2020 despite the absence of extraordinary calls for HR such as those launched last year by the regional government of Andalusia.

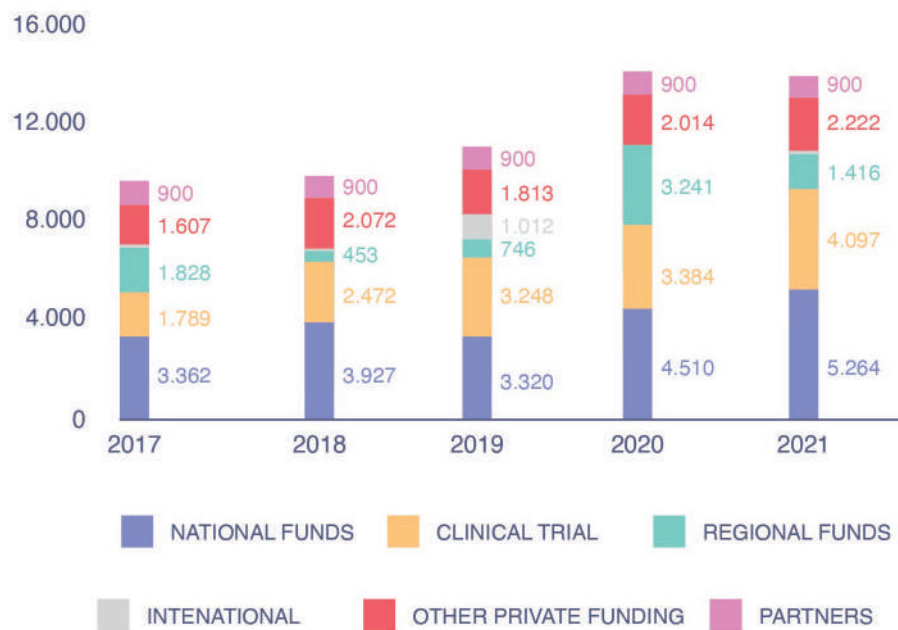
Worthy of mention under this heading was clinical trial invoicing, which exceeded 4 million euros, and funds obtained from ISCIII, which raised 5 M€.

The breakdown of funds in 2017-2021 is as follows (in € thousands):

	2017	2018	2019	2020	2021
IMIBIC Partners	900	900	900	900	900
Public Funding	5.332	4.430	5.078	7.752	7.637
Private Funding	3.397	4.544	5.061	5.397	5.420
	9.628	9.874	11.039	14.049	13.956



	2017	2018	2019	2020	2021
Total funds raised (in € thousands):	9.628	9.874	11.039	15.396	13.956
National	3.362	3.927	3.320	4.510	5.264
Regional	1.828	453	746	3.241	1.416
International	141	50	1.012	0	57
IMIBIC Partners	900	900	900	900	900
Clinical Trials	1.789	2.472	3.248	3.384	4.097
Other Private Funding	1.607	2.072	1.813	2.014	2.222
TOTAL net of resignations	9.628	9.874	11.039	14.049	13.956

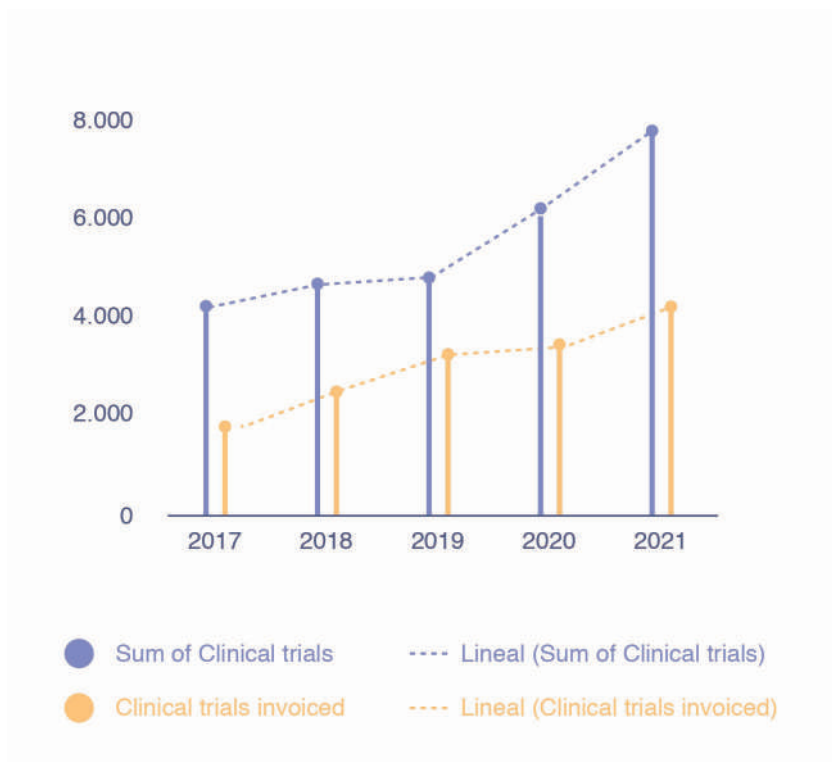


As in previous years, there has been a greater proportion of public *versus* private funding, although the percentage of private funding has significantly increased in recent years, mainly related to the activity in clinical trials.

» CLINICAL TRIALS

Clinical Research represents one of the cornerstones of IMIBIC'S strategy. The tables below show the amounts (*in € thousands*) and trend for clinical trials signed and invoiced, respectively, by the Institute in the last five years.

	2017	2018	2019	2020	2021
Clinical trials funding	4.188	4.763	4.887	6.175	7.917
Clinical trials invoiced	1.922	2.472	2.472	3.248	4.097

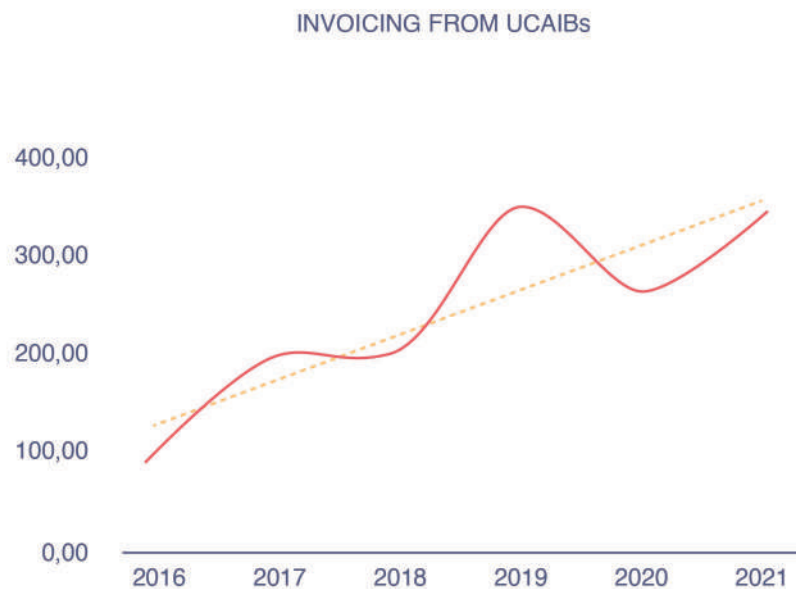


The following table shows the medical services that have been most active in invoicing. The managements of IMIBIC and the RSUH have implemented a plan to incorporate new medical services to this activity with a view to providing the latest available treatment to patients in Cordoba, as well as moving further towards the economic sustainability of the Institute.

	2017	2018	2019	2020	2021
Oncology	624	1.051	1.740	1.557	1.875
Neurology	247	332	276	411	589
Internal Medicine	196	133	168	244	241
Rheumatology	148	227	237	136	260
Dermatology	49	116	277	399	180
Infectious Diseases	131	202	109	102	263
Nephrology	90	175	108	90	122
Digestive Health	109	102	136	123	114
Haematology	55	66	94	141	70
Top 10	1.648	2.404	3.146	3.204	3.715
% TOP10	84.9%	89.5%	90.7%	94.7%	92.0%

This summary of IMIBIC funding concludes by mentioning the evolution of revenues from IMIBIC Biomedical Research Support Units. Members of these units are committed to improving the quality of research and improving financial sustainability.

	2017	2018	2019	2020	2021
Invoicing from UCAIBs (<i>In € thousands</i>)	198	202	351	266	348



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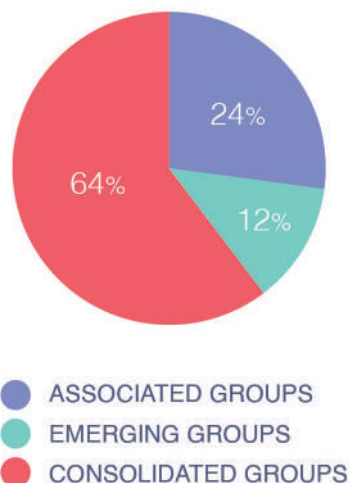


FACTS & FIGURES

7.1 STAFF

» RESEARCHERS OF IMIBIC GROUPS

IMIBIC comprises 48 research groups, which are divided into consolidated, emerging and associated groups (29, 6, and 13, respectively, in 2021).



In 2021, IMIBIC implemented the 2020-2022 Action Plan pertaining to the Human Resources Strategy for Researchers (HRS4R), which was originally launched in 2017 after obtaining the “HR Excellence in Research” label from the European Commission.

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

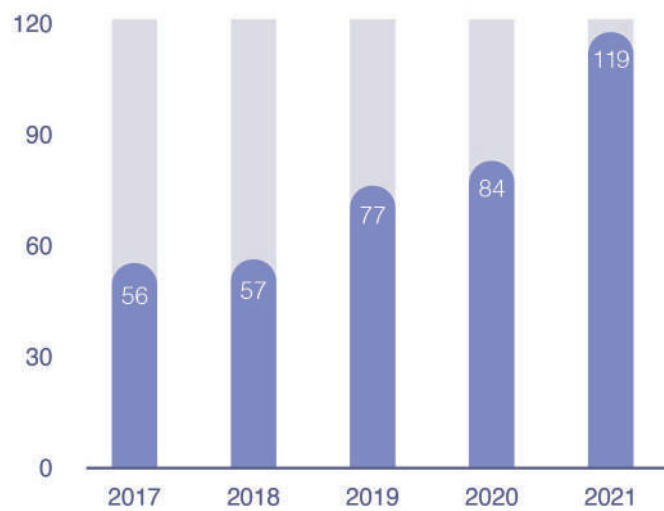
IMIBIC researchers are classified according to their Career Stage (R1-R4), as defined by the Research Profile Descriptors established by EURAXESS, as shown in the graph below.

» RESEARCHERS R1-R4



» COMPETITIVE HUMAN RESOURCES GRANTS

During 2021, IMIBIC had the following ongoing human resources grants:



FUNDING AGENCY	CALL	ONGOING IN 2021	GRANTED IN 2021
CE	P2MED	5	
CE	MARIE CURIE	2	
ISCI III	BIOINFORMÁTICO	1	
ISCI III	GIS	1	
ISCI III	INTENSIFICACIONES	6	2
ISCI III	IPFIS	2	
ISCI III	JUAN RODÉS	3	2
ISCI III	MIGUEL SERVET I	4	1
ISCI III	MIGUEL SERVET II	1	
ISCI III	PFIS	10	5
ISCI III	RÍO HORTEGA	4	4
ISCI III	SARA BORRELL	4	4
ISCI III	MOVILIDAD	1	
MEC	FPU	10	
MICINN	PREDOCTORAL I+D+i	3	
MICINN	PERSONAL TÉCNICO DE APOYO	4	1
MICINN	PEJ	5	
MICINN	JUAN DE LA CIERVA (FORMACIÓN)	5	
MICINN	FPI	5	
MICINN	RAMÓN Y CAJAL	3	
MINISTERIO DE TRABAJO	PROGRAMA INVESTIGO		39
CSYF	PROYECTO CON PREDOCT		7
CSYF	POSTDOC ESPECIALISTA (clínicos)	3	
CSYF	POSTDOC SENIOR	5	3
CSYF	POSTDOC JUNIOR	2	3
CTEICU	POSTDOCTORALES	5	2
CTEICU	POEJ		19
SAS	TÉCNICOS DE ECAI	5	
SAS	INTENSIFICACIONES (ACCIÓN A)	9	10
SAS	INTENSIFICACIONES DE LA UNIDAD (ACCIÓN B)	3	
SAS	INVESTIGADOR CLÍNICO (ACCIÓN B)	3	1
SAS	NICOLÁS MONARDES (ACCIÓN C)	6	
PRIVATE FUNDS		1	1
	TOTAL	121	104

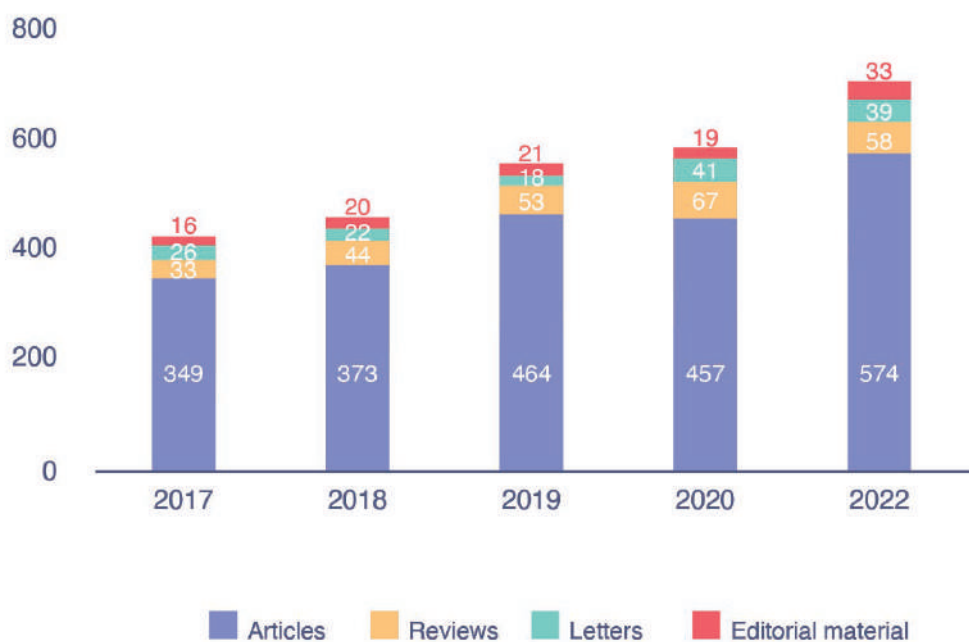
7.2 PUBLICATIONS

In 2021, our researchers contributed with 752 scientific documents, of which 704 were published in journals indexed in the Web of Science citation database and ranked within quartiles according to the journals' Impact Factor.



The number of IMIBIC publications in Open Access increased by 71 in 2021 compared to 2020 (almost 50% of total publications in both years).

» PUBLICATIONS (2017 – 2021)



» PUBLICATION RESULTS IN 2021

	TOTAL	D1	Q1 (*)	Q2	Q3-Q4
ORIGINAL ARTICLES	574	116	374	115	85
REVIEWS	58	10	31	17	10
TOTAL ORIGINAL ARTICLES & REVIEWS	632	126	405	132	95
LETTERS	39	9	19	4	16
EDITORIAL MATERIAL	33	7	14	6	13
TOTAL PUBLICATIONS	704	142	438	142	124

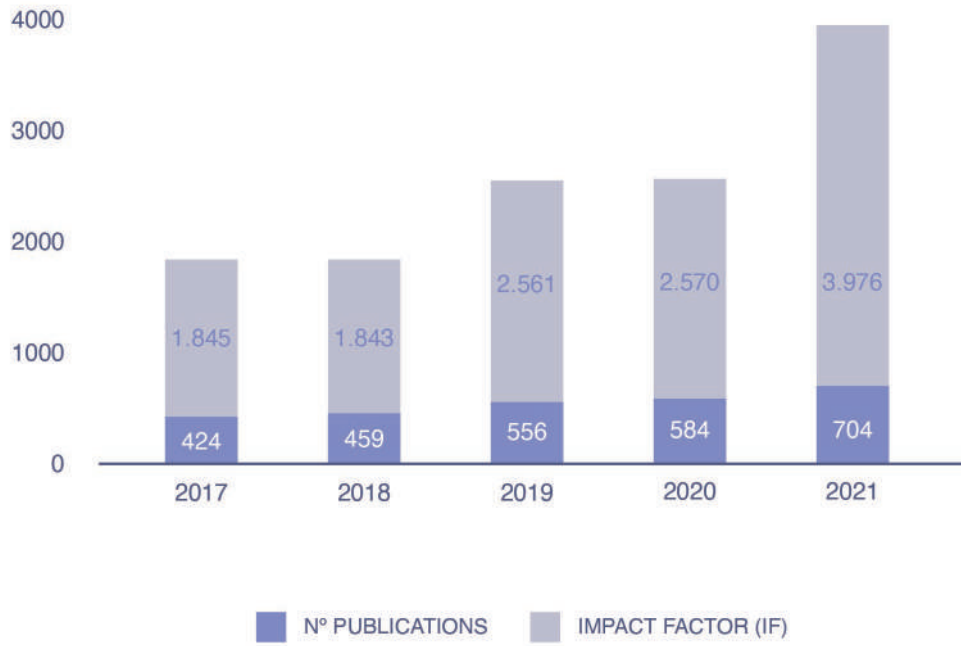
Publications have been ranked by quartiles according to the journals' impact factor

(*) Including D1

» DISTRIBUTION OF PUBLICATIONS IN NATIONAL AND INTERNATIONAL JOURNALS

	NO. OF PUBLICATIONS
INTERNATIONAL JOURNALS	661
ORIGINAL ARTICLES	555
REVIEWS	56
EDITORIAL MATERIAL	23
LETTERS	27
NATIONAL JOURNALS	43
ORIGINAL ARTICLES	19
REVIEWS	3
EDITORIAL MATERIAL	9
LETTERS	12
TOTAL PUBLICATIONS	704

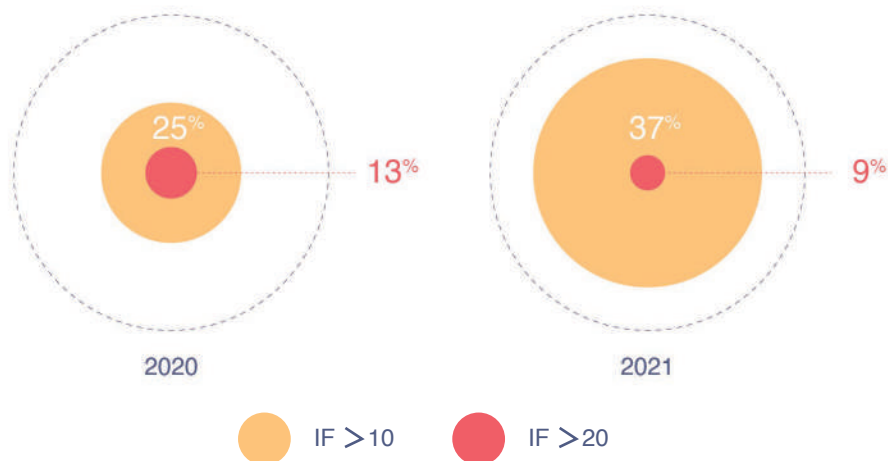
» EVOLUTION OF PUBLICATIONS AND TOTAL IMPACT FACTOR



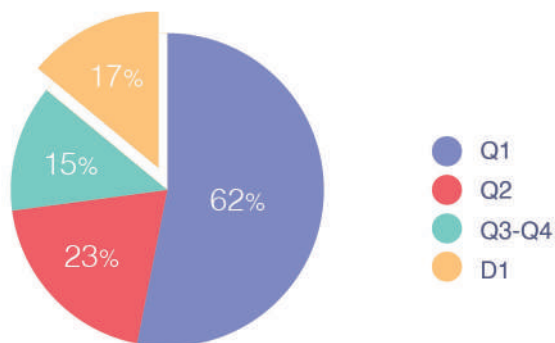
» EVOLUTION OF PUBLICATIONS IN QUARTILE 1 & DECILE 1 JOURNALS



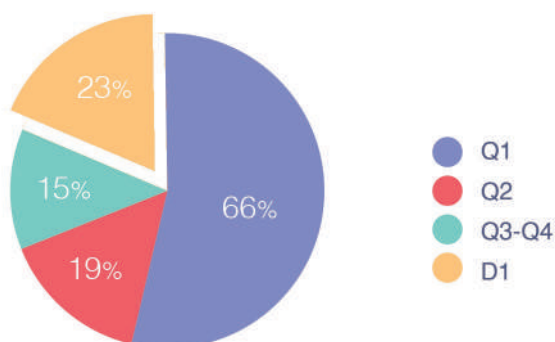
In 2021, the percentage of articles in D1 with IF>10 increased by 48% with respect to 2020:



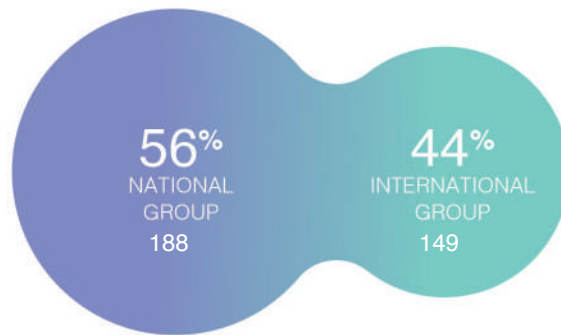
» PUBLICATIONS LED BY IMBIC RESEARCHERS (ORIGINAL ARTICLES + REVIEWS)



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



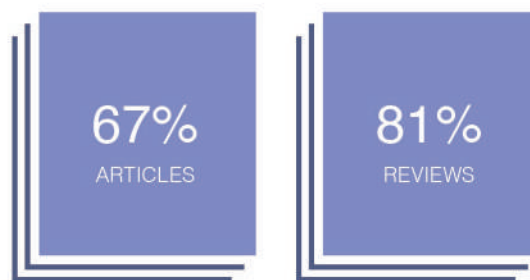
» DISTRIBUTION OF PUBLICATIONS IN COLLABORATION WITH NATIONAL AND INTERNATIONAL GROUPS



» PUBLICATIONS-INTRAMURAL COLLABORATIONS



» AFFILIATION OF ARTICLES AND REVIEWS



» BIBLIOGRAPHIC INDICATORS

	2017	2018	2019	2020 ^(*)	2021 ^(#)
FIRST, LAST OR CORRESPONDING AUTHOR	48%	52%	39%	51%	47%
CATEGORY NORMALIZED CITATION IMPACT (CROWN INDICATOR) (**)	1,48	1,61	1,81	2,03	2,95
HIGHLY CITED PAPERS (HCP INDICATOR) (***)	19,11%	22,30%	21,50%	24%	25%
PUBLICATIONS LED BY IMBIC ACCORDING TO HCP INDICATOR	26	39	39	54	53

Data calculated in March 2021 (*) and August 2022 (#)

(**) CATEGORY NORMALIZED CITATION IMPACT (CROWN INDICATOR): Number of citations of publications during the period analysed in relation to the world averages of citations extracted from the BASELINES-CITATION RATES of Essential Science Indicators (Clarivate Analytics).

(***)HIGHLY CITED PAPERS (HCP INDICATOR): Percentage of publications that are among 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 AND PROTOCOL DOCUMENTS

IMBIC researchers have participated in several international Clinical Guidelines. These guidelines have had an outstanding impact on patient care and medical practice.

CLINICAL GUIDELINES AND CONSENSUS DOCUMENTS	TOTAL	%D1	%Q1
	13	8%	23%

Total number of Clinical Guidelines and Consensus Documents published in 2021 in journals indexed in ISI Web of Science. Journals were ranked by quartiles according to Impact Factor.

7.4 RESEARCH PROJECTS AND NETWORKS

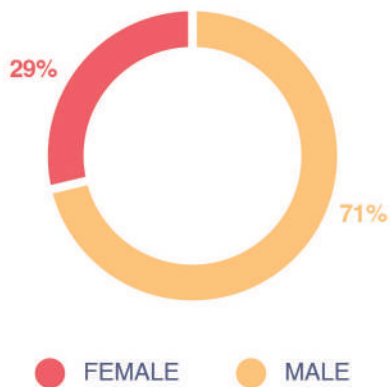
Our researchers have developed a high number of competitive projects, specifically, 157 were active in 2021



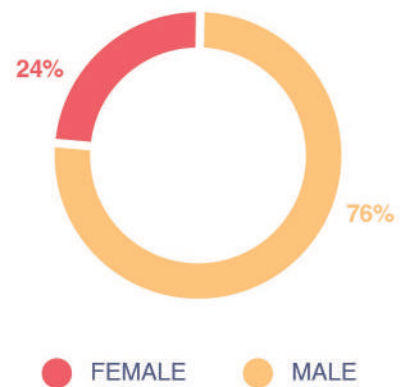
Figures represent the number of ongoing projects financed by national and international funding agencies, either public or private, in 2021.

» RESEARCH PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR

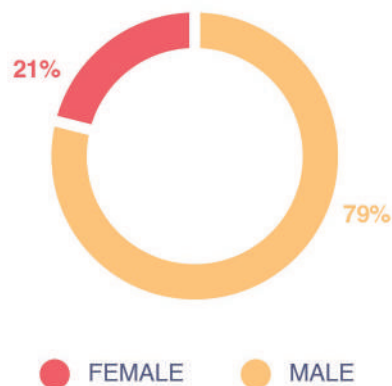
RESEARCH PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR



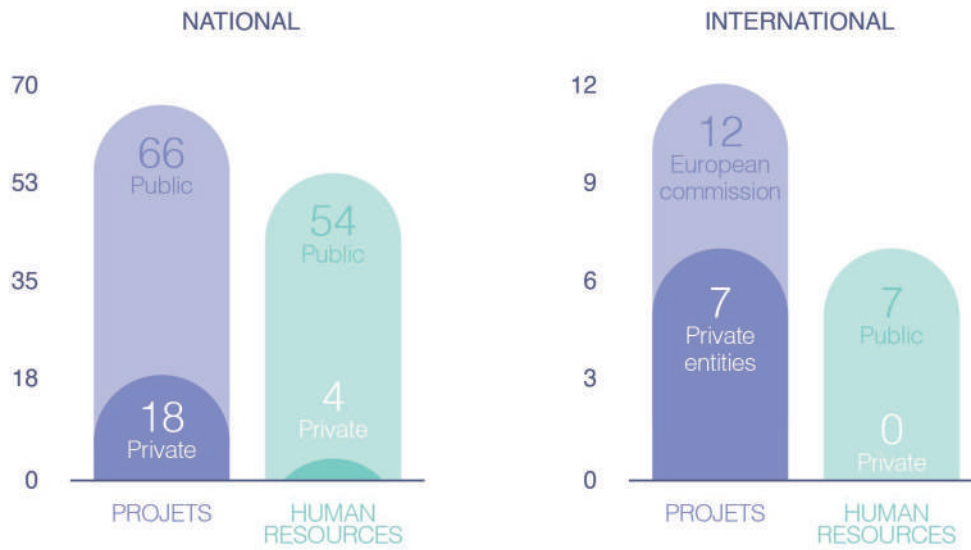
NATIONAL PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR



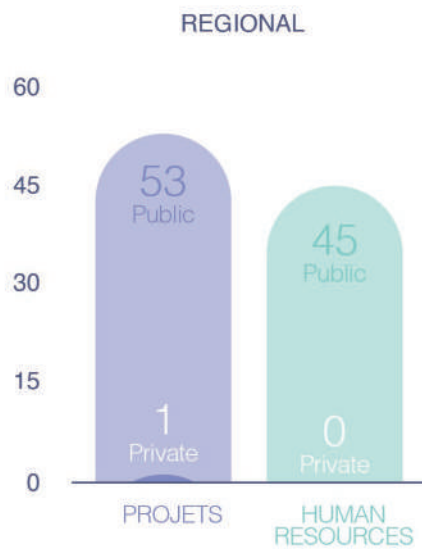
INTERNATIONAL PROJECTS BY GENDER OF PRINCIPAL INVESTIGATOR



» RESEARCH PROJECTS ACCORDING TO FUNDING SOURCES:



Along with national and international grants, our researchers have been awarded research grants funded by regional agencies through public competitive calls:



» ONGOING PROJECTS IN 2021

NATIONAL	N° OF ONGOING PROJECTS
PUBLIC	
Institute of Health Carlos III (ISCIII)	51
Spanish Ministry for Science, Innovation and Universities (MICINN)	15
PRIVATE	
Private Funding	18
REGIONAL	
PUBLIC	
Regional Ministry of Health and families (CSyF)	29
Regional Ministry of Economic transformation, Industry, Knowledge and Universities (CTEICU)	9
FIBICO	6
FPS	8
PRIVATE	
Private Funding	2
INTERNATIONAL	
PUBLIC	
European Commission	12
PRIVATE	
Private Funding	7
N° of Granted Projects	157

» PROJECTS FUNDED BY GRANTS IN 2021

NATIONAL	N° OF ONGOING PROJECTS
PUBLIC	
Institute of Health Carlos III (ISCIII)	15
Spanish Ministry for Science, Innovation and Universities (MICINN)	2
PRIVATE	
Private Funding	4
REGIONAL	
PUBLIC	
Regional Ministry of Health and families (CSyF)	10
Regional Ministry of Economic transformation, Industry, Knowledge and Universities (CTEICU)	2
FPS	2
PRIVATE	
Private Funding	-
INTERNATIONAL	
PUBLIC	
European Commission	2
PRIVATE	
Private Funding	2
N° of Granted Projects	39

7.5 CLINICAL TRIALS

The following graphs summarize the number of active clinical trials in 2021.

In 2021, 166 new clinical trials were initiated and 729 were active. Of all active studies, as many as 424 were commenced within the last 3 years. These include 272 clinical studies with drugs, 126 observational studies and 26 trials of new medical devices.

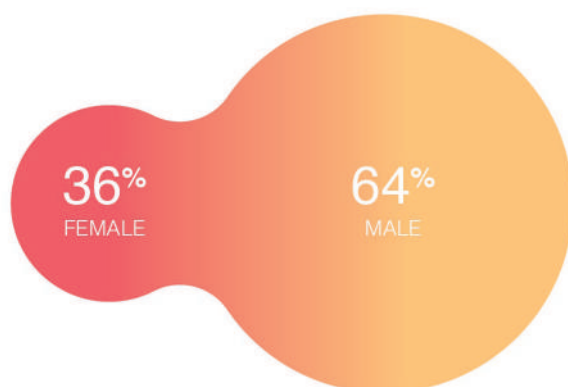
» ONGOING CLINICAL TRIALS IN 2021



OS: Observational Studies / ME: Medical Equipment

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

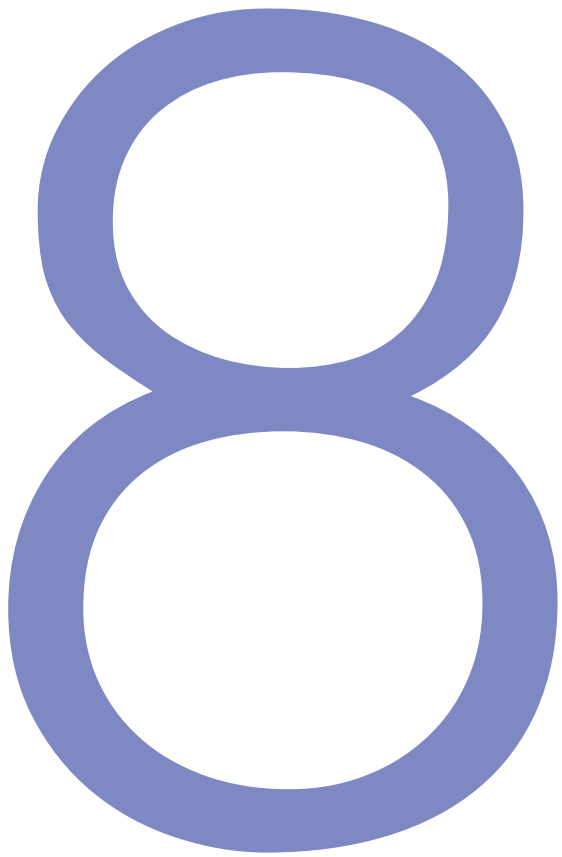
» CLINICAL TRIALS BY GENDER OF PRINCIPAL INVESTIGATOR



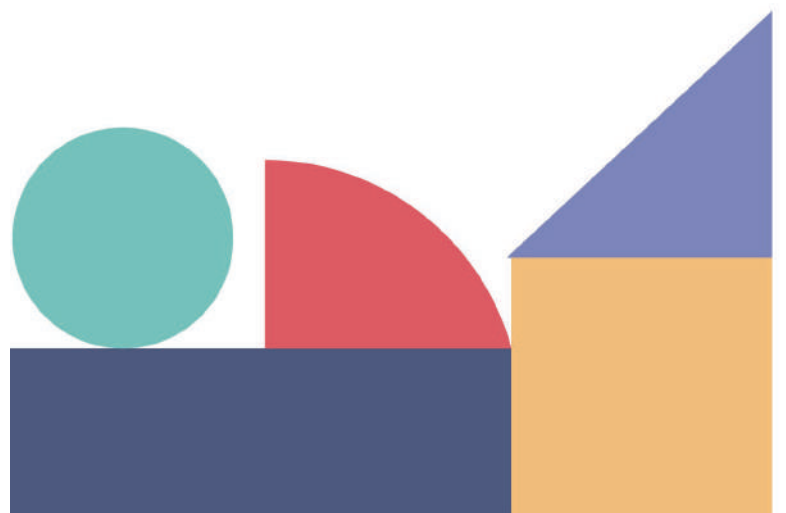
» CLINICAL TRIALS CLASSIFIED ACCORDING TO PROMOTERS IN 2021

	CLINICAL TRIALS WITH DRUGS	OBSERVATIONAL STUDIES	MEDICAL EQUIPMENT
PHARMACEUTICAL INDUSTRY	326	95	16
OTHER ENTITIES	100	139	20
SELF PROMOTED (FIBICO)	12	17	4
TOTAL	438	251	40





SCIENTIFIC REPORT
IMIBIC 2021



SCIENTIFIC PRODUCTION

8.1. SCIENTIFIC PROGRAMS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

» GENERAL GOALS

The general objective of the “Ageing and Frailty” Program is to generate new knowledge to better understand the molecular and cellular bases of healthy aging, that can be of help to design psychosocial and nutritional interventions aiming prevent frailty and age-associated diseases.

Ageing is the major factor risk associated with cancer and chronic inflammatory diseases. In spite of being an area of active research worldwide, many aspects of the molecular and cellular bases of aging and age-associated diseases remain unknown. Cumulative evidence in the last decade strongly support the relevance of immunosenescence and inflamm-aging in these processes. In addition, the possibility to prevent or revert age-associated alterations by using not only new therapies but also psychosocial or nutritional interventions has attracted great interest.

One major aim objective of this program is to take advantage of the heterogeneity in the scientific background of the groups involved, supporting an interdisciplinary approach of ageing from the analysis of the molecular and cellular aspects of cellular and system senescence to clinical and interventional approaches. Therefore, an objective is to integrate clinical and molecular information 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 performed a wide range of basic, clinical, and translational studies related to the specific objectives of the program that have led to a number of publications and competitive projects financed by regional and national agencies.

» 5 HIGHLIGHTED PUBLICATIONS

1. Kirkham F, Pera A, Simanek AM, Bano A, Morrow G, Reus B, Caserta S, Smith HE, Davies KA, Rajkumar C, Kern F; Cytomegalovirus infection is associated with an increase in aortic stiffness in older men which may be mediated in part by CD4 memory T-cells; THERANOSTICS; 2021; 11; (12) 5728-5741; DOI: 10.7150/thno.58356
IF: 11,556 Q1 D1
2. Miho H, Moral J, Barranco D, Ledesma-Escobar CA, Priego-Capote F, Diez CM; Influence of genetic and interannual factors on the phenolic profiles of virgin olive oils; FOOD CHEMISTRY; 2021; 342; () -; 128357 DOI: 10.1016/j.foodchem.2020.128357
IF: 7,514 Q1 D1
3. Ramirez-Exposito MJ, Martinez-Martos JM, Canton-Habas V, Carrera-Gonzalez MD; Putative Involvement of Endocrine Disruptors in the Alzheimer’s Disease Via the Insulin-Regulated Aminopeptidase/GLUT4 Pathway; CURRENT NEUROPHARMACOLOGY; 2021; 19; (7) 939-956; DOI: 10.2174/1570159X1866620111103024
IF: 7,363 Q1 D1
4. Ramirez-Exposito MJ, Carrera-Gonzalez MP, Mayas MD, Martinez-Martos JM; Gender differences in the antioxidant response of oral administration of hydroxytyrosol and oleuropein against N-ethyl-N-nitrosourea (ENU)-induced glioma; FOOD RESEARCH INTERNATIONAL; 2021; 140; () -; 110023 DOI: 10.1016/j.foodres.2020.110023
IF: 6,475 Q1 D1
5. Formentini M, Navas A, Hassouneh F, Lopez-Sejas N, Alonso C, Tarazona R, Solana R, Pera A; Impact of Cytomegalovirus and Age on T-Cell Subsets Defined by CD161, CD300a, and/or CD57 Expression in Healthy Andalusians; JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES; 2021; 76; (11) 1946-1953; DOI: 10.1093/gerona/glab140
IF: 6,053 Q1 D1

» SUB-PROGRAMS

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

Following the research lines defined in the Scientific Program 1, the different groups have focused their efforts on objectives aiming 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 the psychosocial and nutritional factors in elderly individuals, the chronically ill and cancer patients, to stratify their health status better, and to gauge the relevance of implementing care-based strategies to contribute to their well-being.
- iii) Conducting a metabolomic analysis of the 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 led to the achievement of projects in regional and national competitive calls and publication of a number of papers in high-impact journals.

» HIGHLIGHTS IN 2021

N° OF PUBLICATIONS: 105

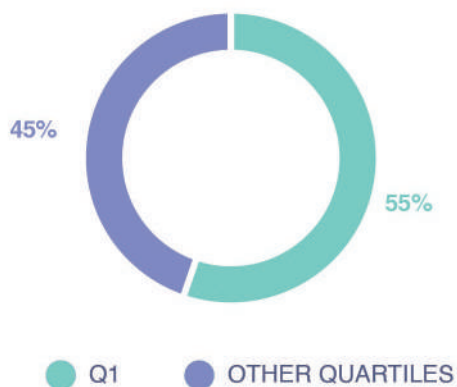
- Own: **66%**
- N° of collaborative publications: **25**
- IF: **444,04**
- Q1 (including D1): **55%**
- D1: **11%**

N° OF ONGOING PROJECTS: 31

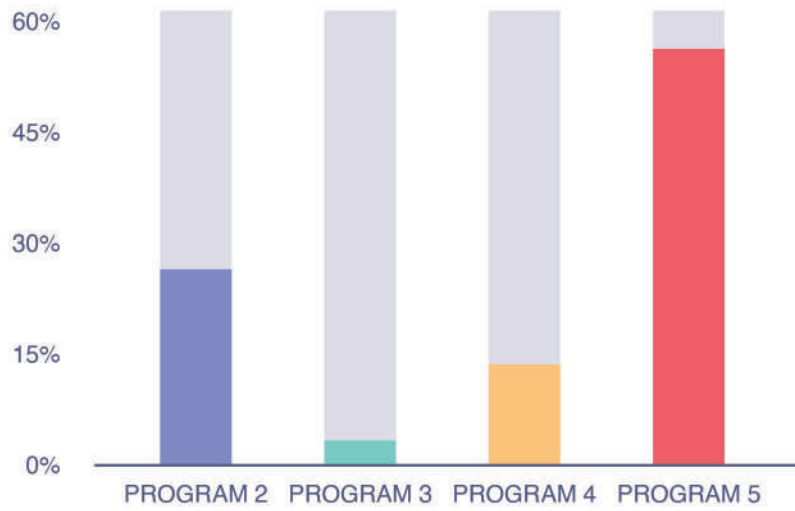
- N° of collaborative projects: **18**

N° OF ONGOING CLINICAL TRIALS: 6

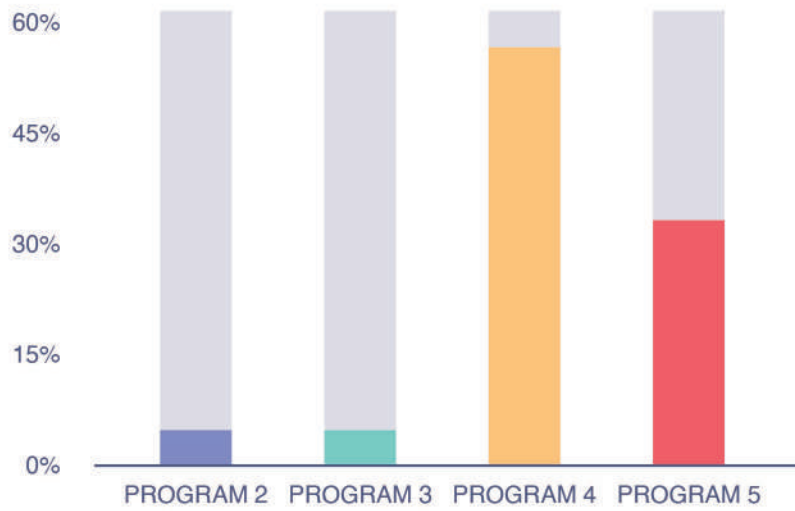
» PROGRAM 1



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 disease standing out as being particularly important. Metabolic diseases are often associated with obesity and are the subject of active research. Despite considerable advances in our knowledge, the exact causes of these diseases, the mechanisms involved in their development, the nature of all their comorbidities and how to tackle prevention and treatment effectively are still not known. 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 it is a high priority to address them. There is also considerable variability both in individual susceptibility to these diseases and in 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 or molecular mechanisms in biology, such as oxidative stress, inflammation, fibrosis or the response to hypoxia. A key objective of our program, therefore, is to follow 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 so 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 advances, thus contributing to creating added wealth 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 led to a large number of publications and other scientific contributions, which confirms the growing trend of previous years. Likewise, the continuity and accomplishment 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, contribute towards building a profile of excellence, which has laid the foundations 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. Yubero-Serrano EM, Alcalá-Díaz JF, Gutierrez-Mariscal FM, Arenas-de Larriva AP, Peña-Orihuela PJ, Blanco-Rojo R, Martínez-Botas J, Torres-Peña JD, Pérez-Martínez P, Ordovas JM, Delgado-Lista J, Gómez-Coronado D, López-Miranda J. Association between cholesterol efflux capacity and peripheral artery disease in coronary heart disease patients with and without type 2 diabetes: from the CORDIOPREV study. *Cardiovasc Diabetol*. 2021 Apr 17;20(1):79. doi: 10.1186/s12933-021-01269-8.
IF: 9,951 Q1 D1
2. Sánchez-Ceinos J, Rangel-Zuñiga OA, Clemente-Postigo M, Podadera-Herreros A, Camargo A, Alcalá-Díaz JF, Guzmán-Ruiz R, López-Miranda J, Malagón MM. *miR-223-3p as a potential biomarker and player for adipose tissue dysfunction preceding type 2 diabetes onset*. *Mol Ther Nucleic Acids*. 2021 Jan 20;23:1035-1052. doi: 10.1016/j.omtn.2021.01.014.
IF: 8,886 Q1 D1
3. Franssen D, Barroso A, Ruiz-Pino F, Vázquez MJ, García-Galiano D, Castellano JM, Onieva R, Ruiz-Cruz M, Poutanen M, Gaytán F, Diéguez C, Pinilla L, Lopez M, Roa J, Tena-Sempere M. AMP-activated protein kinase (AMPK) signaling in GnRH neurons links energy status and reproduction. *Metabolism*. 2021 Feb;115:154460. doi: 10.1016/j.metabol.2020.154460
IF: 8,694 Q1 D1
4. Jimenez-Torres J, Alcalá-Díaz JF, Torres-Peña JD, Gutierrez-Mariscal FM, Leon-Acuña A, Gómez-Luna P, Fernández-Gandara C, Quintana-Navarro GM, Fernandez-Garcia JC, Pérez-Martínez P, Ordovas JM, Delgado-Lista J, Yubero-Serrano EM, López-Miranda J. Mediterranean Diet Reduces Atherosclerosis Progression in Coronary Heart Disease: An Analysis of the CORDIOPREV Randomized Controlled Trial. *Stroke*. 2021 Nov;52(11):3440-3449. doi: 10.1161/STROKEAHA.120.033214
IF: 7,914 Q1 D1

5. Llorente-Cantarero FJ, Aguilar-Gómez FJ, Leis R, Bueno G, Rupérez AI, Anguita-Ruiz A, Vázquez-Cobela R, Mesa MD, Moreno LA, Gil Á, Aguilera CM, Gil-Campos M. Relationship between Physical Activity, Oxidative Stress, and Total Plasma Antioxidant Capacity in Spanish Children from the GENOBOX Study. *Antioxidants (Basel)*. 2021 Feb 20;10(2):320. doi: 10.3390/antiox10020320
IF: 6,312 Q1 D1

» SUB-PROGRAMS

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

METABOLIC SYNDROME

The objectives of this sub-program were successfully completed during 2021. In general, the scientific output of this sub-program increased compared to previous years. The original publications contributed to providing answers to most of the specific objectives of the sub-program: establishing possible mechanisms involved in the clinical development and regression of type 2 diabetes and peripheral artery disease, in the context of coronary heart disease; defining the molecular bases for improved dietary intervention strategies, such as following a Mediterranean diet and doing exercise, which could be optimal strategies for reducing cardiovascular risk factors.

Also in 2021, research projects funded in previous years continued to be developed, and three research projects with national funding were launched including: 'Effect of two healthy diets on HDL functionality and its influence on the incidence of major cardiovascular events in patients with coronary artery disease', 'Gut microbial composition as a predictive tool for the development of type 2 diabetes mellitus' and 'Role of the intestinal microbiota in gender differences in the development of cardiovascular disease'. The results of this sub-program have been presented at different national and international conferences.

REPRODUCTIVE HEALTH

The development of this sub-program has allowed substantial progress in reaching its specific objectives, which, on one hand, aim to obtain better knowledge of the physiopathology of widespread reproductive disorders frequently associated with metabolic and/or neuroendocrine alterations, and on the other, pursue the development of new diagnostic and therapeutic strategies for those disorders. In this context, during 2021, this subprogram generated relevant articles published in first-decile/quartile journals, focusing on the characterization of novel mechanisms for the metabolic control of the reproductive axis and the role of specific neuropeptidergic systems, such as tachykininins, in the regulation of different aspects of the functioning of the reproductive and metabolic systems. In addition, through collaborations published in highly-tiered journals, the program has collaborated in studies addressing basic mechanisms for reproductive control, highlighting the precise interplay between GnRH neurons and glial cells in this process. In addition, translational and clinical studies have been carried out focusing on the identification of novel biomarkers and potential new therapeutic strategies for common reproductive diseases, with metabolic implications, such as polycystic ovary syndrome (PCOS) and obesity-induced hypogonadism. Some of these studies were published in 2022 and included one led article on novel biomarkers of PCOS, and one collaborative paper, based on the preclinical development of novel strategies for brain delivery of compounds with capacity to tackle obesity. These activities were carried out in the framework of up to eight competitive projects funded by international, national and regional agencies. In addition, research agreements with pharma/biotech companies have allowed the conduction of preclinical studies to develop some of the contents of this sub-program. As further indicators of excellence, this sub-program has presented some of its main results in the form of guest lectures at various international scientific conferences, and has been able to attract and retain highly qualified human resources via very 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 the specific objectives of the program. On the one hand, a considerable number of publications have been aimed at characterizing the molecular and hormonal bases of childhood obesity, as well as analyzing the influence 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 physical condition in pre-adolescents. At the same time, the sub-program has also made significant preclinical contributions to the characterization of novel mechanisms involved in the control of puberty, and particularly on the basis for obesity-induced accelerated puberty, whose prevalence 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 derived of this sub-program in 2021 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 are also actively collaborating with the teams primarily ascribed to Program 2, and contributions in the area of neuroendocrine tumors and related conditions remain an important component of this Program.

» HIGHLIGHTS IN 2021

N° OF PUBLICATIONS: 140

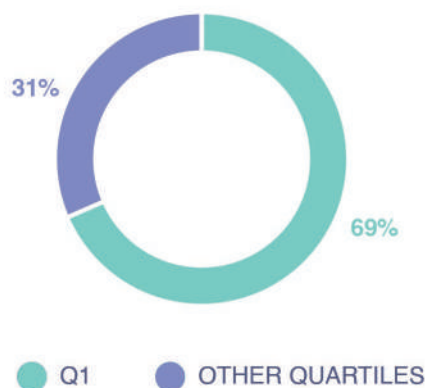
- Own: **49%**
- N° of collaborative publications: **33**
- IF: **761,94**
- Q1 (including D1): **69%**
- D1: **16%**

N° OF ONGOING PROJECTS: 43

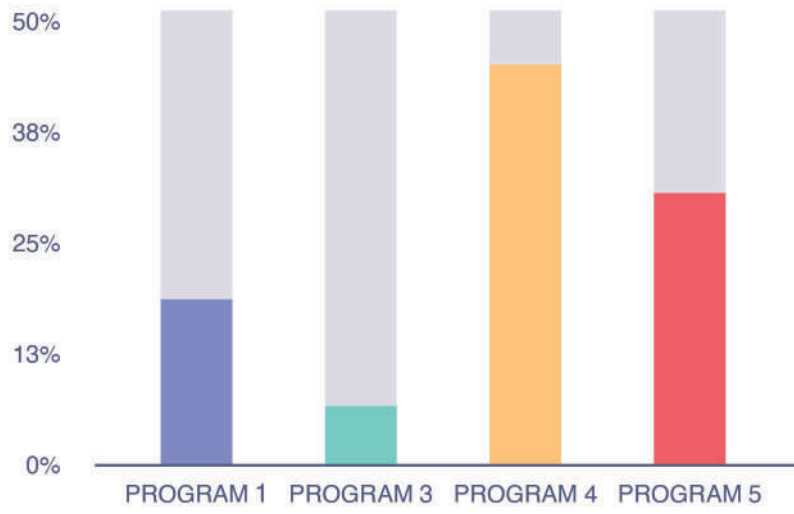
- N° of collaborative projects: **18**

N° OF ONGOING CLINICAL TRIALS: 45

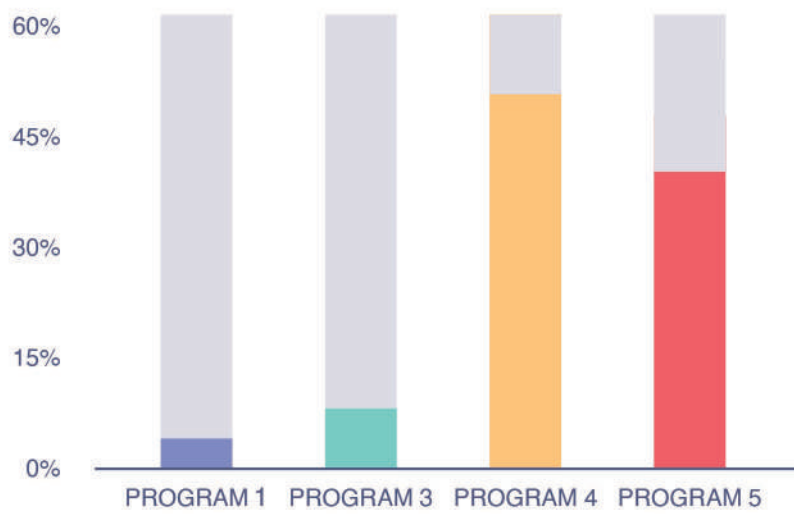
» PROGRAM 2



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 quality research aimed at health problems related to host-foreign agent interactions in the specific field of the study of infectious, zoonotic, immunological and organ transplantation diseases. This research line aims to achieve results which can be applied to, and influence, clinical practice among health professionals to increase the patients' quality of life and the well-being of society in general. One key strategy is to strengthen the ties between research groups on a regional, national and international level and/or, where possible, with public or private companies. It is also crucial to target a greater guarantee of success in the research projects, help members of the groups create new spin-offs and establish a solid foundation to support research training and guarantee stable employment for researchers. To achieve this, specific, effective action is called for in order to attain the targets set, with a translational approach which results in improved quality of patient care, either through the technological transfer of the results to the industry or by applying them in clinical practice guidelines.

In 2021, a total of 8 research groups participated in IMIBIC Program 3 (3 consolidated groups, 1 emerging groups and 4 associated groups). It should be noted that, despite the decrease in global scientific production as a result of the Covid-19 pandemic, the activity of Program 3 during 2020 generated 83 publications, 24 active projects and 24 clinical trials.

» 5 HIGHLIGHTED PUBLICATIONS

1. Perez-Nadales, Elena; Alastruey-Izquierdo, Ana; Jose Linares-Sicilia, Maria; Carlos Soto-Debran, Juan; Abdala, Edson; Garcia-Rodriguez, Julio; Montejo, Miguel; Munoz, Patricia; Salavert. Invasive Fusariosis in Nonneutropenic Patients, Spain, 2000-2015. EMERGING INFECTIOUS DISEASES. DOI: 10.3201/eid2701.190782
IF: 6,883 Q1 D1
2. Frias, Mario; Moyano, Jose M.; Rivero-Juarez, Antonio; Luna, Jose M.; Camacho, Angela; Fardoun, Habib M.; Machuca, Isabel; Al-Twijri, Mohamed; Rivero, Antonio; Ventura, Sebastian. Classification Accuracy of Hepatitis C Virus Infection Outcome: Data Mining Approach. JOURNAL OF MEDICAL INTERNET RESEARCH. DOI: 10.2196/18766
IF: 5,428 Q1 D1
3. Barbero-Gomez, Javier; Gutierrez, Pedro-Antonio; Vargas, Victor-Manuel; Vallejo-Casas, Juan-Antonio; Hervas-Martinez, Cesar. An ordinal CNN approach for the assessment of neurological damage in Parkinson's disease patients. EXPERT SYSTEMS WITH APPLICATIONS. DOI: 10.1016/j.eswa.2021.115271
IF: 6,954 Q1 D1
4. Guijo-Rubio, David; Manuel Duran-Rosal, Antonio; Antonio Gutierrez, Pedro; Troncoso, Alicia; Hervas-Martinez, Cesar. Time-Series Clustering Based on the Characterization of Segment Typologies. IEEE TRANSACTIONS ON CYBERNETICS. DOI: 10.1109/TCYB.2019.2962584
IF: 11,448 Q1 D1
5. Rivero-Juarez, Antonio; Lopez-Lopez, Pedro; Antonio Pineda, Juan; Carlos Alados, Juan; Fuentes-Lopez, Ana; Ramirez-Arellano, Encarnacion; Freyre, Carolina; Belen Perez, Ana; Frias, Mario; Rivero, Antonio. Limited Value of Single Sampling for IgM Antibody Determination as a Diagnostic Approach for Acute Hepatitis E Virus Infection MICROBIOLOGY SPECTRUM. DOI: 10.1128/Spectrum.00382-21
IF: 7,171 Q1 D2

» SUB-PROGRAMS

- HIV + Hepatitis C
- Transplantation
- Multiresistance

INFECTION BY HIV AND/OR HCV + HEV

In the HIV and/or HCV infection subprogram, a total of 23 articles were generated in 2021 (8 in D1 and 9 in Q1). It is worth mentioning the publication “Classification Accuracy of Hepatitis C Virus Infection Outcome: Data Mining Approach”, where we reanalyzed the data set of a previous study using a new data mining approach in order to find models that improve the classification accuracy of the genes studied. In addition, an ISCIII-financed project entitled “EVALUACIÓN DE LA INFLUENCIA DE LA ENFERMEDAD HEPÁTICA GRASA NO ALCOHÓLICA SOBRE EVENTOS CLÍNICOS Y MORTALIDAD DE LOS PACIENTES INFECTADOS POR VIH” was also launched.

TRANSPLANT/MULTIRESISTANCE

As part of these topics, a total of 19 publications were generated during 2021. The multicenter study “Pretransplant CMV-Specific T-Cell Immunity But Not Dose of Antithymocyte Globulin Is Associated With Recovery of Specific Immunity After Kidney Transplantation” was published in Journal of Infectious Diseases (Q1 D2). In the same area, the translational study “IMPLantación de la monitorización de la Inmunidad Celular frente a Citomegalovirus en la práctica clínica para mejorar el control de la infección por este virus en el Trasplante de Órgano” 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 2021. It is worth highlighting: “Invasive Fusariosis in Nonneutropenic Patients, Spain, 2000-2015”, a multicenter study published in Emerging Infection Diseases (D1). This work has been selected as one of the most outstanding publications from Program 3.

» HIGHLIGHTS IN 2021

Nº OF PUBLICATIONS: 83

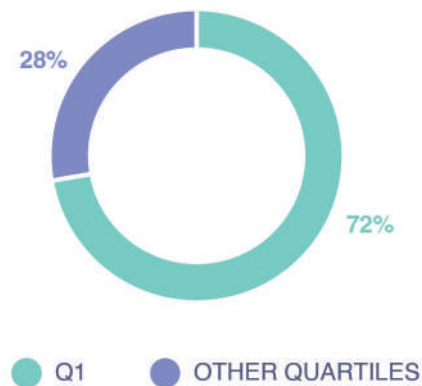
- Own: **40%**
- Nº of collaborative publications: **29**
- IF: **548,63**
- Q1 (including D1): **72%**
- D1: **29%**

Nº OF ONGOING PROJECTS: 34

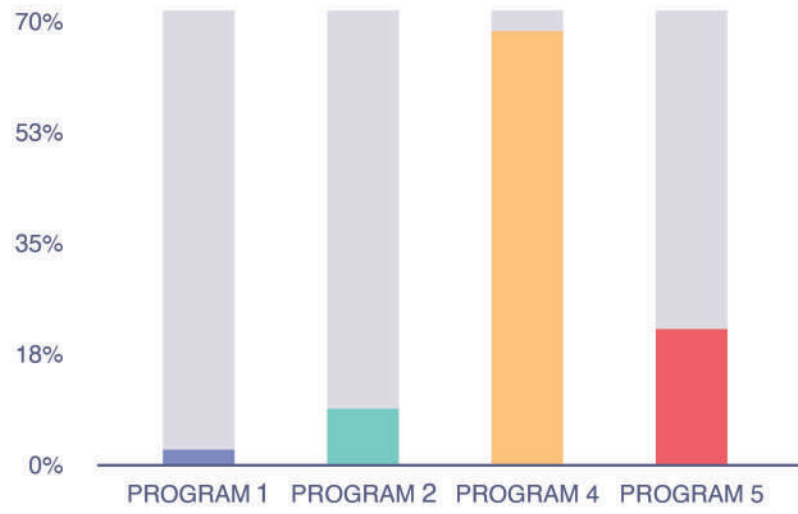
- Nº of collaborative projects: **11**

Nº OF ONGOING CLINICAL TRIALS: 24

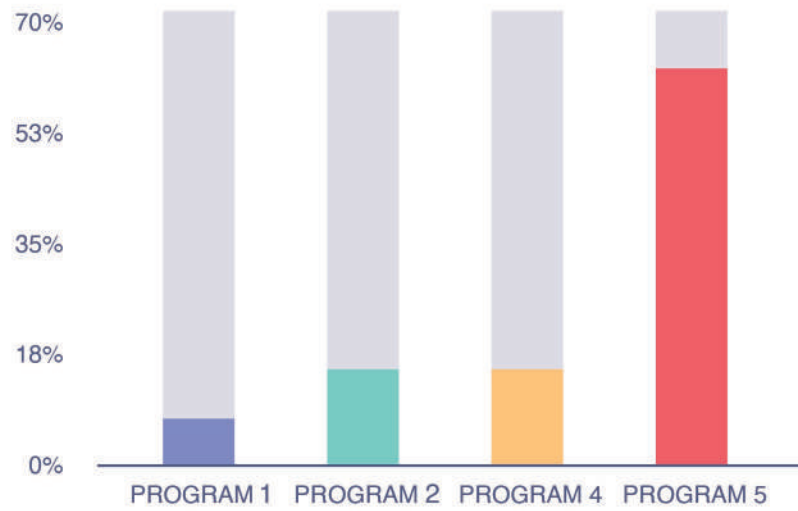
» PROGRAM 3



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, mainly due to its high prevalence and mortality rates. Its incidence is on the rise every year, 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 tumors, in others, there is an urgent need for improved molecular knowledge, as well as better prevention and diagnosis measures.

For these reasons, the general goal of the program is aimed at improving the prevention, diagnosis and treatment of cancer in all its aspects. This scientific program focused its efforts on crucial objectives such as early detection, the search for new therapeutic targets and biomarkers, the development of new therapies, and the improvement of immunotherapy programs. This helped the program to secure top-quality projects in highly competitive calls, as well as a considerable number of publications in high-impact magazines.

To sum up the activity of the program in 2021, its main goals were successfully achieved and important results were obtained. This was reflected in the publication of 166 scientific articles, both by the program itself and in collaboration with other national and international groups. Similarly, the program ran 47 active research projects, all obtained from competitive calls. In the same year, 161 clinical trials were carried out, in their different phases, related to different types of tumors and therapeutic approaches.

» 5 HIGHLIGHTED PUBLICATIONS

1. Manzanares-Martin B, Aranda AC, del Puerto-Nevado L, Gonzalez R, Solanes S, Gomez-Espana MA, Garcia-Foncillas J, Aranda E; Improving selection of patients with metastatic colorectal cancer to benefit from cetuximab based on KIR genotypes; JOURNAL FOR IMMUNOTHERAPY OF CANCER; 2021; 9; (4) ; e001705 DOI: 10.1136/jitc-2020-001705
IF: 13,751 Q1 D1
2. Alors-Perez E, Blazquez-Encinas R, Alcalá S, Viyuela-García C, Pedraza-Arevalo S, Herrero-Aguayo V, Jimenez-Vacas JM, Mafficini A, Sanchez-Frias ME, Cano MT, Abollo-Jimenez F, Marin-Sanz JA, Cabezas-Sainz P, Lawlor RT, Luchini C, Sanchez L, Sanchez-Hidalgo JM, Ventura S, Martin-Hijano L, Gahete MD, Scarpa A, Arjona-Sanchez A, Ibanez-Costa A, Sainz B, Luque RM, Castano JP; Dysregulated splicing factor SF3B1 unveils a dual therapeutic vulnerability to target pancreatic cancer cells and cancer stem cells with an anti-splicing drug; JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH; 2021; 40; (1) ; 382 DOI: 10.1186/s13046-021-02153-9
IF: 11,161 Q1 D1
3. Lopez-Canovas JL, del Rio-Moreno M, Garcia-Fernandez H, Jimenez-Vacas JM, Moreno-Montilla MT, Sanchez-Frias ME, Amado V, Lopez FL, Fondevila MF, Ciria R, Gomez-Luque I, Briceno J, Nogueiras R, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD; Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma; CANCER LETTERS; 2021; 496; () 72-83; DOI: 10.1016/j.canlet.2020.10.010
IF: 8,679 Q1 D2
4. Perez E, Reyes O, Ventura S; Convolutional neural networks for the automatic diagnosis of melanoma: An extensive experimental study; MEDICAL IMAGE ANALYSIS; 2021; 67; () -; 101858 DOI: 10.1016/j.media.2020.101858
IF: 8,545 Q1 D1
5. Amado V, Gonzalez-Rubio S, Zamora J, Alejandro R, Espejo-Cruz ML, Linares C, Sanchez-Frias M, Garcia-Jurado G, Montero JL, Ciria R, Rodriguez-Peralvarez M, Ferrin G, De la Mata M; Clearance of Circulating Tumor Cells in Patients with Hepatocellular Carcinoma Undergoing Surgical Resection or Liver Transplantation; CANCERS; 2021; 13; (10) -; 2476 DOI: 10.3390/cancers13102476
IF: 6,639 Q1 D3

» SUB-PROGRAMS

- Lung cancer
- Breast cancer
- Hepatocellular carcinoma
- Leukemias and lymphomas
- Digestive tumors
- Other tumors

Through a variety of preferential 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 advanced methodology for data analysis, as well as the application of new therapeutic approaches by conducting clinical drug response studies.

» HIGHLIGHTS IN 2021

N° OF PUBLICATIONS: **166**

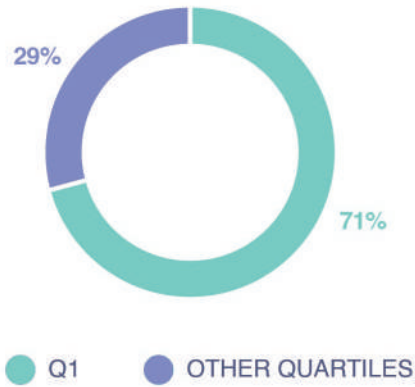
- Own: **31%**
- N° of collaborative publications: **55**
- IF: **1173,41**
- Q1 (including D1): **71%**
- D1: **22%**

N° OF ONGOING PROJECTS: **47**

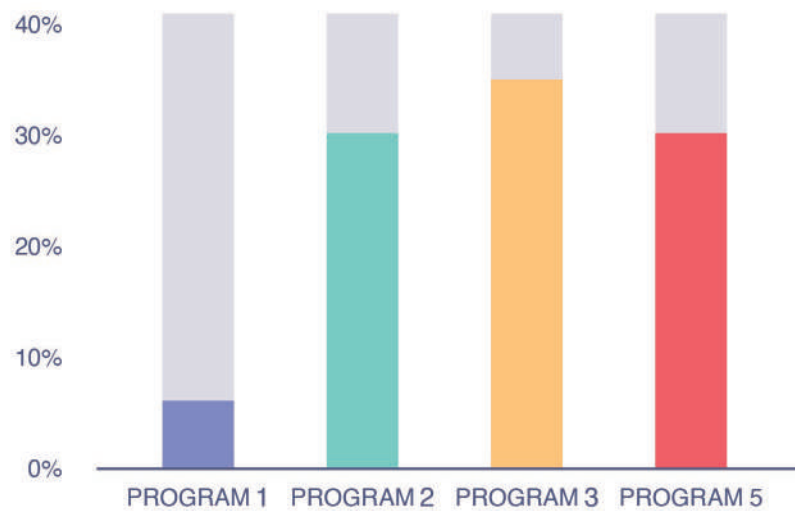
- N° of collaborative projects: **36**

N° OF ONGOING CLINICAL TRIALS: **161**

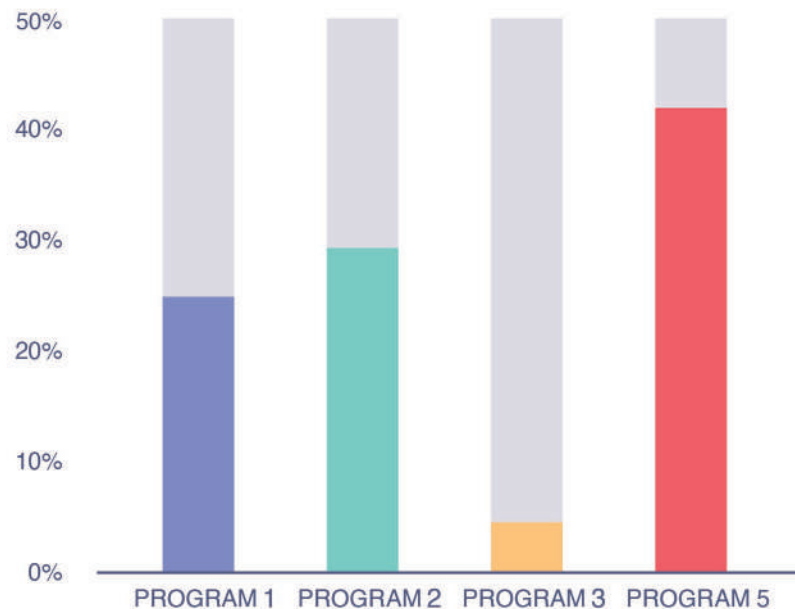
» PROGRAM 4



PUBLICATIONS IN COLLABORATION PROGRAM 4



PROJECTS IN COLLABORATION PROGRAM 4



SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» GENERAL GOALS

The increased life expectancy of the general population is directly linked to a higher incidence and prevalence of chronic and inflammatory diseases. This seriously affects the quality of life of this type of patient and has a key impact on their role in society. In addition, as these diseases are subjected to chronic treatments, they account for a significant percentage of health budgets.

For these reasons, the main objective of this program focuses on the approach to chronic disease from three key angles:

First of all, to widen our knowledge and characterize the molecular basis that underlies this type of disease.

Secondly, based on this new knowledge, to develop new therapeutic strategies which may lead to an improvement in the prognosis and development of the disease.

Finally, to develop new preventive strategies to prevent or delay the onset or evolution of this type of disease.

To sum up, its primary objective is to compile the clinical-molecular profiles underlying the development of chronic diseases and their comorbidities, and to develop new therapeutic strategies to use in follow-up and management of the diseases.

During 2021, 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 studies of basic, clinical and translational research, in the areas included in the different subprograms, and achieved a notable improvement compared to 2019 in the percentage of works led by the research groups, as well as in the global impact factor and the quality of the journals, despite the reduction in the number of groups involved.

A key part of achieving the objectives set in this program throughout the year 2021 also lay in the work of numerous research projects, on international, national or regional levels, obtained in competitive calls by the research groups involved. Around 24% of the articles published involved close collaboration between 2 or more research groups belonging to the various subprograms. There was also a key contribution made by emerging groups and associates.

It must be stressed that a major contribution to the quality of the publications came from the development of multi-center national and international projects which included large cohorts of patients, the implementation of new clinical trials and/or the use of animal models as a basis for studying the disease and the response to therapies.

» HIGHLIGHTED PUBLICATIONS

1. Colmenero J, Rodríguez-Perálvarez M, Salcedo M, Arias-Milla A, Muñoz-Serrano A, Graus J, Nuño J, Gastaca M, Bustamante-Schneider J, Cachero A, Lladó L, Caballero A, Fernández-Yunquera A, Loinaz C, Fernández I, Fondevila C, Navasa M, Iñarrairaegui M, Castells L, Pascual S, Ramírez P, Vinaixa C, González-Dieguez ML, González-Grande R, Hierro L, Nogueras F, Otero A, Álamo JM, Blanco-Fernández G, Fábrega E, García-Pajares F, Montero JL, Tomé S, De la Rosa G, Pons JA. Epidemiological pattern, incidence, and outcomes of COVID-19 in liver transplant patients. *J Hepatol.* 2021 Jan;74(1):148-155. doi: 10.1016/j.jhep.2020.07.040
IF:25,08 Q1(D1)
2. Raya-Povedano JL, Romero-Martín S, Elías-Cabot E, Gubern-Mérida A, Rodríguez-Ruiz A, Álvarez-Benito M. AI-based Strategies to Reduce Workload in Breast Cancer Screening with Mammography and Tomosynthesis: A Retrospective Evaluation. *Radiology.* 2021 Jul;300(1):57-65. doi: 10.1148/radiol.2021203555. Epub 2021 May 4. PMID: 33944627
IF: 11,11 Q1 D1
3. Patiño-Trives AM, Pérez-Sánchez C, Pérez-Sánchez L, Luque-Tévar M, Ábalos-Aguilera MC, Alcaide-Ruggiero L, Arias-de la Rosa I, Román-Rodríguez C, Seguí P, Espinosa M, Font P, Barbarroja N, Escudero-Contreras A, Antonio González-Reyes J, Manuel Villalba J, Collantes-Estévez E, Aguirre-Zamorano MÁ, López-Pedreira C. Anti-dsDNA Antibodies Increase the Cardiovascular Risk in Systemic Lupus Erythematosus Promoting a Distinctive Immune and Vascular Activation. *Arterioscler Thromb Vasc Biol.* 2021 Sep;41(9):2417-2430. doi: 10.1161/ATVBAHA.121.315928
IF: 10,514 Q1 D1

4. López-Cánovas JL, Del Rio-Moreno M, García-Fernandez H, Jiménez-Vacas JM, Moreno-Montilla MT, Sánchez-Frias ME, Amado V, L-López F, Fondevila MF, Ciria R, Gómez-Luque I, Briceño J, Nogueiras R, de la Mata M, Castaño JP, Rodríguez-Perálvarez M, Luque RM, Gahete MD. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. *Cancer Lett.* 2021 Jan 1;496:72-83. doi: 10.1016/j.canlet.2020.10.010
IF: 8,68 Q1
5. Perez-Sanchez, Laura; Patino-Trives, Alejandra M.; Angeles Aguirre-Zamorano, M.; Luque-Tevar, Maria; Carmen Abalos-Aguilera, M.; Arias-de La Rosa, Ivan; Segui, Pedro; Velasco-Gimena, Francisco; Barbarroja, Nuria; Escudero-Contreras, Alejandro; Collantes-Estevez, Eduardo; Perez-Sanchez, Carlos; Lopez-Pedreira, Chary. Characterization of Antiphospholipid Syndrome Atherothrombotic Risk by Unsupervised Integrated Transcriptomic Analyses. *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY.* 2021 Feb;41(2):865-877. doi: 10.1161/ATVBAHA.120.315346
IF: 8,31 Q1 D1

» 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 in EAS by 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:

- Analyzing the cellular and molecular mechanisms which regulate the effect of statins and other drugs under development (biological therapies) to prevent thrombosis and atherothrombosis in ASD such as APS, SLE or RA.
- Molecular, clinical and epidemiological research studies to define the pathophysiology of the disease and the therapeutic response in patients with spondyloarthritis.

NEUROLOGICAL DISEASES AND MENTAL HEALTH

Groups involved: GC28

Among the action plans implemented, the highlights were:

- Investigating the neuromodulation mechanisms underlying neurodegenerative processes such as Alzheimer's disease, Huntington's disease and multiple sclerosis, and studying the effect of different antioxidant agents, as well as transcranial magnetic stimulation on neuroplasticity, cell death, oxidative stress and behavioral phenotype in these pathologies.
- Carrying out research into 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 development of a bio-artificial kidney.
- A study of the basis underlying vascular calcification in chronic kidney disease.
- Evaluation of inflammation and calcifying vascular disease in uremia.
- Identification of biomarkers of kidney damage and vascular calcification.

It should be noted that over the past year a new emerging group (GE06 'Physiopathology of renal and vascular damage') was involved in this sub-program, which has contributed to both broadening its scientific and strategic objectives and enhancing its quality.

LIVER AND DIGESTIVE DISEASES

Groups involved: GC02

The action plans worth highlighting included:

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

CHRONIC INFLAMMATION AND SIGNALLING

Groups involved: GC29, GA03

Among the action plans implemented, the highlights were:

- Transcriptomic studies to characterize the involvement of immune system cells in dermatological pathologies such as atopic dermatitis, granuloma annulare and fibrosing frontal alopecia.
- Identification of prognostic factors for pulmonary involvement in patients with amyotrophic lateral sclerosis.
- Association studies between antibiotic resistance and mortality from pneumonia caused by infection with Klebsiella.
- Development of clinical trials in patients with obstructive sleep apnea syndrome.

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

Group GA08: Radiodiagnosis

The research conducted in 2021 mainly focused on:

- Study of cerebral vascular pathology
- Analysis of the therapeutic efficacy in breast, prostate and other urological tumors
- Artificial intelligent 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 2021

Nº OF PUBLICATIONS: 184

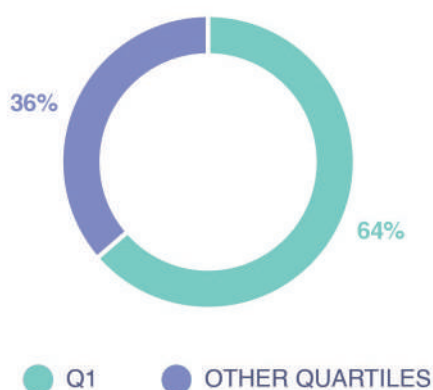
- Own: **36%**
- Nº of collaborative publications: **45**
- IF: **1032,12**
- Q1 (including D1): **64%**
- D1: **17%**

Nº OF ONGOING PROJECTS: 43

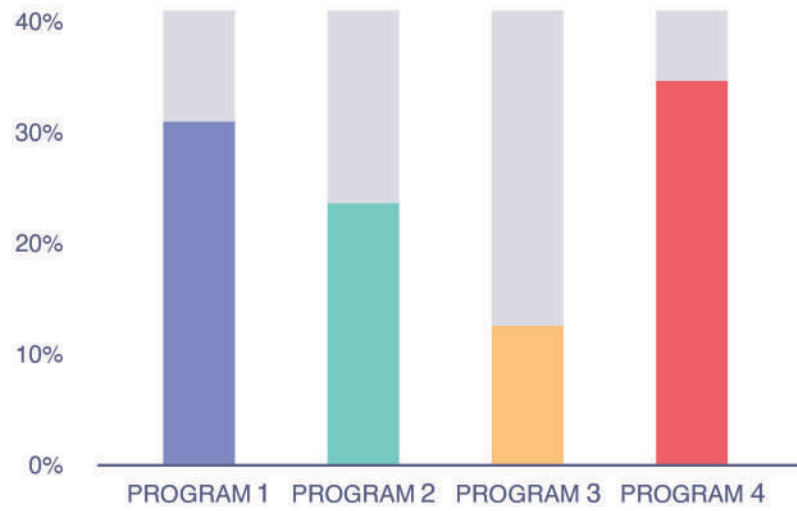
- Nº of collaborative projects: **34**

Nº OF ONGOING CLINICAL TRIALS: 146

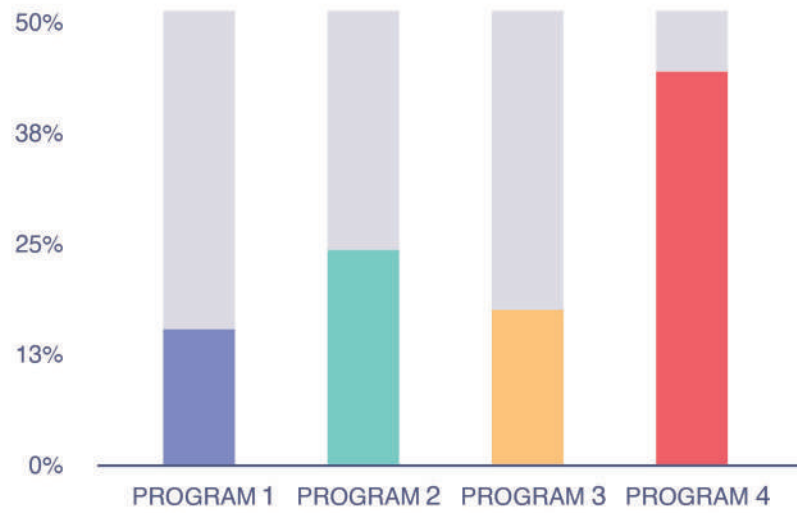
» PROGRAM 5



PUBLICATIONS IN COLLABORATION PROGRAM 5



PROJECTS IN COLLABORATION PROGRAM 5



8.2. SCIENTIFIC GROUPS

GC01:

IMMUNOLOGY AND ALLERGY

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

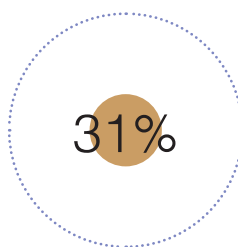
» TEAM

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

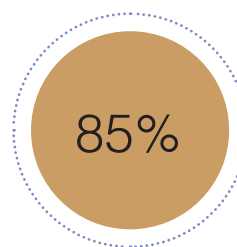
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



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
	Drugs

» HIGHLIGHTED PUBLICATIONS:

1. Manzanares-Martin B, Aranda AC, del Puerto-Nevaldo L, Gonzalez R, Solanes S, Gomez-Espana MA, Garcia-Foncillas J, Aranda E. Improving selection of patients with metastatic colorectal cancer to benefit from cetuximab based on KIR genotypes. JOURNAL FOR IMMUNOTHERAPY OF CANCER. 2021. 9(4):- DOI: 10.1136/jitc-2020-001705
IF: 13,751 Q1 D1
2. Reus B, Caserta S, Larsen M, Morrow G, Bano A, Hallensleben M, Rajkumar C, Pera A, Kern F. In-Depth Profiling of T-Cell Responsiveness to Commonly Recognized CMV Antigens in Older People Reveals Important Sex Differences. FRONTIERS IN IMMUNOLOGY. 2021. 12():-. DOI: 10.3389/fimmu.2021.707830
IF: 7,561 Q1 D2
3. Martin MC, Jurado A, Abad-Molina C, Orduna A, Yarce O, Navas AM, Cunill V, Escobar D, Boix F, Burillo-Sanz S, Vegas-Sanchez MC, Jimenez-de Las Pozas Y, Melero J, Aguilar M, Sobieschi OI, Lopez-Hoyos M, Ocejio-Vinyals G, San Segundo D, Almeida D, Medina S, Fernandez L, Vergara E, Quirant B, Martinez-Caceres E, Boiges M, Alonso M, Esparcia-Pinedo L, Lopez-Sanz C, Munoz-Vico J, Lopez-Palmero S, Trujillo A, Alvarez P, Prada A, Monzon D, Ontanon J, Marco FM, Mora S, Rojo R, Gonzalez-Martinez G, Martinez-Saavedra MT, Gil-Herrera J, Cantenys-Molina S, Hernandez M, Perurena-Prieto J, Rodriguez-Bayona B, Martinez A, Ocana E, Molina J. The age again in the eye of the COVID-19 storm: evidence-based decision making. IMMUNITY & AGEING. 2021. 18(1):- DOI: 10.1186/s12979-021-00237-w
IF: 6,40 Q1 D2

4. Formentini M, Navas A, Hassouneh F, Lopez-Sejas N, Alonso C, Tarazona R, Solana R, Pera A. Impact of Cytomegalovirus and Age on T-Cell Subsets Defined by CD161, CD300a, and/or CD57 Expression in Healthy Andalusians. JOURNALS OF GERONTOLOGY SERIES A-BIOLOGICAL SCIENCES AND MEDICAL SCIENCES. 2021. 76(11):1946-1953. DOI: 10.1093/gerona/glab140
IF: 6,053 Q1 D1
5. Hassouneh F, Goldeck D, Pera A, van Heemst D, Slagboom PE, Pawelec G, Solana R. Functional Changes of T-Cell Subsets with Age and CMV Infection. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES. 2021. 22(18):-.
DOI: 10.3390/ijms22189973
IF: 5,923 Q1 D3

» **ACTIVITY:**

- N° ONGOING PROJECTS: 10
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3
 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
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. SAS_ACCIÓN A- (SERVICIO ANDALUZ DE SALUD)- AURORA JURADO ROGER
 2. MIGUEL SERVET (INSTITUTO DE SALUD CARLOS III)- ALEJANDRA PERA ROJAS
 3. POSDOCTORALE 2019 (CONSEJERÍA DE TRANSFORMACIÓN ECONÓMICA, INDUSTRIA, CONOCIMIENTO Y UNIVERSIDADES)- FAKHRI HASSOUNEH
 4. PFIS 2020 (INSTITUTO DE SALUD CARLOS III)- PABLO ALVAREZ HEREDIA
 5. POSDOCTORALES 2020 (CONSEJERÍA DE SALUD Y FAMILIAS)- BÁRBARA MANZANARES MARTÍN
 6. RRHH P2MED (COMISIÓN EUROPEA)- ALEXANDER BATISTA DUHARTE
- AGREEMENTS WITH COMPANIES: 5

GC02:

OXIDATIVE AND NITROSATIVE STRESS IN ACUTE AND CHRONIC LIVER DISEASE

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

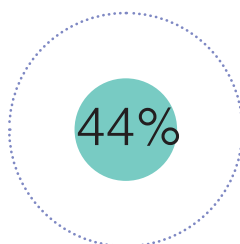
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
De la Mata	Garcia	Manuel	R4	0000-0002-5353-2188
Bárcena	Ruiz	José Antonio	R4	
Barrera	Baena	Pilar	R3	
Costán	Rodero	Guadalupe	R3	
Ferrín	Sánchez	Gustavo	R3	
Montero	Alvarez	José Luis	R3	
Padilla	Peña	Alicia	R3	
Peinado	Peinado	Jose	R3	
Poyato	González	Antonio	R3	
Requejo	Aguilar	Raquel	R3	
Rodriguez	Perálvarez	Manuel Luis	R3	
González	Rubio	Sandra	R2	
Linares	Luna	Clara Isabel	R2	
Vida	Perez	Luis	R2	
Amado	Torres	Victor	R1	
Benítez	Cantero	José Manuel	R1	
Espejo	Cruz	María Lola	R1	
Fernández	González	Rocío	R1	
Guerrero	Misas	Marta	R1	
Iglesias	Flores	Eva	R1	
Medina	Medina	Rosario	R1	
Gómez	Núñez	María Isabel	T	
Salgueiro	Rodriguez	María Isabel	T	

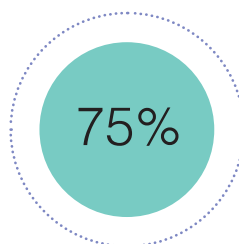
» SCIENTIFIC PRODUCTION



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:

- Espejo-Cruz ML, Gonzalez-Rubio S, Zamora-Olaya J, Amado-Torres V, Alejandro R, Sanchez-Frias M, Ciria R, De la Mata M, Rodriguez-Peralvarez M, Ferrin G. Circulating Tumor Cells in Hepatocellular Carcinoma: A Comprehensive Review and Critical Appraisal. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*. 2021. 22(23):- . DOI: 10.3390/ijms222313073
IF: 5,924 Q1 D3
- Amado V, Gonzalez-Rubio S, Zamora J, Alejandro R, Espejo-Cruz ML, Linares C, Sanchez-Frias M, Garcia-Jurado G, Montero JL, Ciria R, Rodriguez-Peralvarez M, Ferrin G, De la Mata M. Clearance of Circulating Tumor Cells in Patients with Hepatocellular Carcinoma Undergoing Surgical Resection or Liver Transplantation. *CANCERS*. 2021. 13(10):- . DOI: 10.3390/cancers13102476
IF: 6,639 Q1 D3
- Martina JA, Guerrero-Gomez D, Gomez-Orte E, Barcena JA, Cabello J, Miranda-Vizuetete A, Puertollano R. A conserved cysteine-based redox mechanismsustains TFEB/HLH-30 activity under persistent stress. *EMBO JOURNAL*. 2021. 40(3):- . DOI: 10.15252/embj.2020105793
IF: 11,598 Q1 D1
- Colmenero J, Rodríguez-Perálvarez M*, Salcedo M, Arias-Milla A, Muñoz-Serrano A, Graus J, Nuño J, Gastaca M, Bustamante-Schneider J, Cachero A, Lladó L, Caballero A, Fernández-Yunquera A, Loinaz C, Fernández I, Fondevilla C, Navasa M, Iñárraeraegui M, Castells L, Pascual S, Ramírez P, Vinaixa C, González-Dieguez ML, González-Grande R, Hierro L, Nogueras F, Otero A, Álamo JM, Blanco-Fernández G, Fábrega E, García-Pajares F, Montero JL, Tomé S, De laRosa G, Pons JA. Epidemiological pattern, incidence and outcomes of COVID-19 in liver transplant patients. *Journal of Hepatology*. 2020;74(1):148-155. DOI: 10.1016/j.jhep.2020.07.040
IF: 25,08 D1
- Lopez-Canovas JL, del Rio-Moreno M, Garcia-Fernandez H, Jimenez-Vacas JM, Moreno-Montilla MT, Sanchez-Frias ME, Amado V, Lopez FL, Fondevila MF, Ciria R, Gomez-Luque I, Briceno J, Nogueiras R, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. *CANCER LETTERS*. 2021. 496():72-83. DOI: 10.1016/j.canlet.2020.10.010
IF: 8,679 Q1 D2

» CLINICAL GUIDES:

1. Rodriguez-Peralvarez M, Gomez-Bravo MA, Sanchez-Antolin G, De la Rosa G, Bilbao I, Colmenero J. Expanding Indications of Liver Transplantation in Spain: Consensus Statement and Recommendations by the Spanish Society of Liver Transplantation. TRANSPLANTATION. 2021. 105(3):602-607. DOI: 10.1097/TP.0000000000003281
IF: 4,939 Q1 D2
2. Reig M, Forner A, Ávila MA, Ayuso C, Mínguez B, Varela M, Bilbao I, Bilbao JI, Burrel M, Bustamante J, Ferrer J, Gómez MÁ, Llovet JM, De la Mata M, Matilla A, Pardo F, Pastrana MA, Rodríguez-Perálvarez M, Tabernero J, Urbano J, Vera R, Sangro B, Bruix J. Diagnosis and treatment of hepatocellular carcinoma. Update of the consensus document of the AEEH, AEC, SEOM, SERAM, SERVEI, and SETH. MEDICINA CLINICA (Barc). 2021 May 7;156(9):463.e1-463.e30. doi: 10.1016/j.medcli.2020.09.022. Epub 2021 Jan 16. PMID: 33461840
IF: 1,725 Q3

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 31

» 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: 4
 1. RÍO HORTEGA (ISCIII) – MARTA GUERRERO MISAS
 2. PFIS (ISCIII) – MARÍA LOLA ESPEJO CRUZ
 3. POSDOCTORALES 2020 (CONSEJERÍA DE SALUD Y FAMILIAS) – SANDRA GONZÁLEZ RUBIO
 4. INTENSIFICACIÓN: ACCIÓN B (CLINICAL RESEARCHER-SAS) – MANUEL L. RODRÍGUEZ PERÁLVAREZ
- AGREEMENTS WITH COMPANIES: 3
- AWARDS: 2
 1. M. Rodríguez-Perálvarez; Premio IESE-Novartis 2021 a la excelencia operativa en gestión sanitaria (accésit) en la categoría de iniciativas innovadoras de gestión basadas en Nuevas Tecnologías de la Información y el Conocimiento: Digitalización, Big Data, Inteligencia Artificial ó Telemedicina que aporten valor al sistema; IESE-Novartis, 2021.
 2. M. Rodríguez-Perálvarez; Premio RISING STAR por la trayectoria investigadora excelente en el ámbito de la hepatología a nivel nacional por debajo de los 40 años; Asociación Española para el Estudio del Hígado (AEEH), 2021.

GC03:

INFECTIOUS DISEASES

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

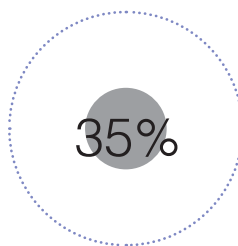
» TEAM

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	
Gavilán	Guirao	Fuensanta María	R2	
Natera	Kindelan	Clara	R2	
Rumbao	Aguirre	José Manuel	R2	
Sergobe	Luque	David	R2	
Vidal	Verdu	Elisa	R2	
Cano	Yuste	Angela	R1	
Fernández	Moreno	Raquel	R1	
Gálvez	Soto	Víctor	R1	
Méndez	Natera	Alejandra	R1	
Páez	Vega	Aurora	R1	
Recio	Rufián	Manuel	R1	
Valle	Arroyo	Jorge	R1	
Ruiz	Sánchez De Puerta	Lourdes	N	
Añon	Gamez	María Teresa	ADM	
Cantueso	Méndez	Inmaculada	ADM	
Del Hoyo	Navarro	Antonio Jesús	ADM	
De la Torre	Giménez	Julián	T	
Salinas	Gavilán	Ana	T	

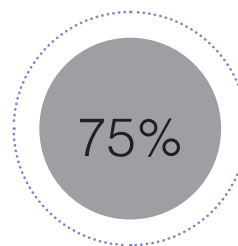
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cytomegalovirus	Transplantation
Multidrug-resistant microorganisms	Specific immune response
Immunopathology	

» HIGHLIGHTED PUBLICATIONS:

1. Paez-Vega A, Cantisan S, Aguera ML, Suner M, Facundo C, Yuste JR, Fernandez-Ruiz M, Montejo M, Redondo-Pachon D, Lopez-Oliva MO, Fernandez-Rodriguez A, Farinas MC, Hernandez D, Len O, Munoz P, Valle-Arroyo J, Rodelo-Haad C, Cordero E, Torre-Cisneros J. Pretransplant CMV-Specific T-Cell Immunity But Not Dose of Antithymocyte Globulin Is Associated With Recovery of Specific Immunity After Kidney Transplantation. *JOURNAL OF INFECTIOUS DISEASES*. 2021. 223(7):1205-1213. DOI: 10.1093/infdis/jiaa503
IF: 5,226 Q1 D2
2. Pérez-Nadales E, Alastruey-Izquierdo A, Linares-Sicilia MJ, Soto-Debran JC, Abdala E, Garcia-Rodriguez J, Montejo M, Munoz P, Lleti MS, Rezusta A, de Pipaon MRP, Yanez L, Merino E, Campos-Herrero MI, Costa-Mateo JM, Fortun J, Garcia-Lozano T, Garcia-Vidal C, Fernandez-Ruiz M, Sanchez-Reus F, Castro-Mendez C, Guerrero-Lozano I, Soler-Palacin P, Aguado JM, Martinez-Martinez L, Torre-Cisneros J, Nucci M. Invasive Fusariosis in Nonneutropenic Patients, Spain, 2000-2015. *EMERGING INFECTIOUS DISEASES*. 2021. 27(1):26-35. DOI: 10.3201/eid2701.190782
IF: 6,883 Q1 D1
3. Fernández-Moreno R, Torre-Cisneros J, Cantisan S. Human cytomegalovirus (HCMV)-encoded microRNAs: potential biomarkers and clinical applications. *RNA BIOLOGY*. 2021. 18(12):2194-2202. DOI: 10.1080/15476286.2021.1930757
IF: 4,652 Q2 D4
4. Lopez-Vinau T, Penalva G, Garcia-Martinez L, Caston JJ, Munoz-Rosa M, Cano A, Recio M, Cisneros JM, Perez-Nadales E, Aguirre JR, Garcia-Martinez E, Salcedo I, del Prado JR, de la Fuente C, Martinez-Martinez L, Gracia-Ahufinger I, Torre-Cisneros J. Impact of an Antimicrobial Stewardship Program on the Incidence of Carbapenem Resistant Gram-Negative Bacilli: An Interrupted Time-Series Analysis. *ANTIBIOTICS-BASEL*. 2021. 10(5):. DOI: 10.3390/antibiotics10050586
IF: 4,639 Q2 D3
5. Gutiérrez-Gutiérrez B, Pérez-Nadales E, Pérez-Galera S, Fernández-Ruiz M, Carratalà J, Oriol I, Cordero E, Lepe JA, Tan BH, Corbella L, Paul M, Natera AM, David MD, Montejo M, Iyer RN, Pierrotti LC, Merino E, Steinke SM, Rana MM, Muñoz P, Mularoni A, van Delden C, Grossi PA, Seminari EM, Gunseren F, Lease ED, Roilides E, Fortún J, Arslan H, Coussement J, Tufan ZK, Pilmis B, Rizzi M, Loeches B, Eriksson BM, Abdala E, Soldani F, Lowman W, Clemente WT, Bodro M, Fariñas MC, Kazak E, Martínez-Martínez L, Aguado JM, Torre-Cisneros J, Pascual Á, Rodríguez-Baño J; Investigators from the REIPI/ESGICH/ESGBIS/INCREMENT-SOT Group. Propensity Score and Desirability of Outcome Ranking Analysis of Ertapenem for Treatment of Nonsevere Bacteremic Urinary Tract Infections Due to Extended-Spectrum-Beta-Lactamase-Producing Enterobacterales in Kidney Transplant Recipients. *Antimicrob Agents Chemother*. *PHARMACOLOGY & PHARMACY*. 2021 Oct 18;65(11): e0110221. doi: 10.1128/AAC.01102-21. Epub 2021 Aug 9. PMID: 34370578
IF: 5,191 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 9

» ADDITIONAL INFORMATION:

- NETWORKS: 7
 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)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. INTENSIFICACIÓN (ISCIII) – JULIÁN DE LA TORRE CISNEROS
 2. POSDOCTORALES 2020 (CONSEJERÍA SALUD Y FAMILIAS) – ELENA PÉREZ NADALES
 3. INTENSIFICACIÓN ACCIÓN A (SAS) – JULIÁN DE LA TORRE CISNEROS
 4. INTENSIFICACIÓN ACCIÓN B (CLINICAL RESEARCHER) (SAS) – SARA CANTISÁN BOHÓRQUEZ
 5. RÍO HORTEGA (ISCIII) – TERESA LÓPEZ-VIÑAU LÓPEZ
 6. FPU18/01970. FORMACIÓN Y MOVILIDAD DENTRO DEL PROGRAMA ESTATAL DE PROMOCIÓN DEL TALENTO Y SU EMPLEABILIDAD; Alejandra Méndez Natera. 2019-2023
- AGREEMENTS WITH COMPANIES: 4
- INTERNATIONAL PROJECTS: 4
 1. JUAN JOSE CASTON OSORIO; CAVICOR - Impact of the treatment with ceftazidime/avibactam vs best available therapy on mortality of patients with infections caused by carbapenem-resistant Enterobacteriaceae; Funding Agency: PFIZER, S.A; Reference: INSPIRE-2018-02
 2. JULIAN CARLOS DE LA TORRE CISNEROS; COMBACTE-NET - Combatting Bacterial Resistance in Europe; Funding Agency: COMISIÓN EUROPEA; Reference: IMI-2012-001
 3. JULIAN CARLOS DE LA TORRE CISNEROS; COMBACTE-CARE - Combatting Bacterial Resistance in Europe – Carbapenem Resistance; Funding Agency: COMISIÓN EUROPEA; Reference: IMI-2013-001
 4. JULIAN CARLOS DE LA TORRE CISNEROS; REVERSE - pREvention and management tools for rEducing antibiotic Resistance in high prevalence Settings.; Funding Agency: COMISIÓN EUROPEA; Reference: BHC34-2020-01

GC04:

INFLAMMATION AND CANCER

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

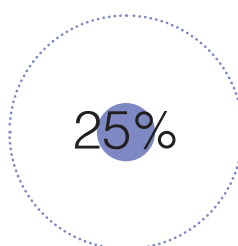
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Muñoz	Blanco	Eduardo	R4	0000-0001-8478-5842
Calzado	Canale	Marco Antonio	R4	
García	Martín	Adela	R2	
Navarrete	Rueda	Carmen	R2	
Prados	González	María Eugenia	R2	
Unciti	Broceta	Juan Diego	R2	
Correa	Sáez	Alejandro	R1	
Garrido	Rodríguez-Córdoba	Martin	R1	
Jiménez	Izquierdo	Rafael	R1	
Morrugares	Carmona	Rosario	R1	
Collado	Rojas	Juan Antonio	T	

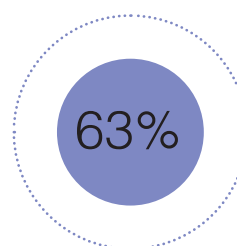
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Inflammation	Endocannabinoid system
Cancer	Pharmacology
Hypoxia	Cell signaling

» HIGHLIGHTED PUBLICATIONS:

1. Gonzalez-Mariscal I, Carmona-Hidalgo B, Winkler M, Unciti-Broceta JD, Escamilla A, Gomez-Canas M, Fernandez-Ruiz J, Fiebich BL, Romero-Zerbo SY, Bermudez-Silva FJ, Collado JA, Munoz E. (+)-trans-Cannabidiol-2-hydroxy pentyl is a dual CB1R antagonist/CB2R agonist that prevents diabetic nephropathy in mice. PHARMACOLOGICAL RESEARCH. 2021. 169():-. DOI: 10.1016/j.phrs.2021.105492
IF: 7,658 Q1 D1
2. Lara-Chica M, Correa-Sáez A, Jiménez-Izquierdo R, Garrido-Rodríguez M, Ponce FJ, Moreno R, Morrison K, Di Vona C, Arató K, Jiménez-Jiménez 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 DIFFER. 2021 Aug 6. doi: 10.1038/s41418-021-00845-5
IF: 15,828 Q1 D1
3. Prados ME, Correa-Saez A, Unciti-Broceta JD, Garrido-Rodriguez M, Jimenez-Jimenez C, Mazzone M, Minassi A, Appendino G, Calzado MA, Munoz E. Betulinic Acid Hydroxamate is Neuroprotective and Induces Protein Phosphatase 2A-Dependent HIF-1 alpha Stabilization and Post-transcriptional Dephosphorylation of Prolyl Hydrolase 2. NEUROTHERAPEUTICS. 2021. 18(3):1849-1861. DOI: 10.1007/s13311-021-01089-4
IF: 7,62 Q1 D1
4. Prados ME, Garcia-Martin A, Unciti-Broceta JD, Palomares B, Collado JA, Minassi A, Calzado MA, Appendino G, Munoz E. Betulinic acid hydroxamate prevents colonic inflammation and fibrosis in murine models of inflammatory bowel disease. ACTA PHARMACOLOGICA SINICA. 2021. 42(7):1124-1138. DOI: 10.1038/s41401-020-0497-0
IF: 6,15 Q1 D2
5. Garcia-Martin A, Navarrete C, Garrido-Rodriguez M, Prados ME, Caprioglio D, Appendino G, Munoz E. EHP-101 alleviates angiotensin II-induced fibrosis and inflammation in mice. BIOMEDICINE & PHARMACOTHERAPY. 2021. 142():-. DOI: 10.1016/j.biopha.2021.112007
IF: 6,529 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2021: 3
- N° PHD THESES: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 2
 1. PAIDI BIO-304
 2. Grupo Español de Hipoxia y RedHYPOX
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. AYUDAS PARA LA FORMACIÓN DE PROFESORADO UNIVERSITARIO (FPU), MINISTERIO DE UNIVERSIDADES – ALEJANDRO CORREA SÁEZ
- AGREEMENTS WITH COMPANIES: 3

GC05:

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

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

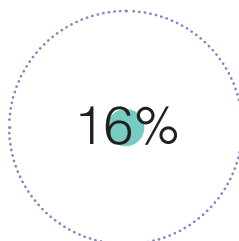
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
López	Pedraera	R4	0000-0003-2067-4603
Collantes	Estévez	R4	
Aguirre	Zamorano	R3	
Alburquerque	Sendín	R3	
Barbarroja	Puerto	R3	
Escudero	Contreras	R3	
Font	Ugalde	R3	
Lopez	Medina	R3	
Pérez	Sánchez	R3	
Aranda	Valera	R2	
Arias	De la Rosa	R2	
Calvo	Gutiérrez	R2	
Caracuel	Ruiz	R2	
Ladehesa	Pineda	R2	
Lopez	Montilla	R2	
Ortega	Castro	R2	
Pérez	Guijo	R2	
Puche	Larrubia	R2	
Rojas	Giménez	R2	
Armenteros	Ortiz	R1	
Gómez	García	R1	
Jurado	Ruiz	R1	
Luque	Tevar	R1	
Muñoz	Barrera	R1	
Patiño	Trives	R1	
Sánchez	Pareja	R1	
Segura	Ruiz	R1	

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Ruiz	Vilchez	Desirée	R1	
Ábalos	Aguilera	María Carmen	T	
Ortiz	Buitrago	Pedro	T	
Román	Rodríguez	Cristóbal	T	

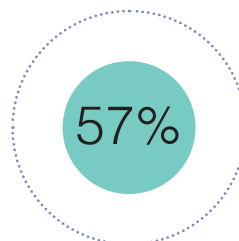
» SCIENTIFIC PRODUCTION



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:

- de la Rosa IA, Escudero-Contreras A, Ruiz-Ponce M, Roman-Rodríguez C, Perez-Sanchez C, Abalos-Aguilera MD, Ortega-Castro R, Alcaide J, Murri M, Font P, Calvo-Gutierrez J, Luque-Tevar M, Patino-Trives AM, Guzman-Ruiz R, Malagon MD, Tinahones FJ, Collantes-Estevez E, Lopez-Pedrerera C, Barbarroja N. Molecular Changes in the Adipose Tissue Induced by Rheumatoid Arthritis: Effects of Disease-Modifying Anti-Rheumatic Drugs. FRONTIERS IN IMMUNOLOGY. 2021. 12():-. DOI: 10.3389/fimmu.2021.744022
IF: 7,561 Q1 D2
- Patino-Trives AM, Perez-Sanchez C, Perez-Sanchez L, Luque-Tevar M, Abalos-Aguilera MC, Alcaide-Ruggiero L, Arias-de la Rosa I, Roman-Rodríguez C, Segui P, Espinosa M, Font P, Barbarroja N, Escudero-Contreras A, Gonzalez-Reyes JA, Villalba JM, Collantes-Estevez E, Aguirre-Zamorano MA, Lopez-Pedrerera C. Anti-dsDNA Antibodies Increase the Cardiovascular Risk in Systemic Lupus Erythematosus Promoting a Distinctive Immune and Vascular Activation. ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY. 2021. 41(9):2417-2430. DOI: 10.1161/ATVBAHA.121.315928
IF: 8,311 Q1 D1
- Perez-Sanchez L, Patino-Trives AM, Aguirre-Zamorano MA, Luque-Tevar M, Abalos-Aguilera MC, Arias-de La Rosa I, Segui P, Velasco-Gimena F, Barbarroja N, Escudero-Contreras A, Collantes-Estevez E, Perez-Sanchez C, Lopez-Pedrerera C. Characterization of Antiphospholipid Syndrome Atherothrombotic Risk by Unsupervised Integrated Transcriptomic Analyses. ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY. 2021. 41(2):865-877. DOI: 10.1161/ATVBAHA.120.315346
IF: 8,311 Q1 D1

4. Lopez-Medina C, Ortega-Castro R, Castro-Villegas MC, Font-Ugalde P, Puche-Larrubia MA, Gomez-Garcia I, Arias-de la Rosa I, Barbarroja N, Schiotis R, Collantes-Estevez E. Axial and peripheral spondyloarthritis: does psoriasis influence the clinical expression and disease burden? Data from REGISPONER registry. RHEUMATOLOGY. 2021. 60(3):1125-1136. DOI: 10.1093/rheumatology/keaa398
IF: 7,58 Q1 D2
5. Luque-Tevar M, Perez-Sanchez C, Patino-Trives AM, Barbarroja N, de la Rosa IA, Abalos-Aguilera MC, Marin-Sanz JA, Ruiz-Vilchez D, Ortega-Castro R, Font P, Lopez-Medina C, Romero-Gomez M, Rodriguez-Escalera C, Perez-Venegas J, Ruiz-Montesinos MD, Dominguez C, Romero-Barco C, Fernandez-Nebro A, Mena-Vazquez N, Marengo JL, Uceda-Montanez J, Toledo-Coello MD, Aguirre MA, Escudero-Contreras A, Collantes-Estevez E, Lopez-Pedraza C. Integrative Clinical, Molecular, and Computational Analysis Identify Novel Biomarkers and Differential Profiles of Anti-TNF Response in Rheumatoid Arthritis. FRONTIERS IN IMMUNOLOGY. 2021. 12():-. DOI: 10.3389/fimmu.2021.631662
IF: 7,561 Q1 D2

» CLINICAL GUIDES:

1. Lopez-Soto PJ, Lopez-Carrasco JD, Fabbian F, Minarro-Del Moral RM, Segura-Ruiz R, Hidalgo-Lopezosa P, Manfredini R, Rodriguez-Borrego MA. Chronoprevention in hospital falls of older people: protocol for a mixed-method study. BMC NURSING. 2021. 20(1):- DOI: 10.1186/s12912-021-00618-y.
IF: 2,283 Q2 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 7
- N° GRANTED PROJECTS IN 2021: 4
- N° PHD THESES: 3

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 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
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 7
 1. NICOLÁS MONARDES (SAS) – ROSARIO LÓPEZ PEDRERA
 2. INTENSIFICACIÓN ACCIÓN A (SAS) – EDUARDO COLLANTES ESTÉVEZ
 3. RAMÓN Y CAJAL (MICINN) – NURIA BARBARROJA PUERTO
 4. INTENSIFICACIÓN ACCIÓN B (SAS) – JERUSALEM CALVO GUTIÉRREZ
 5. RÍO HORTEGA (ISCIII) – CLEMENTINA LÓPEZ MEDINA
 6. POSDOCTORALES (CONSEJERÍA DE TRANSFORMACIÓN ECONÓMICA, INDUSTRIA, CONOCIMIENTO Y UNIVERSIDADES –CTEICU) – CARLOS PÉREZ SÁNCHEZ
 7. INTENSIFICACIÓN (ISCIII) – ALEJANDRO ESCUDERO CONTRERAS
- AGREEMENTS WITH COMPANIES: 14
- INTERNATIONAL PROJECTS: 4
 1. EDUARDO COLLANTES ESTEVEZ; Can Inertial Movement Sensors (IMUs) provide a valid and reliable way of measuring Spinal Mobility in Axial Spondyloarthritis (axSpa): a Clinimetric Evaluation; Funding Agency: FOUNDATION FOR RESEARCH IN RHEUMATOLOGY; Reference: FOREUM-2015-001
 2. 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
 3. 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-lir-2020-001
 4. 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: 5

1. IVAN ARIAS DE LA ROSA; JJII21- IVAN ARIAS DE LA ROSA - SESSION II - Premio a la mejor comunicación de la SESSION II. Multidisciplinary; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJII21/0002
2. ROSARIO LÓPEZ PEDRERA. 1º Premio a la mejor comunicación oral en el 27 Congreso de la Sociedad Andaluza de Reumatología.
3. IVÁN ARIAS DE LA ROSA. 2º Premio a la mejor comunicación en formato Póster en el 27 congreso de la Sociedad Andaluza de Reumatología.
4. ROSARIO LOPEZ PEDRERA. Award for the best submitted abstract in the category of Basic Science to the European Congress of Rheumatology. EULAR 2021.
5. ROSARIO LOPEZ PEDRERA. Premio de la Sociedad Española de Reumatología 2021 al mejor trabajo presentado sobre ciencia básica publicado en el año 2020.

NEW THERAPIES IN CANCER**SCIENTIFIC PROGRAM 4:
CANCER (ONCOLOGY AND ONCOHEMATOLOGY)****» TEAM**

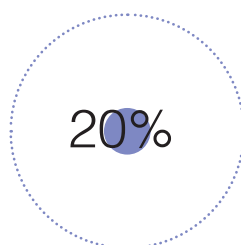
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Aranda	Aguilar	Enrique	R4
De La Haba	Rodríguez	Juan Rafael	R4
Rodríguez	Ariza	Antonio	R4
Gómez	España	María Auxiliadora	R3
Guil	Luna	Silvia	R3
Barneto	Aranda	Isidoro C.	R2
Fuentes	Vaamonde	Elena	R2
García	Ortiz	María Victoria	R2
Martínez	Peinado	Antonio	R2
Mena	Osuna	Rafael	R2
Morales	Estévez	Cristina	R2
Rubio	Pérez	Mª Jesús	R2
Serrano	Blanch	Raquel	R2
Toledano	Fonseca	Marta	R2
Valladares	Ayerbes	Manuel J.	R2
Villar	Pastor	Carlos	R2
Cano	Osuna	María Teresa	R1
Inga	Saavedra	Elizabeth	R1
López	Gómez	Javier	R1
Mantrana	Soldado	Ana	R1
Méndez	Vidal	María José	R1
Montero	Gómez	Marina	R1
Moreno	Vega	Alberto Luis	R1
Navarrete	Sirvent	Carmen	R1
Ortiz	Morales	María José	R1
Porras	Quintela	Ignacio	R1
Pulido	Cortijo	Gema	R1
Rodríguez	Alonso	Beatriz	R1
Rodríguez	Alonso	Rosa María	R1
Sánchez	Mauriño	Pedro	R1
Sánchez	Montero	Mª Teresa	R1
Rodríguez	De Julián	Sonia	ADM
Aranda	Aguilar	Asunción	T

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Bernal	García	Gonzalo	T
Campón	Montilla	Daniel José	T
Díaz	Díaz	Ángeles María	T
Kindelan	Segador	Lara	T
Leña	Barranco	Amalia	T
Marín	Serrano	Jacinta	T
Marín	Serrano	María José	T
Márquez	Gómez-Lama	Nieves	T
Moral	Garófano	Virginia	T
Pavón	Gómez	Rebeca	T
Rodríguez	De Julián	Carlos	T
Sánchez	Ostos	Manuel	T
Vázquez	Ibáñez	Pilar	T

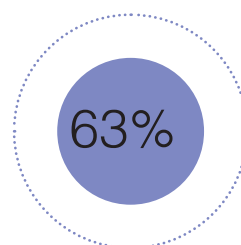
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

- Garcia-Alfonso P, Munoz A, Jimenez-Castro J, Jimenez-Fonseca P, Pericay C, Longo-Munoz F, Reyna-Fortes C, Argiles-Martinez G, Gonzalez-Astorga B, Gomez-Reina MJ, Ruiz-Casado A, Rodriguez-Salas N, Lopez-Lopez R, Carmona-Bayonas A, Conde-Herrero V, Aranda E. Early Clinical Experience with Trifluridine/Tipiracil for Refractory Metastatic Colorectal Cancer: The ROS Study. *CANCERS*. 2021. 13(18):- . DOI: 10.3390/cancers13184514
IF: 6,639 Q1 D3
- Guil-Luna S, Sedlik C, Piaggio E. Humanized Mouse Models to Evaluate Cancer Immunotherapeutics. *ANNUAL REVIEW OF CANCER BIOLOGY, VOL 5, 2021*. 2021. 5():119-136. DOI: 10.1146/annurev-cancerbio-050520-100526.
IF: 9,391 Q1 D2

3. Manzanares-Martin B, Aranda AC, del Puerto-Nevado L, Gonzalez R, Solanes S, Gomez-Espana MA, Garcia-Foncillas J, Aranda E. Improving selection of patients with metastatic colorectal cancer to benefit from cetuximab based on KIR genotypes. JOURNAL FOR IMMUNOTHERAPY OF CANCER. 2021. 9(4):- . DOI: 10.1136/jitc-2020-001705
IF: 13,751 Q1 D1
4. Lopez-Sanchez LM, Mena R, Guil-Luna S, Mantrana A, Penarando J, Toledano-Fonseca M, Conde F, De La Haba-Rodriguez JR, Aranda E, Rodriguez-Ariza A. Nitric oxide-targeted therapy inhibits stemness and increases the efficacy of tamoxifen in estrogen receptor-positive breast cancer cells. LABORATORY INVESTIGATION. 2021. 101(3):292-303. DOI: 10.1038/s41374-020-00507-z
IF: 5,662 Q1 D2
5. Toledano-Fonseca M, Cano MT, Inga E, Gomez-Espana A, Guil-Luna S, Garcia-Ortiz MV, Mena-Osuna R, De la Haba-Rodriguez JR, Rodriguez-Ariza A, Aranda E. The Combination of Neutrophil-Lymphocyte Ratio and Platelet-Lymphocyte Ratio with Liquid Biopsy Biomarkers Improves Prognosis Prediction in Metastatic Pancreatic Cancer. CANCERS. 2021. 13(6):- . DOI: 10.3390/cancers13061210
IF: 6,639 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 93
- N° PHD THESES: 2

» 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: 5
 1. PREDOCTORAL AECC 2019 – ANA MANTRANA SOLDADO
 2. NICOLÁS MONARDES (SAS) – ANTONIO RODRÍGUEZ ARIZA
 3. INTENSIFICACIÓN (ISCIII) – JUAN DE LA HABA RODRÍGUEZ
 4. POSDOCTORALES (CSyF) – SILVIA GUIL LUNA
 5. CONTRATO PREDOCTORAL PARA LA FORMACIÓN DE DOCTORES I+D+i (AEI) – MARÍA TERESA SÁNCHEZ MONTERO
- AGREEMENTS WITH COMPANIES: 16
- AWARDS: 2
 1. RAFAEL MENA OSUNA; Premio Jóvenes Investigadores Rafael Mena Osuna; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJII21/0001
 2. ANA MANTRANA SOLDADO; Premio Jóvenes Investigadores 2021 Ana Mantrana; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJII21/0004

GC07:

NEPHROLOGY. CELL DAMAGE IN CHRONIC INFLAMMATION

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

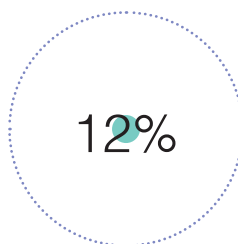
» TEAM

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

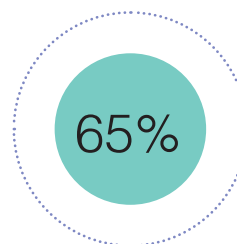
» SCIENTIFIC PRODUCTION



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:

- Guerrero F, Carmona A, Jimenez MJ, Obrero T, Pulido V, Moreno JA, Soriano S, Martín-Malo A, Aljama P. Passage Number-Induced Replicative Senescence Modulates the Endothelial Cell Response to Protein-Bound Uremic Toxins. *Toxins (Basel)*. 2021 Oct 19;13(10):738. doi: 10.3390/toxins13100738
IF: 4,546 Q1 D3
- De Mier MVPR, Vergara N, Rodelo-Haad C, Lopez-Zamorano MD, Membrives-Gonzalez C, Lopez-Baltanas R, Munoz-Castaneda JR, Caravaca F, Martin-Malo A, Felsenfeld AJ, De la Torre EJ, Soriano S, Santamaria R, Rodriguez M. Assessment of Inorganic Phosphate Intake by the Measurement of the Phosphate/Urea Nitrogen Ratio in Urine. *NUTRIENTS*. 2021. 13(2):- DOI: 10.3390/nu13020292
IF: 5,717 Q1 D2
- Garcia-Montemayor V, Martin-Malo A, Barbieri C, Bellocchio F, Soriano S, de Mier VPR, Molina IR, Aljama P, Rodriguez M. Predicting mortality in hemodialysis patients using machine learning analysis. *CLINICAL KIDNEY JOURNAL*. 2021. 14(5):1388-1395. DOI: 10.1093/ckj/sfaa126
IF: 4,452 Q1 D3
- Rosa-Guerrero P, Trujillo-Aguilera A, Molina J, Navas A, Lopez-Martin C, Jurado A, Rodriguez-Benot A, Torres-De-Rueda A. Case Report: Successful Response to Intravenous Immunoglobulin and Steroid Pulses in a Renal Transplant Recipient With Severe Covid-19 Disease and Associated Acute Allograft Failure. *FRONTIERS IN IMMUNOLOGY*. 2021. 12():-. DOI: 10.3389/fimmu.2021.671013
IF: 7,561 Q1 D2
- Crespo-Montero R, Gomez-Lopez VE, Guerrero-Pavon F, Carmona-Munoz A, Romero-Saldana M, Ranchal-Sanchez A, Aljama-Garcia P. Influence of Tunneled Hemodialysis-Catheters on Inflammation and Mortality in Dialyzed Patients. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*. 2021. 18(14):- DOI: 10.3390/ijerph18147605
IF: 3,39 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° CLINICAL TRIALS: 16

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. ANDRÉS Spanish Renal Research Network (REDinREN)
 2. PAIDI CTS-260
 3. Medtronic PSP-RCS
 4. Hyperphosphatemia and CKD
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. ANDRÉS CARMONA MUÑOZ (CTEICU) – POSDOCTORALES 2019
 2. ANDRÉS CAMONA MUÑOZ (CSyF) – POSDOCTORALES 2020
- AGREEMENTS WITH COMPANIES: 6
- AWARDS: 4
 1. M. Ciudad Montejo, C. Rodelo Haad, DA. Rodríguez Fuentes, I. López López, JR. Muñoz Castañeda, M. Rodríguez Portillo, A. Martín Malo. Captadores cálcicos y regulación de FGF23. PREMIO mejor comunicación e-poster en el 51 Congreso de la Sociedad Española de Nefrología 2021 (Modalidad Hemodiálisis).
 2. DA. Rodríguez-Fuentes, P. Rosa-Guerrero, ML. Agüera-Morales, MD. Navarrocabello, A. Rodríguez-Benot, A. Torres-De-Rueda. El rechazo mediado por anticuerpos sin anti-hla donantes específicos detectables es más frecuente en receptores inducidos con timoglobulina. PREMIO mejor comunicación e-poster en el 51 Congreso de la Sociedad Española de Nefrología 2021 (Modalidad de Trasplante Renal).
 3. C. Rodelo-Haad, I. López-López, JR. Muñoz-Castañeda, S. Soriano, M. Rodríguez, A. Martín-Malo. Trayectorias longitudinales de FGF23 y mortalidad en diálisis. PREMIO mejor comunicación oral en el 51 Congreso de la Sociedad Española de Nefrología 2021. (Modalidad Hemodiálisis).
 4. P. Rosa Guerrero, M. López-Andreu, T. González-Serrano, C. Muñoz Martínez, C. González-Ruiz Moyano, S. Soriano Cabrera. Implicación del complemento en lesiones histológicas presentes en placentas con preeclampsia. PREMIO mejor comunicación oral en el 51 Congreso de la Sociedad Española de Nefrología 2021. (Modalidad Hipertensión arterial y regulación vascular).

GC08:

HORMONES AND CANCER

SCIENTIFIC PROGRAM 4:

CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

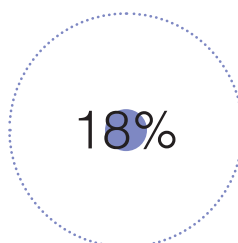
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Castaño	Fuentes	Justo Pastor	R4	0000-0002-3145-7287
Gracia	Navarro	Francisco	R3	
Agraz	Doblas	Antonio Manuel	R2	
Ibáñez	Costa	Alejandro	R2	
Pedraza	Arévalo	Sergio	R2	
Berbel	Díaz	María Inmaculada	R1	
Blanco	Acevedo	Cristóbal José	R1	
Blázquez	Encinas-Rey	Ricardo	R1	
Caro	Cuenca	María Teresa	R1	
Fuentes	Fayos	Antonio Carlos	R1	
García	Vioque	Víctor	R1	
García	Díaz	Miriam	R1	
Moreno	Moreno	Paloma	R1	
Moreno	Montilla	María Trinidad	R1	
Padillo	Cuenca	José Carlos	R1	
Sánchez	Frías	Marina Esther	R1	

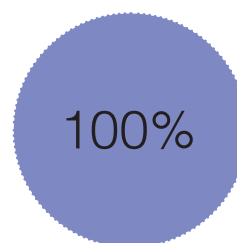
» SCIENTIFIC PRODUCTION



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. Alors-Perez E, Blazquez-Encinas R, Alcalá S, Viyuela-García C, Pedraza-Arevalo S, Herrero-Aguayo V, Jimenez-Vacas JM, Mafficini A, Sanchez-Frias ME, Cano MT, Abollo-Jimenez F, Marin-Sanz JA, Cabezas-Sainz P, Lawlor RT, Luchini C, Sanchez L, Sanchez-Hidalgo JM, Ventura S, Martin-Hijano L, Gahete MD, Scarpa A, Arjona-Sanchez A, Ibanez-Costa A, Sainz B, Luque RM, Castano JP. Dysregulated splicing factor SF3B1 unveils a dual therapeutic vulnerability to target pancreatic cancer cells and cancer stem cells with an anti-splicing drug. *JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH*. 2021. 40(1): DOI: 10.1186/s13046-021-02153-9
IF: 11,161 Q1 D1
2. Gonzalez-Borja I, Alors-Perez E, Amat I, Alonso L, Viyuela-García C, Goni S, Reyes JC, Ceballos-Chavez M, Hernandez-Garcia I, Sanchez-Frias ME, Santamaria E, Razquin S, Arjona-Sanchez A, Arrazubi V, Perez-Sanz J, Vera R, Fernandez-Irigoyen J, Castano JP, Viudez A. Deciphering CHFR Role in Pancreatic Ductal Adenocarcinoma. *FRONTIERS IN MEDICINE*. 2021. 8():-. DOI: 10.3389/fmed.2021.720128
IF: 5,093 Q1 D2
3. Alexander SPH, Christopoulos A, Davenport AP, Kelly E, Mathie A, Peters JA, Veale EL, Armstrong JF, Faccenda E, Harding SD, Pawson AJ, Southan C, Davies JA, Abbracchio MP, Alexander W, Al-hosaini K, Back M, Barnes NM, Bathgate R, Beaulieu JM, Bernstein KE, Bettler B, Birdsall NJM, Blaho V, Boulay F, Bousquet C, Brauner-Osborne H, Burnstock G, Calo G, Castano JP, Catt K, Ceruti S, Chazot P, Chiang N, Chini B, Chun J, Cianciulli A, Civelli O, Clapp LH, Couture R, Csaba Z, Dahlgren C, Dent G, Singh KD, Douglas SD, Dournaud P, Eguchi S, Escher E, Filardo EJ, Fong T, Fumagalli M, Gainetdinov RR, de Gasparo M, Gerard C, Gershengorn M, Gobeil F, Goodfriend TL, Goudet C, Gregory KJ, Gundlach AL, Hamann J, Hanson J, Hauger RL, Hay DL, Heinemann A, Hollenberg MD, Holliday ND, Horiuchi M, Hoyer D, Hunyady L, Husain A, IJzerman AP, Inagami T, Jacobson KA, Jensen RT, Jockers R, Jonnalagadda D, Karnik S, Kaupmann K, Kemp J, Kennedy C, Kihara Y, Kitazawa T, Kozielowicz P, Kreienkamp HJ, Kukkonen JP, Langenhan T, Leach K, Lecca D, Lee JD, Leeman SE, Leprince J, Li XX, Williams TL, Lolait SJ, Lupp A, Macrae R, Maguire J, Mazella J, McArdle CA, Melmed S, Michel MC, Miller LJ, Mitolo V, Mouillac B, Muller CE, Murphy P, Nahon JL, Ngo T, Norel X, Nyimanu D, Ocarroll AM, Offermanns S, Panaro MA, Parmentier M, Pertwee RG, Pin JP, Prossnitz ER, Quinn M, Ramachandran R, Ray M, Reinscheid RK, Rondard P, Rovati GE, Ruzza C, Sanger GJ, Schoneberg T, Schulte G, Schulz S, Segaloff DL, Serhan CN, Stoddart LA, Sugimoto Y, Summers R, Tan VP, Thal D, Thomas W, Timmermans PMWM, Tirupula K, Tulipano G, Unal H, Unger T, Valant C, Vanderheyden P, Vaudry D, Vaudry H, Vilardaga JP, Walker CS, Wang JM, Ward DT, Wester HJ, Willars GB, Woodruff TM, Yao CC, Ye RD. THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: G protein-coupled receptors. *BRITISH JOURNAL OF PHARMACOLOGY*. 2021. 178():S27-S156. DOI: 10.1111/bph.15538
IF: 8,739 Q1 D1
4. Lopez-Canovas JL, del Rio-Moreno M, Garcia-Fernandez H, Jimenez-Vacas JM, Moreno-Montilla MT, Sanchez-Frias ME, Amado V, Lopez FL, Fondevila MF, Ciria R, Gomez-Luque I, Briceno J, Nogueiras R, de la Mata M, Castaño JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. *CANCER LETTERS*. 2021. 496():72-83. DOI: 10.1016/j.canlet.2020.10.010
IF: 8,679 Q1 D2
5. Leon-Gonzalez AJ, Saez-Martinez P, Jimenez-Vacas JM, Herrero-Aguayo V, Montero-Hidalgo AJ, Gomez-Gomez E, Madrona A, Castano JP, Espartero JL, Gahete MD, Luque RM. Comparative Cytotoxic Activity of Hydroxytyrosol and Its Semisynthetic Lipophilic Derivatives in Prostate Cancer Cells. *ANTIOXIDANTS*. 2021. 10(9):- DOI: 10.3390/antiox10091348
IF: 6,312 Q1 D1

» CLINICAL GUIDES:

1. Alexander SPH, Christopoulos A, Davenport AP, Kelly E, Mathie A, Peters JA, Veale EL, Armstrong JF, Faccenda E, Harding SD, Pawson AJ, Southan C, Davies JA, Abbracchio MP, Alexander W, Al-hosaini K, Back M, Barnes NM, Bathgate R, Beaulieu JM, Bernstein KE, Bettler B, Birdsall NJM, Blaho V, Boulay F, Bousquet C, Brauner-Osborne H, Burnstock G, Calo G, Castaño JP, Catt K, Ceruti S, Chazot P, Chiang N, Chini B, Chun J, Cianciulli A, Civelli O, Clapp LH, Couture R, Csaba Z, Dahlgren C, Dent G, Singh KD, Douglas SD, Dournaud P, Eguchi S, Escher E, Filardo EJ, Fong T, Fumagalli M, Gainetdinov RR, de Gasparo M, Gerard C, Gershengorn M, Gobeil F, Goodfriend TL, Goudet C, Gregory KJ, Gundlach AL, Hamann J, Hanson J, Hauger RL, Hay DL, Heinemann A, Hollenberg MD, Holliday ND, Horiuchi M, Hoyer D, Hunyady L, Husain A, IJzerman AP, Inagami T, Jacobson KA, Jensen RT, Jockers R, Jonnalagadda D, Karnik S, Kaupmann K, Kemp J, Kennedy C, Kihara Y, Kitazawa T, Kozielowicz P, Kreienkamp HJ, Kukkonen JP, Langenhan T, Leach K, Lecca D, Lee JD, Leeman SE, Leprince J, Li XX, Williams TL, Lolait SJ, Lupp A, Macrae R, Maguire J, Mazella J, McArdle CA, Melmed S, Michel MC, Miller LJ, Mitolo V, Mouillac B, Muller CE, Murphy P, Nahon JL, Ngo T, Norel X, Nyimanu D, Ocarroll AM, Offermanns S, Panaro MA, Parmentier M, Pertwee RG, Pin JP, Prossnitz ER, Quinn M, Ramachandran R, Ray M, Reinscheid RK, Rondard P, Rovati GE, Ruzza C, Sanger GJ, Schoneberg T, Schulte G, Schulz S, Segaloff DL, Serhan CN, Stoddart LA, Sugimoto Y, Summers R, Tan VP, Thal D, Thomas W, Timmermans PMWM, Tirupula K, Tulipano G, Unal H, Unger T, Valant C, Vanderheyden P, Vaudry D, Vaudry H, Vilardaga JP, Walker CS, Wang JM, Ward DT, Wester HJ, Willars GB, Woodruff TM, Yao CC, Ye RD. THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: G protein-coupled receptors. BRITISH JOURNAL OF PHARMACOLOGY. 2021. 178():S27-S156. DOI: 10.1111/bph.15538.
IF: 8,739 Q1 D1

» ACTIVITY:

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

» ADDITIONAL INFORMATION:

- NETWORKS: 11
 1. CIBER Physiopathology of Obesity and Nutrition – CIBERobn
 2. PAIDI BIO-139
 3. TransBioNet – Spanish Bioinformatics Network for Clinical Research
 4. European Neuroendocrine Tumor Society (ENETS): Advisory Board and Educational and Lung NET task forces
 5. European Society of Endocrinology (ESE). Pituitary and Neuroendocrinology Focus Area.
 6. Spanish Group on Endocrine and Neuroendocrine Tumors (GETNE)
 7. Spanish Molecular Registry of Hypophyseal Adenomas (REMAH)
 8. Agrifood Campus of International Excellence (ceiA3)
 9. Rare Cancer Genomics (IARC, WHO)
 10. Spanish Society of Endocrinology and Nutrition (SEEN). Area of Knowledge of Neuroendocrinology
 11. Andalusian Society of Endocrinology, Diabetes and Nutrition (SAEDYN). Area of Knowledge of Neuroendocrinology
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. SARA BORRELL (ISCI) – ALEJANDRO IBÁÑEZ COSTA
 2. POSDOCTORALES 2020 (CSyF) – ANTONIO M. AGRAZ DOBLAS
 3. FPU (MEC) – ANTONIO CARLOS FUENTES FAYOS
 4. FPU (MEC) – RICARDO BLÁZQUEZ ENCINAS REY
 5. FPU (UCO) – MARÍA TRINIDAD MORENO MONTILLA
 6. FPU (MEC) – VÍCTOR GARCÍA VIOQUE
- AGREEMENTS WITH COMPANIES: 1
- INTERNATIONAL PROJECTS: 2
 1. ALDO SCARPA; Role: WP on Splicing. JP Castaño. Accelerating precision medicine in pancreatic cancer through definition of novel classifications and molecular targets. Funding Agency: Fondazione AIRC per la ricerca sul cancro. Reference: Progetto IG 2021 ID 26343.
 2. ALFONSO VALENCIA HERRERA; Role: WP on Splicing. JP Castaño. Precision Medicine Infrastructure associated to Science and Technology (IMPACT). Funding Agency: Instituto de Salud Carlos III. MICINN. Reference: IMP/00019.

- AWARDS: 4

1. ANTONIO CARLOS FUENTES FAYOS; Metformin and Simvastatin in Combination: drugs repositioning to impair High-Grade Astrocytomas progression; Funding Agency: EUROPEAN SOCIETY OF ENDOCRINOLOGY; Reference: ESE-2021-01.
2. RICARDO BLÁZQUEZ ENCINAS REY; Altered splicing machinery as a source of biomarkers in lung neuroendocrine neoplasms; Pituitary and Neuroendocrinology; ESE Young Endocrinologist and Scientists.
3. RICARDO BLÁZQUEZ ENCINAS REY; Altered splicing machinery as a source of biomarkers in lung neuroendocrine neoplasms; ESE Young Endocrinologist and Scientists.
4. JUSTO P. CASTAÑO; ESE Special Recognition Award. EUROPEAN SOCIETY OF ENDOCRINOLOGY.

GC09:

NUTRIGENOMICS. METABOLIC SYNDROME

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

» TEAM

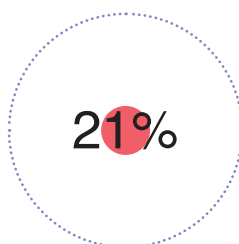
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
López	Miranda	José	R4	0000-0002-8844-0718
Delgado	Lista	Francisco Javier	R4	
Pérez	Jiménez	Francisco	R4	
Pérez	Martínez	Pablo	R4	
Alcalá	Díaz	Juan Francisco	R3	
Blanco	Molina	María Ángeles	R3	
Camargo	García	Antonio	R3	
Fernández	De la Puebla	Rafael Ángel	R3	
Fuentes	Jiménez	Francisco	R3	
García	Ríos	Antonio	R3	
López	Jiménez	Luciano	R3	
Montero	Pérez-Barquero	Manuel	R3	
Pérez	Caballero	Anabel	R3	
Rangel	Zúñiga	Oriol Alberto	R3	
Yubero	Serrano	Elena	R3	
Criado	García	Juan	R2	
De la Cruz	Ares	Silvia	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	
Pino	Ángeles	Almudena	R2	
Torres	Peña	José David	R2	
Vaquero	Álvarez	Manuel	R2	
Arenas	De Larriva	Antonio Pablo	R1	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
García	Fernández	Helena	R1
Jiménez	Torres	Jose	R1
Orge	Millán	Marta	R1
Pérez	Cardelo	María Magdalena	R1
Podadera	Herreros	Alicia	R1
Vals	Delgado	Cristina	R1
Vega	Rojas	Ana María	R1
Villasanta	González	Alejandro	R1
Morillo-Velarde	Castro	Blanca	N
Serrano	Espejo	Carmen	ADM
Carreras	Calero	Rosario	T
Castro	Montero	Sofía	T
Morales	Martínez	José Andrés	T
Peña	Orihuela	Patricia Judith	T
Pérez	Corral	Isabel	T
Quintana	Navarro	Gracia María	T

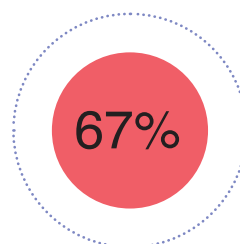
» SCIENTIFIC PRODUCTION



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:

1. Yubero-Serrano EM, Alcalá-Díaz JF, Gutiérrez-Mariscal FM, Arenas-de Larriva AP, Pena-Orihuela PJ, Blanco-Rojo R, Martínez-Botas J, Torres-Pena JD, Pérez-Martínez P, Ordoñas JM, Delgado-Lista J, Gómez-Coronado D, López-Miranda J. Association between cholesterol efflux capacity and peripheral artery disease in coronary heart disease patients with and without type 2 diabetes: from the CORDIOPREV study. *CARDIOVASCULAR DIABETOLOGY*. 2021. 20(1):- DOI: 10.1186/s12933-021-01260-3
IF: 9,951 Q1 D1
2. Rangel-Zuniga OA, Vals-Delgado C, Alcalá-Díaz JF, Quintana-Navarro GM, Krylova Y, Leon-Acuna A, Luque RM, Gómez-Delgado F, Delgado-Lista J, Ordoñas JM, Pérez-Martínez P, Camargo A, López-Miranda J. A set of miRNAs predicts T2DM remission in patients with coronary heart disease: from the CORDIOPREV study. *MOLECULAR THERAPY-NUCLEIC ACIDS*. 2021. 23():255-263. DOI: 10.1016/j.omtn.2020.11.001
IF: 8,886 Q1 D1
3. Jiménez-Torres J, Alcalá-Díaz JF, Torres-Pena JD, Gutiérrez-Mariscal FM, Leon-Acuna A, Gómez-Luna P, Fernández-Gandara C, Quintana-Navarro GM, Fernández-García JC, Pérez-Martínez P, Ordoñas JM, Delgado-Lista J, Yubero-Serrano EM, López-Miranda J. Mediterranean Diet Reduces Atherosclerosis Progression in Coronary Heart Disease An Analysis of the CORDIOPREV Randomized Controlled Trial. *STROKE*. 2021. 52(11):3440-3449. DOI: 10.1161/STROKEAHA.120.033214
IF: 7,914 Q1 D1
4. Jiménez-Lucena R, Alcalá-Díaz JF, Roncero-Ramos I, López-Moreno J, Camargo A, Gómez-Delgado F, Quintana-Navarro GM, Vals-Delgado C, Rodríguez-Cantalejo F, Luque RM, Delgado-Lista J, Ordoñas JM, Pérez-Martínez P, Rangel-Zuniga OA, López-Miranda J. MiRNAs profile as biomarkers of nutritional therapy for the prevention of type 2 diabetes mellitus: From the CORDIOPREV study. *CLINICAL NUTRITION*. 2021. 40(3):1028-1038. DOI: 10.1016/j.clnu.2020.06.035
IF: 7,324 Q1 D1
5. Roncero-Ramos I, Gutiérrez-Mariscal FM, Gómez-Delgado F, Villasanta-González A, Torres-Pena JD, de la Cruz-ares S, Rangel-Zuniga OA, Luque RM, Ordoñas JM, Delgado-Lista J, Pérez-Martínez P, Camargo A, Alcalá-Díaz JF, López-Miranda J. Beta cell functionality and hepatic insulin resistance are major contributors to type 2 diabetes remission and starting pharmacological therapy: from CORDIOPREV randomized controlled trial. *TRANSLATIONAL RESEARCH*. 2021. 238():12-24. DOI: 10.1016/j.trsl.2021.07.001
IF: 7,012 Q1 D1

» CLINICAL GUIDES:

1. Delgado J, Cepeda JM, Llorens P, Jacob J, Comin J, Montero M, Miro O, de Sa EL, Manzano L, Martín-Sánchez FJ, Formiga F, Masip J, Pérez-Calvo JI, Herrero-Puente P, Manito N. Consensus on improving the comprehensive care of patients with acute heart failure. *REVISTA CLINICA ESPANOLA*. 2021. 221(3):163-168. DOI: 10.1016/j.rceng.2020.12.001.
IF: 1,556 Q3
2. Fustera, VP; Pérez, AP; Gómez, JC; Pedragos, AC; Gómez-Huelgas, R; Pérez-Martínez, P. Executive summary: Updates to the dietary treatment of prediabetes and type 2 diabetes mellitus. *Revista Clínica Española*. 2021. 221(3):169-179.
IF: 1,556 Q3
3. V. Pascual Fuster, A. Pérez Pérez, J. Carretero Gómez, A. Caixàs Pedragós, R. Gómez-Huelgas y P. Pérez-Martínez. Resumen ejecutivo: actualización en el tratamiento dietético de la prediabetes y la diabetes mellitus tipo 2. *Clinica e Investigación en Arteriosclerosis*. 2021. 33(2021)73-84. <https://doi.org/10.1016/j.arteri.2020.11.005>.
IF: Not indexed in JCR

» ACTIVITY:

- Nº ONGOING PROJECTS: 13
- Nº GRANTED PROJECTS IN 2021: 2
- Nº CLINICAL TRIALS: 22
- Nº PHD THESES: 2

» 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: 16
 1. INTENSIFICACIÓN (SAS)- JOSÉ LOPEZ MIRANDA
 2. AYUDAS PARA CONTRATOS PREDOCTORALES PARA LA FORMACION DE DOCTORES (MICINN)- CRISTINA VALS DELGADO
 3. NICOLÁS MONARDES (SAS)- ELENA M YUBERO SERRANO
 4. SARA BORRELL (ISCI3)- SILVIA DE LA CRUZ ARES
 5. RÍO HORTEGA (ISCI3)- ANTONIO PABLO ARENAS DE LARRIVA
 6. MIGUEL SERVET I (ISCI3) - ORIOL ALBERTO RANGEL ZUÑIGA
 7. MIGUEL SERVET II (ISCI3) - ANTONIO CAMARGO GARCIA
 8. PFIS (ISCI3) - MAGDALENA PEREZ CARDELO
 9. PFIS (ISCI3) - ALICIA PODADERA HERREROS
 10. JUAN DE LA CIERVA FORMACION 2017 (MICINN) - SILVIA DE LA CRUZ ARES
 11. INTENSIFICACIÓN (ISCI3) - FRANCISCO JAVIER DELGADO LISTA
 12. JUAN RODÉS (ISCI3)- ANA LEÓN ACUÑA
 13. RRHH P2MED (COMISIÓN EUROPEA) - MARINA MORA ORTIZ
 14. RRHH P2MED (COMISIÓN EUROPEA) - ALMUDENA PINO ANGELES
 15. ACCIÓN B CLÍNICOS INVESTIGADORES (SAS)- JUAN FRANCISCO ALCALÁ DÍAZ
 16. PFIS (ISCI3) - HELENA MARÍA GARCÍA FERNÁNDEZ.
- AGREEMENTS WITH COMPANIES: 18
- AWARDS: 3
 1. JUAN LUIS ROMERO CABRERA; Premio Jóvenes Investigadores 2021 Juan Luis Romero Cabrera. Premio a la mejor comunicación tipo POSTER sesión II; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJII21/0006
 2. ELENA M. YUBERO-SERRANO, CAROLINA FERNANDEZ-GANDARA, ANTONIO GARCIA-RIOS, ORIOL A. RANGEL ZUÑIGA, FRANCISCO M. GUTIERREZ-MARISCAL, JOSE D. TORRES-PEÑA, CARMEN MARIN, JAVIER LOPEZ-MORENO, JUSTO P. CASTAÑO, JAVIER DELGADO-LISTA, JOSE M. ORDOVAS, PABLO PEREZ-MARTINEZ, JOSE LOPEZ-MIRANDA; XIX Premio Nacional de Investigación Colegio de Médicos de Córdoba; Funding Agency: Caixabank.
 3. JOSÉ LÓPEZ MIRANDA Y ELENA M. YUBERO SERRANO; Premio de investigación Consejo Andaluz de Colegios de Médicos Sobre los beneficios del Aceite de Oliva en la salud. Funding Agency: Caja Rural de Jaén.

HORMONAL REGULATION OF ENERGY BALANCE, PUBERTY AND REPRODUCTION

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

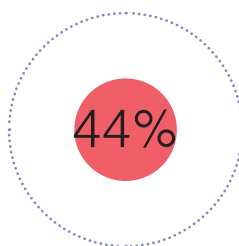
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Tena	Sempere	Manuel	R4	0000-0002-4741-5567
Avendaño	Herrador	María 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	María Jesús	R3	
Barroso	Romero	Alexia	R2	
García	Galiano	David	R2	
León	Téllez	Silvia	R2	
Pineda	Reyes	Rafael	R2	
Sobrino	Cabello	Verónica	R2	
Velasco	Aguayo	Inmaculada	R2	
Aranda	Torrecillas	Álvaro	R1	
Daza	Dueñas	Silvia	R1	
Jiménez	Puyer	Manuel	R1	
Perdices	López	Cecilia María	R1	
Pineda	Reyes	Beatriz	R1	
Rodríguez	Vázquez	Elvira	R1	
Ruiz	Cruz	Miguel	R1	
Serrano	López	Víctor Manuel	R1	
Torres	Jiménez	Encarnación	R1	
Torres	Granados	Carmen	R1	
Cerero	Tejero	Laura	T	
Onieva	Jiménez	Rocío	T	
Rodríguez	Sánchez	Ana Belén	T	
Sánchez	Tapia	María Jesús	T	

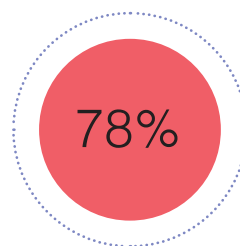
» SCIENTIFIC PRODUCTION



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. Franssen D, Barroso A, Ruiz-Pino F, Vazquez MJ, Garcia-Galiano D, Castellano JM, Onieva R, Ruiz-Cruz M, Poutanen M, Gaytan F, Dieguez C, Pinilla L, Lopez M, Roa J, Tena-Sempere M. AMP-activated protein kinase (AMPK) signaling in GnRH neurons links energy status and reproduction. *METABOLISM-CLINICAL AND EXPERIMENTAL*. 2021. 115():-. DOI: 10.1016/j.metabol.2020.154460
IF: 8,694 Q1 D1
2. Torres E, Velasco I, Franssen D, Heras V, Gaytan F, Leon S, Navarro VM, Pineda R, Candenas ML, Romero-Ruiz A, Tena-Sempere M. Congenital ablation of *Tacr2* reveals overlapping and redundant roles of NK2R signaling in the control of reproductive axis. *AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM*. 2021. 320(3):E496-E511. DOI: 10.1152/ajpendo.00346.2020
IF: 4,31 Q1 D2
3. Romero-Ruiz A, Pineda B, Ovelleiro D, Perdices-Lopez C, Torres E, Vazquez MJ, Guler I, Jimenez A, Pineda R, Persano M, Romero-Baldonado C, Arjona JE, Lorente J, Munoz C, Paz E, Garcia-Maceira FI, Arjona-Sanchez A, Tena-Sempere M. Molecular diagnosis of polycystic ovary syndrome in obese and non-obese women by targeted plasma miRNA profiling. *EUROPEAN JOURNAL OF ENDOCRINOLOGY*. 2021. 185(5):637-652. DOI: 10.1530/EJE-21-0552
IF: 6,664 Q1 D2
4. Pellegrino G, Martin M, Allet C, Lhomme T, Geller S, Franssen D, Mansuy V, Manfredi-Lozano M, Coutteau-Robles A, Delli V, Rasika S, Mazur D, Loyens A, Tena-Sempere M, Siepmann J, Pralong FP, Ciofi P, Corfas G, Parent AS, Ojeda SR, Sharif A, Prevot V. GnRH neurons recruit astrocytes in infancy to facilitate network integration and sexual maturation. *NATURE NEUROSCIENCE*. 2021. 24(12):1660-1672. DOI: 10.1038/s41593-021-00960-z
IF: 24,884 Q1 D1

5. Milbank E, Dragano NRV, Gonzalez-Garcia I, Garcia MR, Rivas-Limeres V, Perdomo L, Hilaiet G, Ruiz-Pino F, Mallegol P, Morgan DA, Iglesias-Rey R, Contreras C, Vergori L, Cunarro J, Porteiro B, Gavalda-Navarro A, Oelkrug R, Vidal A, Roa J, Sobrino T, Villarroya F, Dieguez C, Nogueiras R, Garcia-Caceres C, Tena-Sempere M, Mittag J, Martinez MC, Rahmouni K, Andriantsitohaina R, Lopez M. Small extracellular vesicle-mediated targeting of hypothalamic AMPK alpha 1 corrects obesity through BAT activation. NATURE METABOLISM. 2021. 3(10):1415-1431. DOI: 10.1038/s42255-021-00467-8
IF: 13,511 Q1 D1

» **ACTIVITY:**

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2021: 1
- N° PHD THESES: 1

» **ADDITIONAL INFORMATION:**

- NETWORKS: 4
 1. CIBEROBN (CIBER on Obesity and Nutrition)
 2. PAIDI BIO-310
 3. Theme Area: Reproductive Endocrinology (European Society of Endocrinology)
 4. FiDiPro Program – Finnish Academy
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 8
 1. MARIE SKLODOWSKA-CURIE (COMISIÓN EUROPEA)- DAVID GARCÍA GALIANO
 2. MARIE SKLODOWSKA-CURIE (COMISIÓN EUROPEA)- SILVIA LEÓN TÉLLEZ
 3. MIGUEL SERVET (ISCIII)- MARÍA SOLEDAD AVENDAÑO HERRADOR
 4. MIGUEL SERVET (ISCIII)- MIGUEL ÁNGEL SÁNCHEZ-GARRIDO NOGUERAS
 5. PFIS (ISCIII)- CARMEN TORRES GRANADOS
 6. FPU – MIGUEL RUIZ CRUZ.
 7. FPI – ELVIRA RODRÍGUEZ VÁZQUEZ.
 8. JUAN DE LA CIERVA (INCORPORACIÓN) – VERÓNICA SOBRINO CABELLO.
- AGREEMENTS WITH COMPANIES: 4
- INTERNATIONAL PROJECTS: 1
 1. RAFAEL PINEDA REYES; Society for Endocrinology Early Career Grant for Rafael Pineda Reyes; Funding Agency: SOCIETY FOR ENDOCRINOLOGY; Reference: SfE-ECG-2017-001
- AWARDS: 2
 1. CECILIA MARIA PERDICES LOPEZ; Premio Jóvenes Investigadores Cecilia Perdices López; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJII21/0003
 2. JUAN M. CASTELLANO RODRÍGUEZ; Premio Enrique Aguilar Benítez de Lugo. Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA

GC11:

METABOLISM AND ADIPOCYTE DIFFERENTIATION-METABOLIC SYNDROME

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

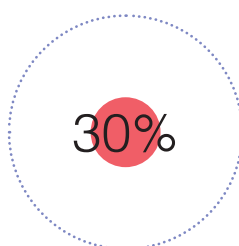
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Malagón	Poyato	María del Mar	R4	0000-0002-2419-2727
Gordon	Bermúdez-Coronel	Ana	R3	
Guzmán	Ruiz	Rocío	R3	
Clemente	Postigo	María Mercedes	R2	
García	Ruiz	Olga	R1	
Garrido	Rascón	Elena	R1	
Lopez	Alcalá	Jaime	R1	
Ruiz	Navarro	María del Carmen	R1	
Tercero	Alcázar	Carmen	R1	
Salido	Martínez	Elena	T	

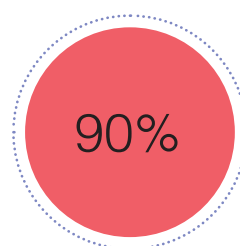
» SCIENTIFIC PRODUCTION



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. Sanchez-Ceinos J, Guzman-Ruiz R, Rangel-Zuniga OA, Lopez-Alcala J, Moreno-Cano E, Del Rio-Moreno M, Romero-Cabrera JL, Perez-Martinez P, Maymo-Masip E, Vendrell J, Fernandez-Veledo S, Fernandez-Real JM, Laurencikiene J, Ryden M, Membrives A, Luque RM, Lopez-Miranda J, Malagon MM. Impaired mRNA splicing and proteostasis in preadipocytes in obesity-related metabolic disease. ELIFE. 2021. 10:e65996. DOI: 10.7554/eLife.65996
IF: 8,14 Q1 D1
2. Sanchez-Ceinos J, Rangel-Zuniga OA, Clemente-Postigo M, Podadera-Herreros A, Camargo A, Alcala-Diaz JF, Guzman-Ruiz R, Lopez-Miranda J, Malagon MM. miR-223-3p as a potential biomarker and player for adipose tissue dysfunction preceding type 2 diabetes onset. MOLECULAR THERAPY-NUCLEIC ACIDS. 2021. 23:1035-1052. DOI: 10.1016/j.omtn.2021.01.014
IF: 8,886 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2021: 2
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 6
 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.
 4. ADIPOSEQ. CIBERObn, Instituto de Salud Carlos III.
 5. COST Action "Delivery of Antisense RNA Therapeutics" (CA17103).
 6. COST Action (European Cooperation in Science and Technology) RNA communication across kingdoms: new mechanisms and strategies in pathogen control (CA20110).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. PAIDI 2020: AYUDAS A LA CONTRATACIÓN DEL PERSONAL DOCTOR (CTEICU)- MERCEDES CLEMENTE POSTIGO
 2. CONVOCATORIA DE INCORPORACIÓN DE INVESTIGADORES POSDOCTORALES A GRUPOS DE LOS CENTROS SANITARIOS Y DE INVESTIGACIÓN DEL SSPA (CSyF) – M^a MERCEDES CLEMENTE POSTIGO

GC12:

CLINICAL AND EPIDEMIOLOGICAL RESEARCH IN PRIMARY CARE (GICEAP)

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

» TEAM

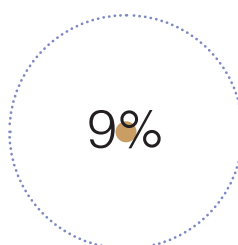
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Pérula	De Torres	Luis Ángel	R4	0000-0002-8784-4905
Aguado	Taberne	Cristina	R3	
Aparicio	Martínez	Pilar	R3	
Arias	Blanco	María Del Carmen	R3	
Arias	Vega	María Raquel	R3	
Blanco	Hungría	Antonio	R3	
Carrera	González	María del Pilar	R3	
Castro	Jiménez	Rafael Ángel	R3	
Fernández	García	José Ángel	R3	
Fonseca	Del Pozo	Francisco Javier	R3	
González	Lama	Jesús	R3	
González	Carretero	Juan Ignacio	R3	
Hidalgo	Requena	Antonio	R3	
Jiménez	García	Celia	R3	
Martin	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	
Ramírez	Baena	Miguel	R3	
Ranchal	Sánchez	Antonio	R3	
Redondo	Sánchez	Juana	R3	
Rich	Ruiz	Manuel	R3	
Roldán	Villalobos	Ana	R3	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
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
Leiva	Cepas	Fernando	R2
Romero	Rodríguez	Esperanza María	R2
López	Ruiz	Victoria	R1
Marín	González	Beatriz	R1
Muñoz	Gómez	Rafaela	R1
Muñoz	Alcaraz	Maria Nieves	R1
Navarrete	Martínez	Esther	R1
Sánchez	Cañete	Eva María	R1
Hernández	Ascanio	José	N
Padilla	Maestre	Jorge Rafael	N
Pérula	Jiménez	Celia	N
Carretero	Anibarro	Enrique	ADM
Montes	Redondo	Gertrudis	T

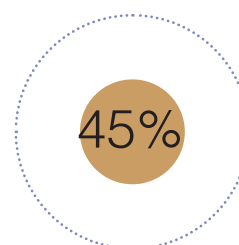
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Leiva-Cepas F, Benito-Ysamat A, Jimena I, Jimenez-Diaz F, Gil-Belmonte MJ, Ruz-Caracuel I, Villalba R, Pena-Amaro J. Ultrasonographic and Histological Correlation after Experimental Reconstruction of a Volumetric Muscle Loss Injury with Adipose Tissue. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES. 2021. 22(13):- DOI: 10.3390/ijms22136689
IF: 5,923 Q1 D3
2. Canton-Habas V, Rich-Ruiz M, Moreno-Casbas MT, Ramirez-Exposito MJ, Martinez-Martos JM, Carrera-Gonzalez MD. Correlation between Biomarkers of Pain in Saliva and PAINAD Scale in Elderly People with Cognitive Impairment and Inability to Communicate. JOURNAL OF CLINICAL MEDICINE. 2021. 10(7):- DOI: 10.3390/jcm10071424
IF: 4,241 Q1 D3
3. Perula-de Torres LA, Verdes-Montenegro-Atalaya JC, Melus-Palazon E, Vinuesa LGD, Valverde FJ, Rodriguez LA, Lietor-Villajos N, Bartolome-Moreno C, Moreno-Martos H, Garcia-Campayo J, Gonzalez-Santos J, Rodriguez-Fernandez P, Leon-del-Barco B, Soto-Camara R, Gonzalez-Bernal JJ. Comparison of the Effectiveness of an Abbreviated Program versus a Standard Program in Mindfulness, Self-Compassion and Self-Perceived Empathy in Tutors and Resident Intern Specialists of Family and Community Medicine and Nursing in Spain. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH. 2021. 18(8):- DOI: 10.3390/ijerph18084340
IF: 3,39 Q1 D3
4. Navarro-Espinosa JA, Vaquero-Abellan M, Perea-Moreno AJ, Pedros-Perez G, Aparicio-Martinez P, Martinez-Jimenez MP. The Influence of Technology on Mental Well-Being of STEM Teachers at University Level: COVID-19 as a Stressor. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH. 2021 18(18):- DOI: 10.3390/ijerph18189605.
IF: 3,39 Q1 D3
5. Company-Sancho MC, Alonso-Poncelas E, Rich-Ruiz M, Cidoncha-Moreno MA, Gonzalez-Pisano A, Abad-Corpa E. The Relation between Functional Performance, Falls and Previous Falls Among Participants in the Otago Programme: A Secondary Data Analysis. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH. 2021. 18(12):- DOI: 10.3390/ijerph18126501
IF: 3,39 Q1 D3

» CLINICAL GUIDES:

1. Naranjo-Rojas A, Perula-de-Torres LA, Cruz-Mosquera FE, Molina-Recio G. Mobile application for monitoring patients under home oxygen therapy: a protocol for a randomized controlled trial. BMC FAMILY PRACTICE. 2021. 22(1):- DOI: 10.1186/s12875-021-01450-8.
IF: 2,497 Q2 D5

» ACTIVITY:

- N° ONGOING PROJECTS: 11
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 2
- N° PHD THESES: 4

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 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
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. POSDOCTORALES 2020 (CSyF) – ESPERANZA ROMERO RODRÍGUEZ
- AGREEMENTS WITH COMPANIES: 4

GC13:

CALCIUM METABOLISM. VASCULAR CALCIFICATION

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

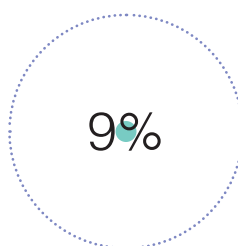
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Rodríguez	Portillo	Mariano	R4	0000-0002-9380-6614
Muñoz	Castañeda	Juan Rafael	R4	
Aguilera	Tejero	Escolástico	R4	
Canalejo	Raya	Antonio Luis	R3	
López	Villalba	Ignacio	R3	
Martínez	Moreno	Julio Manuel	R2	
Rodríguez	Ortiz	María Encarnación	R3	
Pendón	Ruiz de Mier	María Victoria	R2	
Pineda	Martos	Carmen María	R2	
Raya	Bermúdez	Ana Isabel	R2	
Rodelo	Haad	Cristian Roberto	R2	
López	Baltanás	Rodrigo	R1	
Vidal	Carrascosa	Ángela	R2	
Serrano	Berzosa	Rafael	R1	
Valdés	Díaz	Karen	R1	
Membrives	González	Cristina	T	
Torralbo	Romero	Ana Isabel	T	
Regalado	Cordero	Rocío	ADM	

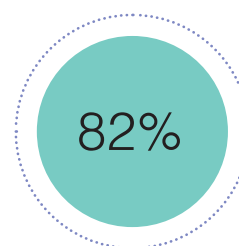
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» 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. De Mier MVPR, Vergara N, Rodelo-Haad C, Lopez-Zamorano MD, Membrives-Gonzalez C, Lopez-Baltanas R, Munoz-Castaneda JR, Caravaca F, Martin-Malo A, Felsenfeld AJ, De la Torre EJ, Soriano S, Santamaria R, Rodriguez M. Assessment of Inorganic Phosphate Intake by the Measurement of the Phosphate/Urea Nitrogen Ratio in Urine. NUTRIENTS. 2021. 13(2):- DOI: 10.3390/nu13020292
IF: 5,717 Q1 D2
2. Vidal A, Rios R, Pineda C, Lopez I, Raya AI, Aguilera-Tejero E, Rodriguez M. Caloric Intake in Renal Patients: Repercussions on Mineral Metabolism. NUTRIENTS. 2021. 13(1):- DOI: 10.3390/nu13010018
IF: 5,717 Q1 D2
3. Vidal A, Rios R, Pineda C, Lopez I, Raya AI, Aguilera-Tejero E, Rivero JLL. Increased 1,25(OH)(2)-Vitamin D Concentrations after Energy Restriction Are Associated with Changes in Skeletal Muscle Phenotype. NUTRIENTS. 2021. 13(2):- DOI: 10.3390/nu13020607
IF: 5,717 Q1 D2
4. Lopez-Baltanas R, Rodriguez-Ortiz ME, Canalejo A, Diaz-Tocados JM, Herencia C, Leiva-Cepas F, Torres-Pena JD, Ortiz-Morales A, Munoz-Castaneda JR, Rodriguez M, Almaden Y. Magnesium supplementation reduces inflammation in rats with induced chronic kidney disease. EUROPEAN JOURNAL OF CLINICAL INVESTIGATION. 2021. 51(8):- DOI: 10.1111/eci.13561
IF: 4,686 Q1 D3
5. Bushinsky DA, Raggi P, Bover J, Ketteler M, Bellasi A, Rodriguez M, Sinha S, Garg R, Perello J, Gold A, Chertow GM. Effects of Myo-inositol Hexaphosphate (SNF472) on Bone Mineral Density in Patients Receiving Hemodialysis An Analysis of the Randomized, Placebo-Controlled CaLIPSO Study. CLINICAL JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY. 2021. 16(5):736-745. DOI: 10.2215/CJN.16931020
IF: 8,237 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 7
- N° GRANTED PROJECTS IN 2021: 3
- N° CLINICAL TRIALS: 4
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. The Spanish Renal Research Network (REDinREN)
 2. PAIDI CTS-179
 3. European Uremic Toxic (EUTOX)
 4. CKD-MBD GROUP (ERA-EDTA)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 8
 1. INTENSIFICACIÓN - ACCIÓN A (SAS) – MARIANO RODRÍGUEZ PORTILLO
 2. RÍO HORTEGA (ISCIII) – M^a VICTORIA PENDÓN RUÍZ DE MIER
 3. POSDOCTORALES CTEICU – JULIO MANUEL MARTÍNEZ MORENO
 4. PFIS (ISCIII) – RODRIGO LÓPEZ BALTANAS
 5. JUAN RODÉS (ISCIII) – M^a VICTORIA PENDÓN RUÍZ DE MIER
 6. NICOLÁS MONARDES (SAS) – JUAN RAFAEL MUÑOZ CASTAÑEDA
 7. POSDOCTORALES (CSyF) – JULIO MANUEL MARTÍNEZ MORENO
 8. POSDOCTORALES (CSyF) – CRISTIAN ROBERTO RODELO HAAD
- AGREEMENTS WITH COMPANIES: 2

GC14:

CELLULAR THERAPY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

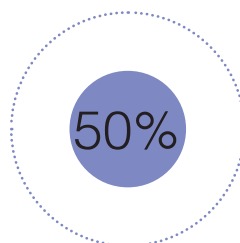
» TEAM

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

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Cortijo-Gutierrez M, Sanchez-Hernandez S, Tristan-Manzano M, Maldonado-Perez N, Lopez-Onieva L, Real PJ, Herrera C, Marchal JA, Martin F, Benabdellah K. Improved Functionality of Integration-Deficient Lentiviral Vectors (IDLVs) by the Inclusion of IS2 Protein Docks. PHARMACEUTICS. 2021. 13(8):- . DOI: 10.3390/pharmaceutics13081217
IF: 6,321 Q1 D2
2. Rosell-Valle C, Antunez C, Campos F, Gallot N, Garcia-Arranz M, Garcia-Olmo D, Gutierrez R, Hernan R, Herrera C, Jimenez R, Leyva-Fernandez L, Maldonado-Sanchez R, Munoz-Fernandez R, Nogueras S, Ortiz L, Piudo I, Ranchal I, Rodriguez-Acosta A, Segovia C, Fernandez-Munoz B. Evaluation of the effectiveness of a new cryopreservation system based on a two-compartment vial for the cryopreservation of cell therapy products. CYTOTHERAPY. 2021. 23(8):740-753. DOI: 10.1016/j.jcyt.2020.12.004
IF: 5,414 Q1 D2
3. Ruggeri A, Galimard JE, Paina O, Fagioli F, Tbakhi A, Yesilipek A, Navarro JMF, Faraci M, Hamladji RM, Skorobogatova E, Al-Seraihy A, Sundin M, Herrera C, Rifón J, Dalissier A, Locatelli F, Rocha V, Corbacioglu S. Outcomes of Unmanipulated Haploidentical Transplantation Using Post-Transplant Cyclophosphamide (PT-Cy) in Pediatric Patients With Acute Lymphoblastic Leukemia. Transplant Cell Ther. 2021 May;27(5):424.e1-424.e9. doi: 10.1016/j.jtct.2021.01.016. Epub 2021 Jan 21. PMID: 33965182
IF: 5,609
4. Sahebi F, Eikema DJ, Koster L, Kroger N, Meijer E, van Doesum JA, Rovira M, Koc Y, Angelucci E, Blaise D, Sammassimo S, McDonald A, Arroyo CH, Sanchez JF, Forcade E, Castagna L, Stölzel F, Sanz J, Tischer J, Ciceri F, Valcarcel D, Proia A, Hayden PJ, Beksac M, Yakoub-Agha I, Schönland. Post-Transplantation Cyclophosphamide for Graft-versus- Host Disease Prophylaxis in Multiple Myeloma Patients Who Underwent Allogeneic Hematopoietic Cell Transplantation: First Comparison by Donor Type. A Study from the Chronic Malignancies Working Party of the European Society for Blood and Marrow Transplantation. Transplant Cell Ther. 2021 Dec;27(12): 999.e1-999.e10
IF: 5,609

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 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)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. TÉCNICOS DE APOYO (ECAI 2015) (SAS) – ROSARIO JIMÉNEZ MORENO
 2. NICOLAS MONARDES (SAS). KARIM BENABDELLAH
- AGREEMENTS WITH COMPANIES: 25

GC15:

INVASIVE CARDIOLOGY AND CELL THERAPY

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

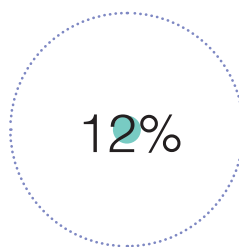
» TEAM

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	María 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	
Suárez De Lezo	Herreros De Tejada	Javier	R3	
Hidalgo	Lesmes	Francisco José	R2	
Dueñas	Perez	Guillermo Miguel	R1	
Flores	Vergara	Guisela María	R1	
González	Manzanares	Rafael	R1	
Luque	Moreno	Aurora	R1	
Cebrián	Salgado	Eva	ADM	

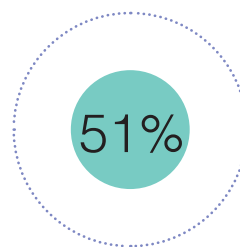
» SCIENTIFIC PRODUCTION



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:

- Hildick-Smith D, Egred M, Banning A, Brunel P, Ferenc M, Hovasse T, Wlodarczak A, Pan M, Schmitz T, Silvestri M, Erglis A, Kretov E, Lassen JF, Chieffo A, Lefevre T, Burzotta F, Cockburn J, Darremont O, Stankovic G, Morice MC, Louvard Y. The European bifurcation club Left Main Coronary Sent study: a randomized comparison of stepwise provisional vs. systematic dual stenting strategies (EBC MAIN). *EUROPEAN HEART JOURNAL*. 2021. 42(37):3829-3839. DOI: 10.1093/eurheartj/ehab283
IF: 29,983 Q1 D1
- del Val D, Abdel-Wahab M, Mangner N, Durand E, Ihlemann N, Urena M, Pellegrini C, Giannini F, Gasior T, Wojakowski W, Landt M, Auffret V, Sinning JM, Cheema AN, Nombela-Franco L, Chamandi C, Campelo-Parada F, Munoz-Garcia E, Herrmann HC, Testa L, Won-Keun K, Castillo JC, Alperi A, Tchetché D, Bartorelli AL, Kapadia S, Stortecky S, Amat-Santos I, Wijeyesundera HC, Lisko J, Gutierrez-Ibanes E, Serra V, Salido L, Alkhodair A, Livi U, Chakravarty T, Lerakis S, Vilalta V, Regueiro A, Romaguera R, Kappert U, Barbanti M, Masson JB, Maes F, Fiorina C, Miceli A, Kodali S, Ribeiro HB, Mangione JA, de Brito FS, Dato GMA, Rosato F, Ferreira MC, de Lima VC, Colafranceschi AS, Abizaid A, Marino MA, Esteves V, Andrea J, Godinho RR, Alfonso F, Eltchaninoff H, Sondergaard L, Himbert D, Husser O, Latib A, Le Breton H, Servoz C, Pascual I, Siddiqui S, Olivares P, Hernandez-Antolin R, Webb JG, Sponga S, Makkar R, Kini AS, Boukhris M, Gervais P, Linke A, Crusius L, Holzhey D, Rodes-Cabau J. Stroke Complicating Infective Endocarditis After Transcatheter Aortic Valve Replacement. *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*. 2021. 77(18):2276-2287. DOI: 10.1016/j.jacc.2021.03.233
IF: 24,094 Q1 D1
- Vemou E, Quadros AS, Dens JA, Rafah NA, Agostoni P, Alaswad K, Avran A, Belli KC, Carlino M, Choi JW, El-Guindy A, Jaffer FA, Karpaliotis D, Khatri JJ, Khelimpkii D, Knaapen P, La Manna A, Krestyaninov O, Lamelas P, Ojeda S, Padilla L, Pan MU, de Oliveira PP, Rinfret S, Spratt JC, Tanabe M, Walsh S, Nikolakopoulos I, Karacsonyi J, Rangan BV, Brilakis ES, Azzalini L. In-Stent CTO Percutaneous Coronary Intervention Individual Patient Data Pooled Analysis of 4 Multicenter Registries. *JACC-CARDIOVASCULAR INTERVENTIONS*. 2021. 14(12):1308-1319. DOI: 10.1016/j.jcin.2021.04.003
IF: 11,195 Q1 D1
- Moreno R, Diez JL, Diarte JA, Salinas P, Hernandez JMD, Andres-Cordon JF, Trillo R, Briales JA, Amat-Santos I, Romaguera R, Diaz JF, Vaquerizo B, Ojeda S, Cruz-Gonzalez I, Morena-Salas D, de Prado AP, Sarnago F, Portero P, Gutierrez-Barrios A, Alfonso F, Bosch E, Pinar E, Ruiz-Arroyo JR, Ruiz-Quevedo V, Jimenez-Mazuecos J, Lozano F, Rumoroso JR, Novo E, Irazusta FJ, Del Blanco BG, Moreu J, Ballesteros-Pradas SM, Frutos A, Villa M, Alegria-Barrero E, Lazaro R, Paredes E. Impact of diabetes in patients waiting for invasive cardiac procedures during COVID-19 pandemic. *CARDIOVASCULAR DIABETOLOGY*. 2021. 20(1):- . DOI: 10.1186/s12933-021-01261-2.
IF: 9,951 Q1 D1

5. Del Val D, Abdel-Wahab M, Linke A, Durand E, Ihlemann N, Urena M, Pellegrini C, Giannini F, Landt M, Auffret V, Sinning JM, Cheema A, Nombela-Franco L, Chamandi C, Campelo-Parada F, Munoz-Garcia A, Herrmann HC, Testa L, Won-Keun K, Carlos Castillo J, Alperi A, Tchetché D, Bartorelli A, Kapadia S, Stortecky S, Amat-Santos I, Wijeyesundera HC, Lisko J, Gutierrez-Ibanes E, Serra V, Salido L, Alkhodair A, Livi U, Chakravarty T, Lerakis S, Vilalta V, Regueiro A, Romaguera R, Barbanti M, Masson JB, Maes F, Fiorina C, Miceli A, Kodali S, Ribeiro HB, Mangione JA, de Brito FS, Actis Dato GM, Rosato F, Ferreira MC, Lima Valter C, Colafranceschi AS, Abizaid A, Marino MA, Esteves V, Andrea J, Godinho RR, Eltchaninoff H, Sondergaard L, Himbert D, Husser O, Latib A, Le Breton H, Servoz C, Pascual I, Siddiqui S, Olivares P, Hernandez-Antolin R, Webb JG, Sponga S, Makkar R, Kini Annapoorna S, Boukhris M, Mangner N, Crusius L, Holzhey D, Rodes-Cabau J. Temporal Trends, Characteristics, and Outcomes of Infective Endocarditis After Transcatheter Aortic Valve Replacement. *CLINICAL INFECTIOUS DISEASES*. 2021. 73(11):E3750-E3758. DOI: 10.1093/cid/ciaa1941
IF: 9,079 Q1 D1

» CLINICAL GUIDES:

1. Au Burzotta F, Lassen JF, Lefevre T, Banning AP, Chatzizisis YS, Johnson TW, Ferenc M, Rathore S, Albiero R, Pan M, Darremont O, Hildick-Smith D, Chieffo A, Zimarino M, Louvard Y, Stankovic G. Percutaneous coronary intervention o bifurcation coronary lesions: the 15th consensus document from he European Bifurcation Club. *EUROINTERVENTION*. 2021. 16(16):1307-1317. DOI: 10.4244/EIJ-D-20-00169.
IF: 6,534 Q1 D2
2. Garcia AM, Mitroi C, Ramos PM, Sanz RG, Virizueta JA, Arenas M, Cabello IE, Albert D, Sanchez MA, Esteban VIA, de la Pena FA, Lozano CB, Castro A, Fernandez AC, Cordoba R, Cosin-Sales J, Chaparro-Munoz M, Dalmau R, Hernandez YD, Bronte LD, Diez-Villanueva P, Cervantes CE, Redondo CF, Rodriguez EG, Lozano T, Vera PM, Monzonis AM, Mesa D, Oristrell G, Gamiz JLP, Pedreira M, Reinoso-Barbero L, Rodriguez I, Antolin JMS, Toral B, Royo LT, del Castillo SV, Vicente-Herrero T, Zatarain-Nicolas E, Tamargo J, Fernandez TL. Stratification and management of cardiovascular risk in cancer patients. A consensus document of the SEC, FEC, SEOM, SEOR, SEHH, SEMG, AEEMT, AEEC, and AECC. *REVISTA ESPANOLA DE CARDIOLOGIA*. 2021. 74(5):438-448. DOI: 10.1016/j.recesp.2020.11.014.
IF: 4,753 Q2 D4

» ACTIVITY:

- N° ONGOING PROJECTS: 2
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 9

» ADDITIONAL INFORMATION:

- NETWORKS: 4
 1. Dr Manuel Pan Álvarez-Ossorio is member of the work group European Bifurcation Club and leader of the organization of many of the meetings and courses organized by the group on an international level.
 2. Dr Miguel A. Romero Moreno is member of the Working Group on Grown Up Congenital Heart Disease European Society of Cardiology.
 3. Dr. Pan, Dr. Romero and Dr. Anguita are active members of the group that develops the guidelines for clinical practice of the Spanish Society of Cardiology (Sociedad Española de Cardiología).
 4. Dr. Anguita last president of the Spanish Society of Cardiology (Sociedad Española de Cardiología).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. Becas de la Sección de Hemodinámica y Cardiología Intervencionista para la Formación en Investigación Post Residencia (SOCIEDAD ESPAÑOLA DE CARDIOLOGÍA)- FRANCISCO JOSE HIDALGO LESMES
- AGREEMENTS WITH COMPANIES: 8

GC16:

CELLULAR BIOLOGY IN HEMATOLOGY. HYPERCOAGULABILITY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

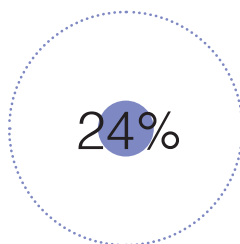
» TEAM

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Sánchez	García	Joaquín	R4	0000-0001-9345-456X
Velasco	Gimena	Francisco	R4	
Alvarez	Rivas	Miguel Ángel	R3	
Arqueros	Martínez	Victor	R3	
Casaño	Sánchez	Javier	R3	
Fernández	De la Mata	Margarita	R3	
Fernández	Sánchez De Mora	María 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	
Janusz		Kamila	R2	
Yébenes	Ramírez	Manuel	R1	
Dorado	Pardo	Javier	T	

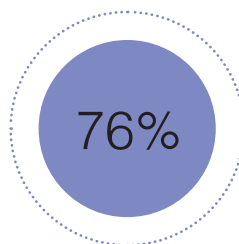
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Acute leukemia

Allogenic stem cell transplantation

Lymphoma

Hypercoagulability

» HIGHLIGHTED PUBLICATIONS:

1. Serrano-Lopez J, Hegde S, Kumar S, Serrano J, Fang J, Wellendorf AM, Roche PA, Rangel Y, Carrington LJ, Geiger H, Grimes HL, Luther S, Maillard I, Sanchez-Garcia J, Starczynowski DT, Cancelas JA. Inflammation rapidly recruits mammalian GMP and MDP from bone marrow into regional lymphatics. *ELIFE*. 2021. 10():-. DOI: 10.7554/eLife.66190
IF: 8,14 Q1 D1
2. Martinez-Cuadron D, Serrano J, Gil C, Tormo M, Martinez-Sanchez P, Perez-Simon JA, Garcia-Boyer R, Rodriguez-Medina C, Lopez-Pavia M, Benavente C, Bergua J, Lavilla-Rubira E, Amigo ML, Herrera P, Alonso-Dominguez JM, Bernal T, Colorado M, Sayas MJ, Algarra L, Vidriales MB, Rodriguez-Macias G, Vives S, Perez-Encinas MM, Lopez A, Noriega V, Garcia-Fortes M, Ramos F, Rodriguez-Gutierrez JI, Costilla-Barriga L, Labrador J, Boluda B, Rodriguez-Veiga R, Martinez-Lopez J, Sanz MA, Montesinos P. Evolving treatment patterns and outcomes in older patients (≥ 60 years) with AML: changing everything to change nothing?. *LEUKEMIA*. 2021. 35(6):1571-1585. DOI: 10.1038/s41375-020-01058-4
IF: 11,528 Q1 D1
3. Ribera JM, Morgades M, Ciudad J, Montesinos P, Esteve J, Genesca E, Barba P, Ribera J, Garcia-Cadenas I, Moreno MJ, Martinez-Carballeira D, Torrent A, Martinez-Sanchez P, Monsalvo S, Gil C, Tormo M, Artola MT, Cervera M, Gonzalez-Campos J, Rodriguez C, Bermudez A, Novo A, Soria B, Coll R, Amigo ML, Lopez-Martinez A, Fernandez-Martin R, Serrano J, Mercadal S, Cladera A, Gimenez-Conca A, Penarrubia MJ, Abella E, Vall-Ilovera F, Hernandez-Rivas JM, Garcia-Guion A, Bergua JM, de Rueda B, Sanchez-Sanchez MJ, Serrano A, Calbacho M, Alonso N, Mendez-Sanchez JA, Garcia-Boyer R, Olivares M, Barrena S, Zamora L, Granada I, Lhermitte L, Feliu E, Orfao A. Chemotherapy or allogeneic transplantation in high-risk Philadelphia chromosome-negative adult lymphoblastic leukemia. *BLOOD*. 2021. 137(14):1879-1894. DOI: 10.1182/blood.2020007311
IF: 22,113 Q1 D1
4. Paiva B, Vidriales MB, Sempere A, Tarin F, Colado E, Benavente C, Cedena MT, Sanchez J, Caballero-Velazquez T, Cordon L, Garces JJ, Simoes C, Martinez-Cuadron D, Bernal T, Botella C, Grille S, Serrano J, Rodriguez-Medina C, Algarra L, Alonso-Dominguez JM, Amigo ML, Barrios M, Garcia-Boyer R, Colorado M, Perez-Oteyza J, Perez-Encinas M, Costilla-Barriga L, Sayas MJ, Perez O, Gonzalez-Diaz M, Perez-Simon JA, Martinez-Lopez J, Sossa C, Orfao A, San Miguel JF, Sanz MA, Montesinos P. Impact of measurable residual disease by decentralized flow cytometry: a PETHEMA real-world study in 1076 patients with acute myeloid leukemia. *LEUKEMIA*. 2021. 35(8):2358-2370. DOI: 10.1038/s41375-021-01126-3
IF: 11,528 Q1 D1

5. Sargas C, Ayala R, Chillon MC, Larrayoz MJ, Carrillo-Cruz E, Bilbao C, Yebenes-Ramirez M, Llop M, Rapado I, Garcia-Sanz R, Vazquez I, Soria E, Florido-Ortega Y, Janusz K, Botella C, Serrano J, Martinez-Cuadron D, Bergua J, Amigo ML, Martinez-Sanchez P, Tormo M, Bernal T, Herrera-Puente P, Garcia R, Algarra L, Sayas MJ, Costilla-Barriga L, Perez-Santolalla E, Marchante I, Lavilla-Rubira E, Noriega V, Alonso-Dominguez JM, Sanz MA, Sanchez-Garcia J, Gomez-Casares MT, Perez-Simon JA, Calasanz MJ, Gonzalez-Diaz M, Martinez-Lopez J, Barragan E, Montesinos P. Networking for advanced molecular diagnosis in acute myeloid leukemia patients is possible: the PETHEMA NGS-AML project. HAEMATOLOGICA. 2021. 106(12):3079-3089. DOI: 10.3324/haematol.2020.263806
IF: 9,941 Q1 D2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 1
- N° CLINICAL TRIALS: 30

» **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 (ObsITI)
 5. PAIDI CTS-620
- AGREEMENTS WITH COMPANIES: 12

GC17:

PHYSIOPATHOLOGY OF ENDOCRINE VITAMIN D SYSTEM BIOTECHNOLOGY AND AGING

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILITY

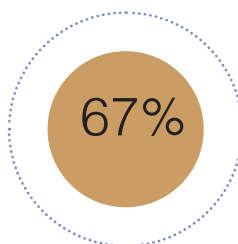
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Quesada	Gómez	José Manuel	R4	0000-0003-0990-5650
Casado	Díaz	Antonio	R4	
Rodríguez	Ramos	Ángel	R1	
Torrecillas	Baena	Bárbara	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Casado-Diaz A, Rodriguez-Ramos A, Torrecillas-Baena B, Dorado G, Quesada-Gomez JM, Galvez-Moreno MA. Flavonoid Phloretin Inhibits Adipogenesis and Increases OPG Expression in Adipocytes Derived from Human Bone-Marrow Mesenchymal Stromal-Cells. NUTRIENTS. 2021. 13(11):- DOI: 10.3390/nu13114185
IF: 5,719 Q1 D2
2. Loucera C, Pena-Chilet M, Esteban-Medina M, Munoyerro-Muniz D, Villegas R, Lopez-Miranda J, Rodriguez-Bano J, Tunes I, Bouillon R, Dopazo J, Gomez JMQ. Real world evidence of calcifediol or vitamin D prescription and mortality rate of COVID-19 in a retrospective cohort of hospitalized Andalusian patients. SCIENTIFIC REPORTS. 2021. 11(1):- DOI: 10.1038/s41598-021-02701-5
IF: 4,38 Q1 D3
3. Perez-Castrillon JL, Duenas-Laita A, Brandi ML, Jodar E, del Pino-Montes J, Quesada-Gomez JM, Castro FC, Gomez-Alonso C, Lopez LG, Martinez JMO, Exposito MRA, Galarraga B, Gonzalez-Macias J, Bouillon R, Hernandez-Herrero G, Fernandez-Hernando N, Arranz-Gutierrez P, Chinchilla SP. Calcifediol is superior to cholecalciferol in improving vitamin D status in postmenopausal women: a randomized trial. JOURNAL OF BONE AND MINERAL RESEARCH. 2021. 36(10):1967-1978. DOI: 10.1002/jbmr.4387
IF: 6,741 Q1 D2
4. Nogues X, Ovejero D, Pineda-Moncusi M, Bouillon R, Arenas D, Pascual J, Ribes A, Guerri-Fernandez R, Villar-Garcia J, Rial A, Gimenez-Argente C, Cos ML, Rodriguez-Morera J, Campodarve I, Quesada-Gomez JM, Garcia-Giralt N. Calcifediol Treatment and COVID-19-Related Outcomes. JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM. 2021. 106(10):E4017-E4027. DOI: 10.1210/clinem/dgab405
IF: 5,958 Q1 D2
5. Giner M, Miranda C, Vazquez-Gamez MA, Altea-Manzano P, Miranda MJ, Casado-Diaz A, Perez-Cano R, Montoya-Garcia MJ. Microstructural and Strength Changes in Trabecular Bone in Elderly Patients with Type 2 Diabetes Mellitus. DIAGNOSTICS. 2021. 11(3):- DOI: 10.3390/diagnostics11030577
IF: 3,706 Q2 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 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 (CTEICU) – MARTA CAMACHO CARDEÑOSA
- AGREEMENTS WITH COMPANIES: 1

GC18:

TRANSLATIONAL RESEARCH IN SURGERY OF SOLID ORGAN TRANSPLANTATION

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

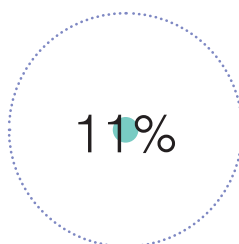
» TEAM

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

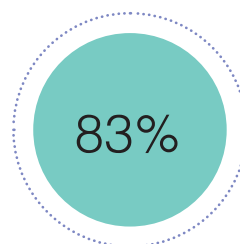
» SCIENTIFIC PRODUCTION



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. Cherqui D, Ciria R, Kwon CHD, Kim KH, Broering D, Wakabayashi G, Samstein B, Troisi RI, Han HS, Rotellar F, Soubrane O, Briceno J, Alconchel F, Ayllon MD, Berardi G, Cauchy F, Luque IG, Hong SK, Yoon YY, Egawa H, Lerut J, Lo CM, Rela M, Sapisochin G, Suh KS. Expert Consensus Guidelines on Minimally Invasive Donor Hepatectomy for Living Donor Liver Transplantation From Innovation to Implementation A Joint Initiative From the International Laparoscopic Liver Society (ILLS) and the Asian-Pacific Hepato-Pancreato-Biliary Association (A-PHPBA). *ANNALS OF SURGERY*. 2021. 273(1):96-108. DOI: 10.1097/SLA.0000000000004475
IF: 12,969 Q1 D1
2. Rodriguez A, Ruiz-Botella M, Martin-Loeches I, Herrera MJ, Sole-Violan J, Gomez J, Bodi M, Trefler S, Papiol E, Diaz E, Suberviola B, Vallverdu M, Mayor-Vazquez E, Moreno AA, Canabal Berlanga A, Sanchez M, Ortiz MD, Ballesteros JC, Iglesias LM, Marin-Corral J, Ramos EL, Valverde VH, Tello LVV, Chinesta SS, de Molina FJG, Garcia S, Perez CC, Laderas JCP, Garcia RR, Estella A, Ferrer R. Deploying unsupervised clustering analysis to derive clinical phenotypes and risk factors associated with mortality risk in 2022 critically ill patients with COVID-19 in Spain. *CRITICAL CARE*. 2021. 25(1):- . DOI: 10.1186/s13054-021-03487-8
IF: 9,097 Q1 D2
3. Lopez-Canovas JL, del Rio-Moreno M, Garcia-Fernandez H, Jimenez-Vacas JM, Moreno-Montilla MT, Sanchez-Frias ME, Amado V, Lopez FL, Fondevila MF, Ciria R, Gomez-Luque I, Briceno J, Nogueiras R, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. *CANCER LETTERS*. 2021. 496():72-83. DOI: 10.1016/j.canlet.2020.10.010
IF: 8,679 Q1 D2
4. Rufian-Andujar B, Valenzuela-Molina F, Rufian-Pena S, Casado-Adam A, Sanchez-Hidalgo JM, Rodriguez-Ortiz L, Medina-Fernandez FJ, Diaz-Lopez C, Ortega-Salas R, Martinez-Lopez A, Briceno-Delgado J, Romero-Ruiz A, Arjona-Sanchez A. From the Ronnett to the PSOGI Classification System for Pseudomyxoma Peritonei: A Validation Study. *ANNALS OF SURGICAL ONCOLOGY*. 2021. 28(5):2819-2827. DOI: 10.1245/s10434-020-09560-w
IF: 5,344 Q1 D1
5. Guijo-Rubio D, Briceno J, Gutierrez PA, Ayllon MD, Ciria R, Hervás-Martínez C. Statistical methods versus machine learning techniques for donor-recipient matching in liver transplantation. *PLOS ONE*. 2021. 16(5):- . DOI: 10.1371/journal.pone.0252068
IF: 3,24 Q2 D4

» CLINICAL GUIDES:

1. Cherqui D, Ciria R, Kwon CHD, Kim KH, Broering D, Wakabayashi G, Samstein B, Troisi RI, Han HS, Rotellar F, Soubrane O, Briceno J, Alconchel F, Ayllon MD, Berardi G, Cauchy F, Luque IG, Hong SK, Yoon YY, Egawa H, Lerut J, Lo CM, Rela M, Sapisochin G, Suh KS. Expert Consensus Guidelines on Minimally Invasive Donor Hepatectomy for Living Donor Liver Transplantation From Innovation to Implementation A Joint Initiative From the International Laparoscopic Liver Society (ILLS) and the Asian-Pacific Hepato-Pancreato-Biliary Association (A-PHPBA). *ANNALS OF SURGERY*. 2021. 273(1):96-108. DOI: 10.1097/SLA.0000000000004475.
IF: 12,969 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

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

GC19:

ARTIFICIAL VISION APPLICATIONS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

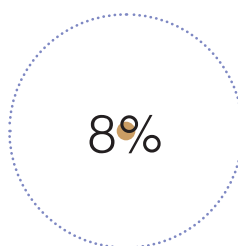
» TEAM

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	Bolívar	Enrique	R3	
Romero	Ramírez	Francisco José	R2	
Jurado	Rodríguez	David	R1	
Sarmadi		Hamid	R1	

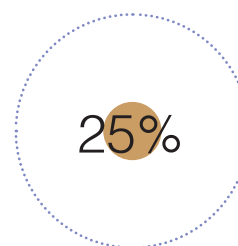
» SCIENTIFIC PRODUCTION



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. Carmona-Poyato A, Fernandez-Garcia NL, Madrid-Cuevas FJ, Duran-Rosal AM. A new approach for optimal offline time-series segmentation with error bound guarantee. PATTERN RECOGNITION. 2021. 115():-. DOI: 10.1016/j.patcog.2021.107917
IF: 7,74 Q1 D1
2. Sarmadi H, Munoz-Salinas R, Berbis MA, Luna A, Medina-Carnicer R. Joint scene and object tracking for cost-Effective augmented reality guided patient positioning in radiation therapy. COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE. 2021. 209():-. DOI: 10.1016/j.cmpb.2021.106296
IF: 5,428 Q1 D2
3. Romero-Ramirez FJ, Munoz-Salinas R, Medina-Carnicer R. Tracking fiducial markers with discriminative correlation filters. IMAGE AND VISION COMPUTING. 2021. 107():-. DOI: 10.1016/j.imavis.2020.104094
IF: 3,818 Q2 D3
4. Garrido-Castro JL, Aranda-Valera IC, Pena-Amaro J, Martinez-Galisteo A, Gonzalez-Navas C, Rodrigues-de-Souza DP, Alcaraz-Clariana S, Garcia-Luque L, Sanchez IRM, Lopez-Medina C, Collantes-Estevez E, Albuquerque-Sendin F. Mechanical Properties of Lumbar and Cervical Paravertebral Muscles in Patients with Axial Spondyloarthritis: A Case-Control Study. DIAGNOSTICS. 2021. 11(9):-. DOI: 10.3390/diagnostics11091662
IF: 3,706 Q2 D3
5. Garrido-Castro JL, Aranda-Valera IC, Pena-Amaro J, Martinez-Galisteo A, Gonzalez-Navas C, Rodrigues-de-Souza DP, Alcaraz-Clariana S, Garcia-Luque L, Sanchez IRM, Lopez-Medina C, Collantes-Estevez E, Albuquerque-Sendin F. Mechanical Properties of Lumbar and Cervical Paravertebral Muscles in Patients with Axial Spondyloarthritis: A Case-Control Study. DIAGNOSTICS. 2021. 11(9):-. DOI: 10.3390/diagnostics11091662
IF: 3,706 Q2 D3

» ACTIVITY:

- Nº ONGOING PROJECTS: 2
- Nº PHD THESES: 2
- Nº PATENTS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 1
 1. PAIDI TIC-161
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. IPFIS (ISCIII) - HAMID SARMADI NASSER
 2. FPI (AEI): FRANCISCO ROMERO RAMÍREZ
 3. CONTRATO DOCTORADO INDUSTRIAL UCO-SEABERY. DAVID JURADO RODRÍGUEZ
- AGREEMENTS WITH COMPANIES: 1

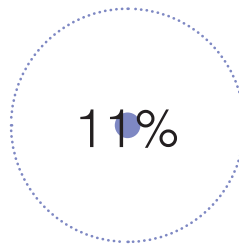
GENETICS AND BEHAVIOURAL DISEASES**SCIENTIFIC PROGRAM 4:****CANCER (ONCOLOGY AND ONCOHEMATOLOGY)****» TEAM**

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Ruiz	Rubio	Manuel	R4	0000-0001-8733-4377
Moriana	Elvira	Juan Antonio	R4	
Alos	Cívico	Francisco José	R3	
Antolí	Cabrera	Adoración	R3	
Burgos	Marín	Rafael	R3	
Cuadrado	Hidalgo	Fátima	R3	
Gálvez	Lara	Mario	R3	
Gamez	Granados	Juan Carlos	R3	
García	Torres	Francisco Mariano	R3	
García	Sancho	Esperanza	R3	
Guijarro	Granados	Teresa	R3	
Martín	Borreguero	Pilar	R3	
Moreno	Osella	Eliana	R3	
Perez	Dueñas	Carolina	R3	
Romero	Balsera	María Auxiliadora	R3	
Sánchez	Raya	María Araceli	R3	
Soto	Hidalgo	José Manuel	R3	
Corpas	Lopez	Jorge	R2	
Maldonado	Herves	Miguel Ángel	R2	
Vacas	Ruiz	Julia	R2	
Aguilera	Martín	Ángel	R1	
Espejo	Durán	Carmen	R1	
Jurado	González	Francisco Javier	R1	
Velasco	Rodríguez	Judith	R1	
Vencesla	Martínez	José Fernando	R1	

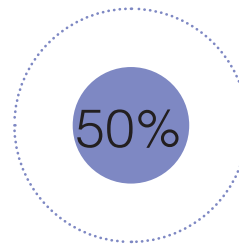
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» 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, Moriana JA, Vencesla JF, Galvez-Lara M. Brief Psychological Therapies for Emotional Disorders in Primary Care: A Systematic Review and Meta-Analysis. *CLINICAL PSYCHOLOGY-SCIENCE AND PRACTICE*. 2021. 28(4):363-376. DOI: 10.1037/cps0000009
IF: 6,724 Q1 D1
2. Corpas J, Moriana JA, Vencesla JF, Galvez-Lara M. Brief psychological treatments for emotional disorders in Primary and Specialized Care: A randomized controlled trial. *INTERNATIONAL JOURNAL OF CLINICAL AND HEALTH PSYCHOLOGY*. 2021. 21(1):- . DOI: 10.1016/j.ijchp.2020.11.002
IF: 5,35 Q1 D2
3. Martin-Borreguero P, Gomez-Fernandez AR, De la Torre-aguilar MJ, Gil-Campos M, Flores-Rojas K, Perez-Navero JL. Children With Autism Spectrum Disorder and Neurodevelopmental Regression Present a Severe Pattern After a Follow-Up at 24 Months. *FRONTIERS IN PSYCHIATRY*. 2021. 12():-. DOI: 10.3389/fpsy.2021.644324
IF: 4,157 Q2 D3
4. Rodriguez-Ramos A, Moriana JA, Garcia-Torres F, Ruiz-Rubio M. Emotional stability is related to 2D:4D and social desirability in women: Possible implications on subjective well-being and psychopathology. *PLOS ONE*. 2021. 16(3):- . DOI: 10.1371/journal.pone.0248368
IF: 3,24 Q2 D4
5. González-Blanch C, Muñoz-Navarro R, Medrano L A, Moriana J A, Ruiz-Rodríguez P, Cano-Vindel A. Moderators and predictors of treatment outcome in transdiagnostic group cognitive-behavioral therapy for primary care patients with emotional disorders. *DEPRESSION AND ANXIETY*. 2021. ():- . DOI: 10.1002/da.23164.
IF: 6,505 Q1 D1

» **ACTIVITY:**

- N° ONGOING PROJECTS: 2
- N° GRANTED PROJECTS IN 2021: 1
- N° PHD THESES: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3
 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 FRAILITY

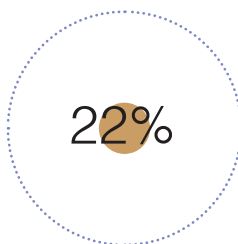
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Priego	Capote	Feliciano	R4	0000-0003-0697-719X
Luque	De Castro	María Dolores	R4	
Calderón	Santiago	Mónica	R2	
Ledesma	Escobar	Carlos Augusto	R2	
Castillo	Peinado	Laura de los Santos	R1	
Criado	Navarro	Inmaculada	R1	
Luque	Córdoba	Diego	R1	
Tome	Rodríguez	Sonia	R1	
Castillo	Peinado	Ana	R1	

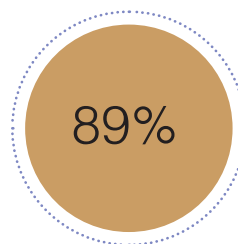
» SCIENTIFIC PRODUCTION



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:

1. Miho H, Moral J, Barranco D, Ledesma-Escobar CA, Priego-Capote F, Diez CM. Influence of genetic and interannual factors on the phenolic profiles of virgin olive oils. FOOD CHEMISTRY. 2021. 342():-. DOI: 10.1016/j.foodchem.2020.128357
IF: 7,514 Q1 D1
2. Castillo-Luna A, Criado-Navarro I, Ledesma-Escobar CA, Lopez-Bascon MA, Priego-Capote F. The decrease in the health benefits of extra virgin olive oil during storage is conditioned by the initial phenolic profile. FOOD CHEMISTRY. 2021. 336():-. DOI: 10.1016/j.foodchem.2020.127730
IF: 7,514 Q1 D1
3. Luque-Cordoba D, Priego-Capote F. Fully automated method for quantitative determination of steroids in serum: An approach to evaluate steroidogenesis. TALANTA. 2021. 224():-. DOI: 10.1016/j.talanta.2020.121923
IF: 6,057 Q1 D2
4. Castillo-Peinado LS, Calderon-Santiago M, Priego-Capote F. Lyophilization as pre-processing for sample storage in the determination of vitamin D-3 and metabolites in serum and plasma. TALANTA. 2021. 222():-. DOI: 10.1016/j.talanta.2020.121692
IF: 6,057 Q1 D2
5. Tome-Rodriguez S, Ledesma-Escobar CA, Penco-Valenzuela JM, Priego-Capote F. Influence of the fatty acid profile on the volatile components of virgin olive oil subjected to thermal stress. JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE. 2021. 101(11):4829-4837. DOI: 10.1002/jsfa.11129
IF: 3,638 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 1
- N° PHD THESES: 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
- AGREEMENTS WITH COMPANIES: 4

GC22:

EPIGENETICS

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

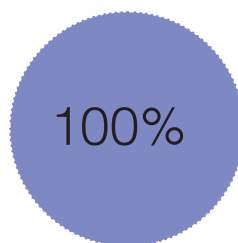
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Roldán	Arjona	María Teresa	R4	0000-0003-2842-3956
Rodríguez	Ariza	Rafael	R3	
Carrasco	Carmona	Álvaro	R2	
Córdoba	Cañero	María Dolores	R2	
Martínez	Macías	María Isabel	R2	
Morales	Ruíz	María Teresa	R2	
Parrilla	Doblas	Jara Teresa	R2	
Jordano	Raya	Marina	R1	
Grávalos	Cano	Inés	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Jordano-Raya M, Beltran-Melero C, Moreno-Recio MD, Martinez-Macias MI, Ariza RR, Roldan-Arjona T, Cordoba-Canero D. Complementary Functions of Plant AP Endonucleases and AP Lyases during DNA Repair of Abasic Sites Arising from C:G Base Pairs. INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES. 2021. 22(16):- DOI: 10.3390/ijms22168763
IF: 5,923 Q1 D3
2. Garcia-Ortiz MV, De La Torre-Aguilar MJ, Morales-Ruiz T, Gomez-Fernandez A, Flores-Rojas K, Gil-Campos M, Martin-Borreguero P, Ariza RR, Roldan-Arjona T, Perez-Navero JL. Analysis of Global and Local DNA Methylation Patterns in Blood Samples of Patients with Autism Spectrum Disorder. FRONTIERS IN PEDIATRICS. 2021. 9():-. DOI: 10.3389/fped.2021.685310
IF: 3,418 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2021: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 1
 1. Our group participates in the COST Action CA18111-Genome editing in plants - a technology with transformative potential (PlantEd).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. AYUDAS PARA CONTRATOS PREDOCTORALES PARA LA FORMACIÓN DE DOCTORES (MICINN) – MACARENA DORADO LEÓN
 2. P2MED (UNIÓN EUROPEA) – M^a ISABEL MARTÍNEZ MACÍAS
 3. Ayuda del Programa de Formación de Profesorado Universitario referencia: FPU20/01146 – MARINA JORDANO RAYA
- AGREEMENTS WITH COMPANIES: 1

GC23:

METABOLISM IN CHILDHOOD

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

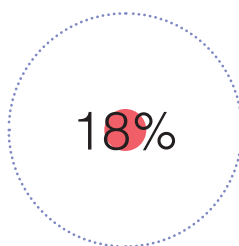
» TEAM

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

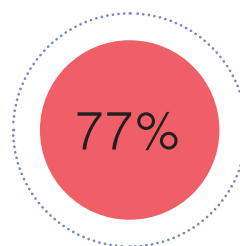
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Llorente-Cantarero FJ, Aguilar-Gomez FJ, Leis R, Bueno G, Ruperez AI, Anguita-Ruiz A, Vazquez-Cobela R, Mesa MD, Moreno LA, Gil A, Aguilera CM, Gil-Campos M. Relationship between Physical Activity, Oxidative Stress, and Total Plasma Antioxidant Capacity in Spanish Children from the GENOBOX Study. *ANTIOXIDANTS*. 2021. 10(2):-
DOI: 10.3390/antiox10020320.
IF: 6,312 Q1 D1
2. Gil-Campos M, Perez-Ferreiros A, Llorente-Cantarero FJ, Anguita-Ruiz A, Bedoya-Carpente JJ, Kalen A, Moreno LA, Bueno G, Gil A, Aguilera CM, Leis R. Association of Diet, Physical Activity Guidelines and Cardiometabolic Risk Markers in Children. *NUTRIENTS*. 2021. 13(9):-
DOI: 10.3390/nu13092954.
IF: 5,717 Q1 D2
3. Plaza-Diaz J, Flores-Rojas K, Torre-Aguilar MJD, Gomez-Fernandez AR, Martin-Borreguero P, Perez-Navero JL, Gil A, Gil-Campos M. Dietary Patterns, Eating Behavior, and Nutrient Intakes of Spanish Preschool Children with Autism Spectrum Disorders. *NUTRIENTS*. 2021. 13(10):-
DOI: 10.3390/nu13103551.
IF: 5,719 Q1 D2
4. Ordonez-Diaz MD, Gil-Campos M, Flores-Rojas K, Munoz-Villanueva MC, Mesa Maria D, de la Torre-Aguilar MJ, Gil A, Perez-Navero JL. Impaired Antioxidant Defence Status Is Associated With Metabolic-Inflammatory Risk Factors in Preterm Children With Extrauterine Growth Restriction: The BIORICA Cohort Study. *FRONTIERS IN NUTRITION*. 2021. 8):-
DOI: 10.3389/fnut.2021.793862.
IF: 6,576 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 8
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 7

» 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: 2
 1. SARA BORRELL (ISCIII)- BELÉN PASTOR VILLAESCUSA
 2. CIBEROBN (ISCIII) – ROCÍO VÁZQUEZ COBELA
- AGREEMENTS WITH COMPANIES: 2
- INTERNATIONAL PROJECTS: 1
 1. MARIA ELENA MATEOS GONZALEZ; ChiLTERN - Children's Liver Tumour European Research Network; Funding Agency: COMISIÓN EUROPEA; Reference: PHC-18-2015-001
- AWARDS: 2
 1. F.J. Llorente-Cantarero, et al. Beca Ballabriga. XXI Congreso de la Sociedad Española de Investigación en Nutrición y Alimentación en Pediatría.
 2. L. Velarde-Morales, J.M Jurado-Castro, M. Gil-Campos. Beca Ballabriga. XXI Congreso de la Sociedad Española de Investigación en Nutrición y Alimentación en Pediatría.

CLINICAL AND MOLECULAR MICROBIOLOGY

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

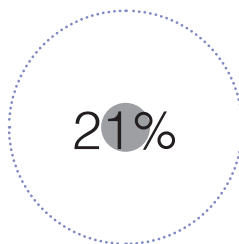
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Martínez	Martínez	Luis	R4	0000-0002-6091-4045
Bellido	Barquero	María del Mar	R3	
Causse	del Río	Manuel	R3	
Egea	Miranda	María del Pilar	R3	
Gracia	Ahufinger	Irene	R3	
Guzmán	Puche	Julia	R3	
Linares	Sicilia	María José	R3	
Pérez	Jiménez	Ana Belén	R3	
Riazzo	Damas	Cristina	R3	
Ruiz	Martínez	Pilar	R3	
Tejero	García	Rocío	R3	
Vaquero	Álvarez	Esther	R2	
Artacho	Reinoso	María José	R1	
Ayala	Morillo	Luis	R1	
Blanco	Martín	Tania	R1	
Elías	López	Cristina	R1	
Espinar	García	Mónica	R1	
Marfil	Pérez	Eduardo	R1	
Morales	Domínguez	Clara de Asís	R1	
Muñoz	De la Rosa	Montserrat	R1	
Pedraza	Merino	Rosa	R1	
Pérez	Garrido	Virginia	R1	
Sánchez	León	Irene	R1	
Córdoba	Fernández	María	T	

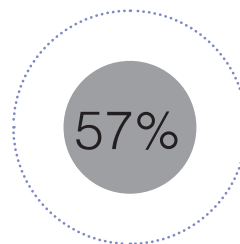
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» 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, Jenayah R, Perez-Vazquez M, Manuel-Causse, Asma F, Jalel B, Oteo-Iglesias J, Martinez-Martinez L. Characterization of OXA-48-producing *Klebsiella oxytoca* isolates from a hospital outbreak in Tunisia. *JOURNAL OF GLOBAL ANTIMICROBIAL RESISTANCE*. 2021. 24():306-310. DOI: 10.1016/j.jgar.2021.01.008.
IF: 4,035 Q2 D4
2. Gambaro F, Perez AB, Aguera E, Prot M, Martinez-Martinez L, Cabrerizo M, Simon-Loriere E, Fernandez-Garcia MD. Genomic surveillance of enterovirus associated with aseptic meningitis cases in southern Spain, 2015-2018. *SCIENTIFIC REPORTS*. 2021. 11(1):- . DOI: 10.1038/s41598-021-01053-4.
IF: 4,38 Q1 D3
3. Lopez-Vinau T, Penalva G, Garcia-Martinez L, Caston JJ, Munoz-Rosa M, Cano A, Recio M, Cisneros JM, Perez-Nadales E, Aguirre JR, Garcia-Martinez E, Salcedo I, del Prado JR, de la Fuente C, Martinez-Martinez L, Gracia-Ahufinger I, Torre-Cisneros J. Impact of an Antimicrobial Stewardship Program on the Incidence of Carbapenem Resistant Gram-Negative Bacilli: An Interrupted Time-Series Analysis. *ANTIBIOTICS-BASEL*. 2021. 10(5):- . DOI: 10.3390/antibiotics10050586.
IF: 4,639 Q2 D3
4. Fernandez-Martinez M, Gonzalez-Rico C, Gozalo-Marguello M, Marco F, Gracia-Ahufinger I, Aranzamendi M, Sanchez-Diaz AM, Vicente-Rangel T, Chaves F, Montes JC, Martinez-Martinez L, Farinas MC. Molecular characterization of multidrug resistant Enterobacterales strains isolated from liver and kidney transplant recipients in Spain. *SCIENTIFIC REPORTS*. 2021. 11(1):- . DOI: 10.1038/s41598-021-90382-5.
IF: 4,379 Q1 D3
5. Farinas MC, Gonzalez-Rico C, Fernandez-Martinez M, Fortun J, Escudero-Sanchez R, Moreno A, Bodro M, Munoz P, Valerio M, Montejo M, Nieto J, Millan JCRS, Casafont-Morencos F, Martinez-Martinez L, Farinas-Alvarez C. Oral decontamination with colistin plus neomycin in solid organ transplant recipients colonized by multidrug-resistant Enterobacterales: a multicentre, randomized, controlled, open-label, parallel-group clinical trial. *CLINICAL MICROBIOLOGY AND INFECTION*. 2021. 27(6):856-863. DOI: 10.1016/j.cmi.2020.12.016.
IF: 8,067 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 5
 1. Spanish Network for Research on Infectious Diseases (REIPI)
 2. Andalusian Network For Clinical Research In Infectious Diseases
 3. EPIC Alliance - Alliance for the Exploration of Pipelines for Inhibitors of Carbapenemases
 4. Centro de Investigación Biomédica en Red de Enfermedades Infecciosas (CIBERINFEC)
 5. Alliance for the Exploration of Pipelines for Inhibitors of Carbapenemases; JPIAMR Network Plus 2020
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 4
 1. LUIS MARTÍNEZ MARTÍNEZ- INTENSIFICACIONES: Acción A (SAS)
 2. IRENE SÁNCHEZ LEÓN; Modalidad 6.2 Contratos Predoctorales UCO 2018; Funding Agency: UCO; PP18-UCO_ISL-MOD.6.2
 3. PUSHPAK MIZAR; Comisión Europea H2020 Programa Marie Skłodowska-Curie Cofund: IMIBIC Fellowships Programme for Personalised and Precision Medicine (IMIBIC-P2Med).
 4. MARÍA CÓRDOBA FERNÁNDEZ; Fondo de Investigación Sanitaria (FIS). Proyecto PI20-01749_
- AGREEMENTS WITH COMPANIES: 6
- INTERNATIONAL PROJECTS: 2
 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.

GC25:

KNOWLEDGE DISCOVERY AND INTELLIGENT SYSTEMS IN BIOMEDICINE

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

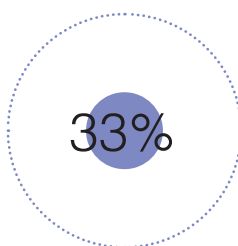
» TEAM

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	
Barbudo	Lunar	Rafael	R1	
Delgado	Osuna	José Antonio	R1	
Esteban	Toscano	Aurora	R1	
Luque	Guzmán	María Carmen	R1	
Marín	Sanz	Juan Antonio	R1	
Moya	Martín-Castaño	Antonio Rafael	R1	
Pérez	Perdomo	Eduardo	R1	
Trasierras	Fresco	Antonio Manuel	R1	

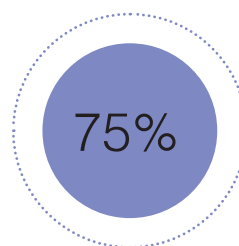
» SCIENTIFIC PRODUCTION



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. Perez E, Reyes O, Ventura S. Convolutional neural networks for the automatic diagnosis of melanoma: An extensive experimental study. *MEDICAL IMAGE ANALYSIS*. 2021. 67():-. DOI: 10.1016/j.media.2020.101858
IF: 8,545 Q1 D1
2. Quintero-Dominguez LA, Morell C, Ventura S. A propositionalization method of multi-relational data based on Grammar-Guided Genetic Programming. *EXPERT SYSTEMS WITH APPLICATIONS*. 2021. 168():-. DOI: 10.1016/j.eswa.2020.114263
IF: 6,954 Q1 D1
3. Frias M, Moyano JM, Rivero-Juarez A, Luna JM, Camacho A, Fardoun HM, Machuca I, Al-Twijri M, Rivero A, Ventura S. Classification Accuracy of Hepatitis C Virus Infection Outcome: Data Mining Approach. *JOURNAL OF MEDICAL INTERNET RESEARCH*. 2021. 23(2):-. DOI: 10.2196/18766
IF: 5,428 Q1 D1
4. Perez E, Ventura S. Melanoma Recognition by Fusing Convolutional Blocks and Dynamic Routing between Capsules. *CANCERS*. 2021. 13(19):-. DOI: 10.3390/cancers13194974
IF: 6,639 Q1 D3
5. Alors-Perez E, Blazquez-Encinas R, Alcalá S, Viyuela-García C, Pedraza-Arevalo S, Herrero-Aguayo V, Jiménez-Vacas JM, Mafficini A, Sánchez-Frías ME, Cano MT, Abollo-Jiménez F, Marín-Sanz JA, Cabezas-Sainz P, Lawlor RT, Luchini C, Sánchez L, Sánchez-Hidalgo JM, Ventura S, Martín-Hijano L, Gahete MD, Scarpa A, Arjona-Sánchez A, Ibanez-Costa A, Sainz B, Luque RM, Castano JP. Dysregulated splicing factor SF3B1 unveils a dual therapeutic vulnerability to target pancreatic cancer cells and cancer stem cells with an anti-splicing drug. *JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH*. 2021. 40(1):-. DOI: 10.1186/s13046-021-02153-9
IF: 11,161 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 1

» 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: 2
 1. Formación de personal técnico para análisis de datos (MINECO) - JUAN ANTONIO MARIN SANZ
 2. IPFIS (ISCI) – EDUARDO PÉREZ PERDOMO
- AGREEMENTS WITH COMPANIES: 1

GC26:

CLINICAL VIROLOGY AND ZONOSIS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

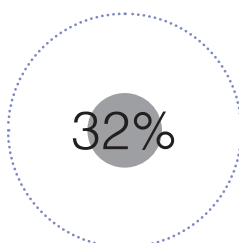
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Rivero	Román	Antonio	R4	0000-0002-8643-4250
Camacho	Espejo	Ángela	R3	
Frías	Casas	Mario	R3	
Risalde	Moya	María Ángeles	R3	
Rivero	Juárez	Antonio	R3	
Machuca	Sánchez	Isabel	R2	
Pérez	Valero	Ignacio	R2	
Caballero	Gómez	Javier	R1	
Corona	Mata	Diana	R1	
López	López	Pedro	R1	
Ruiz	Cáceres	Inmaculada	R1	
Romero	Morales	María del Carmen	ADM	
García	Delgado	Gema Dolores	T	
Ruiz	Torres	Laura	T	
Zafra	Soto	Ismael	T	

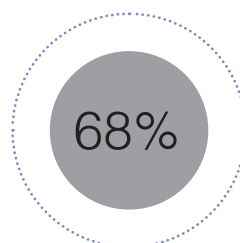
» SCIENTIFIC PRODUCTION



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. Frias M, Moyano JM, Rivero-Juarez A, Luna JM, Camacho A, Fardoun HM, Machuca I, Al-Twijri M, Rivero A, Ventura S. Classification Accuracy of Hepatitis C Virus Infection Outcome: Data Mining Approach. *JOURNAL OF MEDICAL INTERNET RESEARCH*. 2021. 23(2):- DOI: 10.2196/18766
IF: 5,428 Q1 D1
2. Caballero-Gomez J, Garcia-Bocanegra I, Navarro N, Guerra R, Martinez-Nevaldo E, Soriano P, Cano-Terriza D. Zoo animals as sentinels for Schmallenberg virus monitoring in Spain. *VETERINARY MICROBIOLOGY*. 2021. 252():-. DOI: 10.1016/j.vetmic.2020.108927
IF: 3,293 Q1 D1
3. Rivero-Juarez A, Risalde MA, Gortazar C, Lopez-Lopez P, Barasona JA, Frias M, Caballero-Gomez J, de la Fuente J, Rivero A. Detection of Hepatitis E Virus in Hyalomma lusitanicum Ticks Feeding on Wild Boars. *FRONTIERS IN MICROBIOLOGY*. 2021. 12():-. DOI: 10.3389/fmicb.2021.692147
IF: 5,64 Q1 D3
4. Rivero-Juarez A, Lopez-Lopez P, Pineda JA, Alados JC, Fuentes-Lopez A, Ramirez-Arellano E, Freyre C, Perez AB, Frias M, Rivero A. Limited Value of Single Sampling for IgM Antibody Determination as a Diagnostic Approach for Acute Hepatitis E Virus Infection. *MICROBIOLOGY SPECTRUM*. 2021. 9(1):- DOI: 10.1128/Spectrum.00382-21
IF: 7,171 Q1 D2
5. Frias M, Lopez-Lopez P, Zafra I, Caballero-Gomez J, Machuca I, Camacho A, Risalde MA, Rivero-Juarez A, Rivero A. Development and Clinical Validation of a Pangenotypic PCR-Based Assay for the Detection and Quantification of Hepatitis E Virus (Orthohepevirus A Genus). *JOURNAL OF CLINICAL MICROBIOLOGY*. 2021. 59(2):- DOI: 10.1128/JCM.02075-20
IF: 5,948 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2021: 2
- N° CLINICAL TRIALS: 9

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. CIBER - Enfermedades Infecciosas (CB21/13/00083)
 2. AIDS Research Network (RIS. RD16/0025/0034)
 3. HEVnet (ECDC: NP/2016/OCS/7892/01)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 6
 1. SARA BORRELL (ISCIII) - MANUEL MARIO FRIAS CASAS
 2. MIGUEL SERVET TIPO I (ISCIII) - ANTONIO RIVERO JUÁREZ
 3. INTENSIFICACIÓN (ISCIII) - ANTONIO RIVERO ROMÁN
 4. INTENSIFICACIÓN (SAS)- ANTONIO RIVERO ROMÁN.
 5. Programa de Ayuda para "Formación de Profesorado Universitario" (FPU). Ministerio de Ciencia, Innovación y Universidades - JAVIER CABALLERO GÓMEZ
 6. Programa Operativo de Empleo Juvenil 2014-2020 (POEJ) - GEMA DOLORES GARCÍA DELGADO
- AGREEMENTS WITH COMPANIES: 16
- 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: 2
 1. ANTONIO RIVERO JUÁREZ; PREMIO A LA MEJOR COMUNICACIÓN "Valor limitado de la determinación de anticuerpos IGM para el diagnóstico de hepatitis aguda por el virus de la hepatitis E". Grupo de Estudio de las Hepatitis Víricas (GEHEP) de la Sociedad Española de Enfermedades Infecciosas y Microbiología Clínica.
 2. PEDRO LÓPEZ LÓPEZ; PREMIO A LA MEJOR COMUNICACIÓN "Prevalencia del virus de la hepatitis E en alimentos de origen porcino". Consejo Andaluz de Colegios Oficiales de Veterinarios.

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

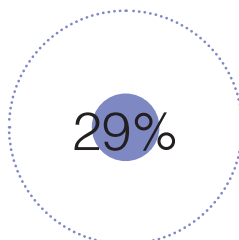
FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Luque	Huertas	Raúl Miguel	R4	0000-0002-7585-1913
Gahete	Ortiz	Manuel David	R4	
Martínez	Fuentes	Antonio Jesús	R4	
Solivera	Vela	Juan	R3	
González	Serrano	María Teresa	R2	
León	González	Antonio José	R2	
Moreno	Rodríguez	María del Mar	R2	
Sarmento	Borges Cabral	Andrés Morais	R2	
Jiménez	Vacas	Juan Manuel	R2	
García	Martínez	Araceli	R2	
Valverde	Moyano	Roberto	R2	
Vidal	Miñano	Juana María	R2	
Alfaro	García	Luis	R1	
Alors	Pérez	Emilia María	R1	
De la Salud	De la Rosa Herendia	Ana	R1	
Di Caro		Isidoro	R1	
García	Estrada	Antonio	R1	
García	García	Miguel Eduardo	R1	
Herman	Sánchez	Natalia	R1	
Herrero	Aguayo	Vicente	R1	
López	Cánovas	Juan Luis	R1	
López	López	Fernando	R1	
Mata	Ordoñez	Fernando	R1	
Montero	Hidalgo	Antonio Jesús	R1	
Pérez	Gómez	Jesús Miguel	R1	
Pérez	Repiso	Auxiliadora	R1	
Rynkowska		Zofía	R1	
Sáez	Martínez	Prudencio	R1	
Sánchez	Sánchez	Rafael	R1	

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Sánchez	Medianero	María Teresa	R1	
Selmi		Salima	R1	
Toledano	Delgado	Álvaro	R1	
Porcel	Pastrana	Francisco	R1	

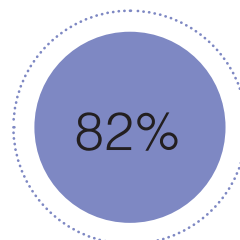
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» 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

» HIGHLIGHTED PUBLICATIONS:

1. Jimenez-Vacas JM, Herrero-Aguayo V, Montero-Hidalgo AJ, Saez-Martinez P, Gomez-Gomez E, Leon-Gonzalez AJ, Fuentes-Fayos AC, Yubero-Serrano EM, Requena-Tapia MJ, Lopez M, Castano JP, Gahete MD, Luque RM. Clinical, Cellular, and Molecular Evidence of the Additive Antitumor Effects of Biguanides and Statins in Prostate Cancer. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*. 2021. 106(2):E696-E710. DOI: 10.1210/clinem/dgaa877
IF: 5,958 Q1 D2
2. Leon-Gonzalez AJ, Saez-Martinez P, Jimenez-Vacas JM, Herrero-Aguayo V, Montero-Hidalgo AJ, Gomez-Gomez E, Madrona A, Castano JP, Espartero JL, Gahete MD, Luque RM. Comparative Cytotoxic Activity of Hydroxytyrosol and Its Semisynthetic Lipophilic Derivatives in Prostate Cancer Cells. *ANTIOXIDANTS*. 2021. 10(9):- . DOI: 10.3390/antiox10091348
IF: 6,312 Q1 D1
3. Jimenez-Vacas JM, Montero-Hidalgo AJ, Gomez-Gomez E, Fuentes-Fayos AC, Ruiz-Pino F, Guler I, Camargo A, Anglada FJ, Carrasco-Valiente J, Tena-Sempere M, Sarmiento-Cabral A, Castano JP, Gahete MD, Luque RM. In 1-Ghrelin Splicing Variant as a Key Element in the Pathophysiological Association Between Obesity and Prostate Cancer. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*. 2021. 106(12):E4956-E4968. DOI: 10.1210/clinem/dgab516
IF: 5,958 Q1 D2
4. Lopez-Canovas JL, del Rio-Moreno M, Garcia-Fernandez H, Jimenez-Vacas JM, Moreno-Montilla MT, Sanchez-Frias ME, Amado V, Lopez FL, Fondevila MF, Ciria R, Gomez-Luque I, Briceno J, Nogueiras R, de la Mata M, Castano JP, Rodriguez-Peralvarez M, Luque RM, Gahete MD. Splicing factor SF3B1 is overexpressed and implicated in the aggressiveness and survival of hepatocellular carcinoma. *CANCER LETTERS*. 2021. 496():72-83. DOI: 10.1016/j.canlet.2020.10.010
IF: 8,679 Q1 D2
5. Alors-Perez E, Blazquez-Encinas R, Alcalá S, Viyuela-Garcia C, Pedraza-Arevalo S, Herrero-Aguayo V, Jimenez-Vacas JM, Mafficini A, Sanchez-Frias ME, Cano MT, Abollo-Jimenez F, Marin-Sanz JA, Cabezas-Sainz P, Lawlor RT, Luchini C, Sanchez L, Sanchez-Hidalgo JM, Ventura S, Martin-Hijano L, Gahete MD, Scarpa A, Arjona-Sanchez A, Ibanez-Costa A, Sainz B, Luque RM, Castano JP. Dysregulated splicing factor SF3B1 unveils a dual therapeutic vulnerability to target pancreatic cancer cells and cancer stem cells with an anti-splicing drug. *JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH*. 2021. 40(1):- . DOI: 10.1186/s13046-021-02153-9
IF: 11,161 Q1 D1

» CLINICAL GUIDES:

1. Pico A, Aranda-Lopez I, Sesmilo G, Toldos-Gonzalez O, Japon MA, Luque RM, Puig-Domingo M. Recommendations on the pathological report of pituitary tumors. A consensus of experts of the Spanish Society of Endocrinology and Nutrition and the Spanish Society of Pathology. *ENDOCRINOLOGIA DIABETES Y NUTRICION*. 2021. 68(3):196-207. DOI: 10.1016/j.endinu.2020.10.004.
2. Pico A, Aranda-Lopez I, Sesmilo G, Toldos-Gonzalez O, Japon MA, Luque RM, Puig-Domingo M. Recommendations on the pathological report of pituitary tumors. A consensus of experts of the Spanish Society of Endocrinology and Nutrition and the Spanish Society of Pathology. *REVISTA ESPAÑOLA DE PATOLOGÍA*. 2021. 54(4):263-274. DOI: 10.1016/j.patol.2020.11.006.

» ACTIVITY:

- N° ONGOING PROJECTS: 12
- N° GRANTED PROJECTS IN 2021: 3
- N° CLINICAL TRIALS: 3
- N° PHD THESES: 2
- N° PATENTS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 12
 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) 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).
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 13
 1. Personal investigador doctor (CTEICU) - ARACELI GARCÍA MARTÍNEZ
 2. BECAS EDUARDO GALLEGO (FUNDACIÓN FRANCISCO COBOS) – ANTONIO JOSÉ LEÓN GONZÁLEZ
 3. SARA BORRELL (ISCIII) - ANDRÉ MORAIS CABRAL BORGES-SARMENTO
 4. PFIS (ISCIII) - EMILIA ALORS PÉREZ
 5. Posdoctorales Senior (CSyF) - ANTONIO JOSÉ LEÓN GONZÁLEZ
 6. RRHH P2MED (COMISIÓN EUROPEA) - ANDRÉ MORAIS CABRAL BORGES-SARMENTO
 7. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) - VICENTE HERRERO AGUAYO
 8. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) - PRUDENCIO SAEZ MARTÍNEZ
 9. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) - ANTONIO JESÚS MONTERO HIDALGO
 10. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) - JESÚS MIGUEL PÉREZ GÓMEZ
 11. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) – MIGUEL EDUARDO GARCÍA GARCÍA
 12. FORMACIÓN PROFESORADO UNIVERSITARIO “FPU” (MEC) – NATALIA HERMAN SÁNCHEZ
 13. FORMACIÓN DE PROFESIONAL INVESTIGADOR “FPI” (MEC) – FRANCISCO PORCEL PASTRANA
- AGREEMENTS WITH COMPANIES: 5
- AWARDS: 7
 1. RAUL MIGUEL LUQUE HUERTAS; Sociedad Española de Endocrinología y Nutrición (SEEN); Premio al mejor artículo publicado en el año 2020. Título: A Somatostatin Receptor Subtype-3 (SST3) Peptide Agonist Shows Antitumor Effects in Experimental Models of Nonfunctioning Pituitary Tumors. Revista: Clinical Cancer Research.
 2. MANUEL DAVID GAHETE ORTIZ; Endocrine Society Early Investigator Awards; Funding Agency: THE ENDOCRINE SOCIETY; Reference: ENDO-EIA-2021-01
 3. PRUDENCIO SÁEZ MARTÍNEZ; Young Investigator Award; Funding Agency: EUROPEAN SOCIETY OF ENDOCRINOLOGY; Reference: ESE-2021-02
 4. MIGUEL EDUARDO GARCIA GARCIA; Premio a la mejor comunicación en el Congreso de Investigadores Noveles de la Universidad de Córdoba; Funding Agency: UCO.
 5. ANDRE MORAIS SARMENTO BORGES CABRAL; Premio a la mejor comunicación oral básica en el 62 Congreso de la SEEN, Título: Identificación IDENTIFICACION EL MIR-107 COMO BIOMARCADOR DIAGNÓSTICO Y DIANA TERAPÉUTICA EN LA ASOCIACIÓN FISIOPATOLÓGICA ENTRE OBESIDAD Y CÁNCER DE PRÓSTATA.; 62 Congreso Nacional de la Sociedad Española de Endocrinología y Nutrición.
 6. NATALIA HERMAN SANCHEZ; Premio a la mejor comunicación en el Congreso de Investigadores Noveles de la Universidad de Córdoba; Funding Agency: UCO.
 7. NATALIA HERMAN SANCHEZ; Premio a la mejor comunicación oral en la 3ª Jornada de Hepatología Traslacional de la Asociación Española para el Estudio del Hígado (AEEH); Funding Agency: AEEH.

NEUROPLASTICITY AND OXIDATIVE STRESS

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Agüera	Morales	Eduardo	R4	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	José	R3	
Espejo	Portero	Isabel	R2	
Feijoo	López	Montserrat	R2	
Galvao	Carmona	Alejandro	R2	
Gascón	Luna	Felix	R2	
Gomez	Chaparro	José Luis	R2	
Peña	Toledo	María Ángeles	R2	
Rodríguez	Cantalejo	Fernando	R2	
Conde	Gavilán	Cristina	R1	
Galván	Jurado	Alberto	R1	
Moyano	Gallego	María José	R1	
Peña	García	Victoria	R1	
Valdés	Navarro	Paula	R1	
Buendía	Bello	Paula	T	
Giraldo	Polo	Ana Isabel	T	
Latorre	Luque	Manuel	T	
Martín	Hersog	Francisco Antonio	T	

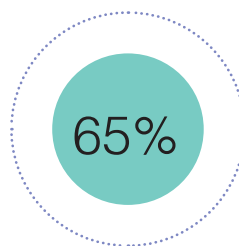
» SCIENTIFIC PRODUCTION



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 (poc)
Programming	

» HIGHLIGHTED PUBLICATIONS:

1. Pena-Toledo MA, Luque E, Ruz-Caracuel I, Aguera E, Jimena I, Pena-Amaro J, Tunez I. Transcranial Magnetic Stimulation Improves Muscle Involvement in Experimental Autoimmune Encephalomyelitis. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*. 2021. 22(16):- DOI: 10.3390/ijms22168589
IF: 5,923 Q1 D3
2. Dopazo J, Maya-Miles D, Garcia F, Lorusso N, Calleja MA, Pareja MJ, Lopez-Miranda J, Rodriguez-Bano J, Padillo J, Tunez I, Romero-Gomez M. Implementing Personalized Medicine in COVID-19 in Andalusia: An Opportunity to Transform the Healthcare System. *JOURNAL OF PERSONALIZED MEDICINE*. 2021. 11(6):- DOI: 10.3390/jpm11060475
IF: 4,945 Q1 D2
3. Jimenez-Lucena R, Alcalá-Díaz JF, Roncero-Ramos I, Lopez-Moreno J, Camargo A, Gomez-Delgado F, Quintana-Navarro GM, Vals-Delgado C, Rodriguez-Cantalejo F, Luque RM, Delgado-Lista J, Ordoñas JM, Perez-Martinez P, Rangel-Zuniga OA, Lopez-Miranda J. MiRNAs profile as biomarkers of nutritional therapy for the prevention of type 2 diabetes mellitus: From the CORDIOPREV study. *CLINICAL NUTRITION*. 2021. 40(3):1028-1038. DOI: 10.1016/j.clnu.2020.06.035
IF: 7,324 Q1 D1
4. Pastor-Villaescusa B, Plaza-Díaz J, Egea-Zorrilla A, Leis R, Bueno G, Hoyos R, Vazquez-Cobela R, Latorre M, Canete MD, Caballero-Villarraso J, Gil A, Canete R, Aguilera CM. Evaluation of the gut microbiota after metformin intervention in children with obesity: A metagenomic study of a randomized controlled trial. *BIOMEDICINE & PHARMACOTHERAPY*. 2021. 134():-. DOI: 10.1016/j.biopha.2020.111117
IF: 6,529 Q1 D1

5. Romero-Ruiz A, Pineda B, Ovelleiro D, Perdices-Lopez C, Torres E, Vazquez MJ, Guler I, Jimenez A, Pineda R, Persano M, Romero-Baldonado C, Arjona JE, Lorente J, Munoz C, Paz E, Garcia-Maceira FI, Arjona-Sanchez A, Tena-Sempere M. Molecular diagnosis of polycystic ovary syndrome in obese and non-obese women by targeted plasma miRNA profiling. EUROPEAN JOURNAL OF ENDOCRINOLOGY. 2021. 185(5):637-652. DOI: 10.1530/EJE-21-0552

IF: 6,664 Q1 D2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 7
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 29

» **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
- AGREEMENTS WITH COMPANIES: 17

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	
Gay	Mimbrera	Jesús	R1	
Gómez	Arias	Pedro Jesús	R1	
López	García	María	R1	
Sanz	Cabanillas	Juan Luis	R1	
Clemente	Millán	María del Carmen	N	
López	González	Carmen	N	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



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. He H, Del Duca E, Diaz A, Kim HJ, Gay-Mimbrera J, Zhang N, Wu JN, Beaziz J, Estrada Y, Krueger JG, Pavel AB, Ruano J, Guttman-Yassky E. Mild atopic dermatitis lacks systemic inflammation and shows reduced nonlesional skin abnormalities. *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*. 2021. 147(4):1369-1380. DOI: 10.1016/j.jaci.2020.08.041
IF: 10,793 Q1 D2
2. Gomez-Arias PJ, Gomez-Garcia F, Hernandez-Parada J, Montilla-Lopez AM, Ruano J, Parra-Peralbo E. Efficacy and Safety of Janus Kinase Inhibitors in Type I Interferon-Mediated Monogenic Autoinflammatory Disorders: A Scoping Review. *DERMATOLOGY AND THERAPY*. 2021. 11(3):733-750. DOI: 10.1007/s13555-021-00517-9
IF: 3,264 Q2 D5
3. Gómez-Arias PJ, Abad-Arenas E, Arias-Blanco MC, Redondo-Sánchez J, Galán-Gutiérrez M, Vélez García-Nieto AJ. Medical and legal aspects of the practice of teledermatology in Spain. *Actas Dermo-Sifiliográficas*. 2021. 112(2): DOI: 10.1016/j.adengl.2020.09.016
IF: 0,52 Q3

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 25

» 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 immunomediated 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)
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. INTENSIFICACIÓN ACCIÓN A (SAS) – JUAN RUANO RUÍZ
- AGREEMENTS WITH COMPANIES: 12

GE04:

APPLIED PSYCHOLOGY

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

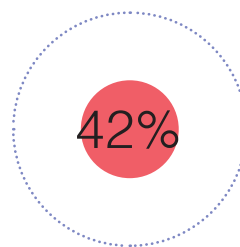
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Luque	Salas	Bárbara	R4	0000-0001-6858-9892
Tabernero	Urbieta	Carmen	R4	
Arenas	Moreno	Alicia	R3	
Castillo	Mayen	Rosario	R3	
Cuadrado	Esther	R3		
Fernández	Calvo	Bernardino	R3	
Moyano	Pacheco	Manuel	R3	
Rubio	García	Sebastián	R3	
Gutiérrez	Domingo	Tamara	R2	
Farhane	Medina	Naima Z.	R1	
Villaécija	Rodríguez	Joaquín	R1	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



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, Maldonado MA, Taberero C, Arenas A, Castillo-Mayen R, Luque B. Construction and Validation of a Brief Pandemic Fatigue Scale in the Context of the Coronavirus-19 Public Health Crisis. *INTERNATIONAL JOURNAL OF PUBLIC HEALTH*. 2021. 66():-. DOI: 10.3389/ijph.2021.1604260
IF: 3,38 Q1 D3
2. Taberero C, Caprara GV, Gutierrez-Domingo T, Cuadrado E, Castillo-Mayen R, Arenas A, Rubio S, Luques B. Positivity and Self-Efficacy Beliefs Explaining Health-Related Quality of Life in Cardiovascular Patients. *PSICOTHEMA*. 2021. 33(3):433-441. DOI: 10.7334/psicothema2020.476
IF: 3,89 Q1 D3
3. Nisa, C. F., Belanger, J. J., Faller, D. G., Buttrick, N. R., Mierau, J., (...), Moyano, M., Psycorona Collaboration & Leander, N. P. (2021). Lives versus Livelihoods? Perceived economic risk has a stronger association with support for COVID-19 preventive measures than perceived health risk. *Scientific reports*, 11(1), 1-12. DOI: 10.1038/s41598-021-88314-4
IF: 4.380 Q1
4. Martín-Fernández, M., Marco, M., Romo, M., & Moyano, M. (2021). Adaptation of the brief sensation seeking scale in Spanish young adults: Psychometric properties and validity evidence. *Current Psychology*, 40(6), 2698-2706. DOI: 10.1007/s12144-019-00190-4
IF: 4.297 Q1
5. Stroebe, W., VanDellen, M. R., Abakoumkin, G., Lemay, E. P., (...), Moyano, M., Psycorona Collaboration & Leander, N. P. (2021). Politicization of COVID-19 health-protective behaviors in the United States: Longitudinal and cross-national evidence. *PloS one*, 16(10), e0256740. DOI: 10.1371/journal.pone.0256740
IF: 3.249 Q1

» ACTIVITY:

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

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. PAIDI HUM-414
 2. Instituto de Neurociencias de Castilla Y León "IncyI" - Unidad de Investigación Consolidada de Castilla y León
 3. PAIDI SEJ-544 ÍNDICES
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. FORMACIÓN PROFESORADO UNIVERSITARIO "FPU" (MEC) - JOAQUÍN VILLAÉCIJA RODRÍGUEZ
- AGREEMENTS WITH COMPANIES: 1
- INTERNATIONAL PROJECTS: 1
 1. IP: 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.

GE05:

GENITOURINARY DISEASES

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

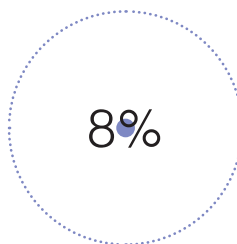
» TEAM

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

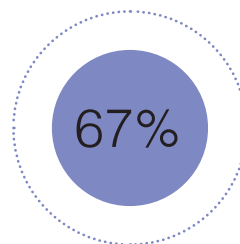
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Galisteo JMR, Fernandez L, Gomez EG, de Pedro N, Castineira RC, Pedregosa AB, Guler I, Valiente JC, Esteban L, Gonzalez S, Castello N, Otero L, Garcia J, Segovia E, Tapia MJR, Najarro P. Telomere-based risk models for the early diagnosis of clinically significant prostate cancer. PROSTATE CANCER AND PROSTATIC DISEASES. 2021. 24(1):88-95. DOI: 10.1038/s41391-020-0232-4
IF: 5,554 Q1 D2
2. Gomez-Gomez E, Sorribas SM, Valero-Rosa J, Blanca A, Mesa J, Salguero J, Carrasco-Valiente J, Lopez-Ruiz D, Anglada-Curado FJ. Does Adding Standard Systematic Biopsy to Targeted Prostate Biopsy in PI-RADS 3 to 5 Lesions Enhance the Detection of Clinically Significant Prostate Cancer? Should All Patients with PI-RADS 3 Undergo Targeted Biopsy?. DIAGNOSTICS. 2021. 11(8):- DOI: 10.3390/diagnostics11081335
IF: 3,706 Q2 D3
3. Salguero J, Gomez-Gomez E, Valero-Rosa J, Carrasco-Valiente J, Mesa J, Martin C, Campos-Hernandez JP, Rubio JM, Lopez D, Requena MJ. Role of Multiparametric Prostate Magnetic Resonance Imaging before Confirmatory Biopsy in Assessing the Risk of Prostate Cancer Progression during Active Surveillance. KOREAN JOURNAL OF RADIOLOGY. 2021. 22(4):559-567. DOI: 10.3348/kjr.2020.0852
IF: 3,5 Q2 D4
4. Lopez-Beltran A, Blanca A, Cimadamore A, Gogna R, Montironi R, Cheng L. Molecular Classification of Bladder Urothelial Carcinoma Using NanoString-Based Gene Expression Analysis. CANCERS. 2021. 13(21):- DOI: 10.3390/cancers13215500
IF: 6,639 Q1 D3
5. Lopez-Beltran A, Cimadamore A, Blanca A, Massari F, Vau N, Scarpelli M, Cheng L, Montironi R. Immune Checkpoint Inhibitors for the Treatment of Bladder Cancer. CANCERS. 2021. 13(1):- DOI: 10.3390/cancers13010131
IF: 6,639 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 1
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 6

» 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)
- AGREEMENTS WITH COMPANIES: 8

GE06:

PATHOPHYSIOLOGY OF RENAL AND VASCULAR DAMAGE

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

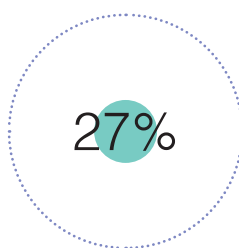
» TEAM

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	

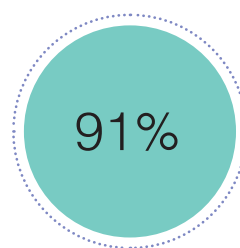
» SCIENTIFIC PRODUCTION



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. Moreno, J. A., Hamza, E., Guerrero-Hue, M., Rayego-Mateos, S., García-Caballero, C., Vallejo-Mударra, M., Metzinger, L., & Metzinger-Le Meuth, V. (2021). Non-Coding RNAs in Kidney Diseases: The Long and Short of Them. *International journal of molecular sciences*, 22(11), 6077. DOI: 10.3390/ijms22116077
IF: 5,923 Q1
2. Guerrero-Hue, M., Rayego-Mateos, S., Vázquez-Carballo, C., Palomino-Antolín, A., García-Caballero, C., Opazo-Ríos, L., Morgado-Pascual, J. L., Herencia, C., Mas, S., Ortiz, A., Rubio-Navarro, A., Egea, J., Villalba, J. M., Egido, J., & Moreno, J. A. (2020). Protective Role of Nrf2 in Renal Disease. *Antioxidants (Basel, Switzerland)*, 10(1), 39. DOI: 10.3390/antiox10010039
IF: 6,312 Q1 D1
3. Vázquez-Carballo, C., Guerrero-Hue, M., García-Caballero, C., Rayego-Mateos, S., Opazo-Ríos, L., Morgado-Pascual, J. L., Herencia-Bellido, C., Vallejo-Mударra, M., Cortegano, I., Gaspar, M. L., de Andrés, B., Egido, J., & Moreno, J. A. (2021). Toll-Like Receptors in Acute Kidney Injury. *International journal of molecular sciences*, 22(2), 816. DOI: 10.3390/ijms22020816
IF: 5,923 Q1
4. Guerrero, F., Carmona, A., Jimenez, M. J., Obrero, T., Pulido, V., Moreno, J. A., Soriano, S., Martín-Malo, A., & Aljama, P. (2021). Passage Number-Induced Replicative Senescence Modulates the Endothelial Cell Response to Protein-Bound Uremic Toxins. *Toxins*, 13(10), 738. DOI: 10.3390/toxins13100738
F: 4,546 Q1
5. Perez-Ecija, A., Buzon-Cuevas, A., Aguilera-Aguilera, R., Gonzalez-De Cara, C., & Mendoza Garcia, F. J. (2021). Reference intervals of acute phase proteins in healthy Andalusian donkeys and response to experimentally induced endotoxemia. *Journal of veterinary internal medicine*, 35(1), 580–589. <https://doi.org/10.1111/jvim.16015>
IF: 3,333 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2021: 1
- N° PHD THESES: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 5
 1. "CIBERCV" Centro de Investigación Biomédica en Red en Enfermedades Cardiovasculares
 2. "ERA-EDTA" Immunonephrology Working Group. European Renal Association – European Dialysis and Transplant Association
 3. "GLOSEN" Spanish group for glomerulonephritis
 4. "VascAgeNet" - COST Action CA18216. 2019-2023. - Network for Research in Vascular Ageing. European Cooperation in Science and Technology. Horizon 2020 Framework Programme of the European Union.
 5. "BenBedPhar" - COST Action CA20121. 2021-2025. Bench to bedside transition for pharmacological regulation of NRF2 in non-communicable diseases. Horizon 2020 Framework Programme of the European Union.
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. PFIS (ISCIII) – MELANIA GUERRERO HUE
 2. RAMÓN Y CAJAL (MICINN) - JUAN ANTONIO MORENO GUTIÉRREZ
 3. JUAN DE LA CIERVA FORMACIÓN (MICINN) – JOSÉ LUIS MORGADO PASCUAL
- AGREEMENTS WITH COMPANIES: 1
- AWARDS: 1
 1. MELANIA GUERRERO HUE; Premio a la mejor comunicación tipo POSTER sesión I; Funding Agency: FIBICO. FUNDACION PARA LA INVESTIGACIÓN BIOMÉDICA DE CÓRDOBA; Reference: JJI121/0005

GE07:

VISUAL QUALITY

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
González	Andrades	Miguel	R3	0000-0003-4632-1267
Domínguez	Pérez	Juan Manuel	R4	
Granados	Machuca	María del Mar	R4	
Martín	Martínez	Francisco	R4	
Gallardo	Galera	José María	R3	
Giménez	Gómez	Rafael	R3	
Jiménez	Gómez	Yolanda	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	María de los Ángeles	R2	
Ibarra	De la Rosa	Encarnación	R2	
Islam		Mohammad Mirazul	R2	
Mohedano	Rincón	José María	R2	
Pérez	Cordobés	María José	R2	
Plugiese	Rojas	Francisco Antonio	R2	
Reyes	Ortega	Felisa	R2	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Stoikow	Pino	Indira	R2
Villalba	González	Marta	R2
Blanco	Blanco	Mario	R1
Baños	Gil	Rosa	N
Ordóñez	Villaizán	Ángela	N
Pérez	Fajardo	Lorena	N
Ortega	Llamas	Laura	N

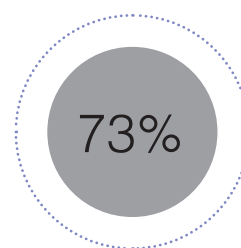
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Simpson FC, McTiernan CD, Islam MM, Buznyk O, Lewis PN, Meek KM, Haagdoorens M, Audiger C, Lesage S, Gueriot FX, Brunette I, Robert MC, Olsen D, Koivusalo L, Liszka A, Fagerholm P, Gonzalez-Andrades M, Griffith M. Collagen analogs with phosphorylcholine are inflammation-suppressing scaffolds for corneal regeneration from alkali burns in mini-pigs. COMMUNICATIONS BIOLOGY. 2021. 4(1):- . DOI: 10.1038/s42003-021-02108-y
IF: 6,268 Q1 D1
2. Sharifi S, Islam MM, Sharifi H, Islam R, Koza D, Reyes-Ortega F, Alba-Molina D, Nilsson PH, Dohlman CH, Mollnes TE, Chodosh J, Gonzalez-Andrades M. Tuning gelatin-based hydrogel towards bioadhesive ocular tissue engineering applications. BIOACTIVE MATERIALS. 2021. 6(11):3947-3961. DOI: 10.1016/j.bioactmat.2021.03.042
IF: 14,593 Q1 D1
3. Islam MM, AbuSamra DB, Chivu A, Argueso P, Dohlman CH, Patra HK, Chodosh J, Gonzalez-Andrades M. Optimization of Collagen Chemical Crosslinking to Restore Biocompatibility of Tissue-Engineered Scaffolds. PHARMACEUTICS. 2021. 13(6):- . DOI: 10.3390/pharmaceutics13060832
IF: 6,321 Q1 D2

4. Sharifi S, Sharifi H, Guild C, Islam MM, Tran KD, Patzer C, Dohlman CH, Paschalis EI, Gonzalez-Andrades M, Chodosh J. Toward electron-beam sterilization of a pre-assembled Boston keratoprosthesis. *OCULAR SURFACE*. 2021. 20():176-184. DOI: 10.1016/j.jtos.2021.02.009
IF: 5,033 Q1 D2
5. Islam R, Islam MM, Nilsson PH, Mohlin C, Hagen KT, Paschalis EI, Woods RL, Bhowmick SC, Dohlman CH, Espevik T, Chodosh J, Gonzalez-Andrades M, Mollnes TE. Combined blockade of complement C5 and TLR co-receptor CD14 synergistically inhibits pig-to-human corneal xenograft induced innate inflammatory responses. *ACTA BIOMATERIALIA*. 2021. 127():169-179. DOI: 10.1016/j.actbio.2021.03.047
IF: 8,947 Q1 D2

» **ACTIVITY:**

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 8

» **ADDITIONAL INFORMATION:**

- NETWORKS: 1
 1. "OFTARED" ISCI. Eye Diseases: Prevention, early detection and treatment of prevalent, degenerative and chronic ocular pathology.
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 2
 1. POSDOCTORALES (CTEICU) - FELISA REYES ORTEGA
 2. POSDOCTORALES (CSyF) – YOLANDA JIMÉNEZ GÓMEZ
- AGREEMENTS WITH COMPANIES: 3

GE08:

COMPREHENSIVE NURSING CARE. MULTIDISCIPLINARY PERSPECTIVE

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

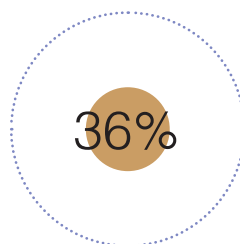
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
López	Soto	Pablo Jesús	R4
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
Guerra	Martín	Dolores	R3
Hidalgo	Lopezosa	Pedro	R3
Laredo	Aguilera	José Alberto	R3
Morales	Cané	Ignacio	R3
Rodríguez	Muñoz	Pedro Manuel	R3
Fernández	Rodríguez	Vicente	R2
Medina	Valverde	María José	R2
Miñarro	Del Moral	Rosa	R2
Moral	Arroyo	Juan Antonio	R2
Muñoz	Alonso	Adoración	R2
Aranburu	Imazt	Alejandra	R1
Cubero	Luna	Ana María	R1
Jiménez	Ruz	Andrea	R1
Jiménez	Pastor	José Manuel	R1
López	Cerdá	Elena	R1
López	Carrasco	Juan de la Cruz	R1
Rodríguez	Cortés	Francisco José	R1
Valverde	León	María del Rocío	R1
Rodríguez	Borrego	María 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. Arévalo-Buitrago P, Morales-Cané I, Luque EO, Guler I, Rodríguez-Borrego MA, López-Soto PJ. Predictive power of early-warning scores used in hospital emergency departments: a systematic review and meta-analysis. *EMERGENCIAS*. 2021. 33(5):374-381
IF: 3,881 Q1 D2
2. Rodríguez-Muñoz PM, Carmona-Torres JM, Rivera-Picon C, Morales-Cané I, Fabbian F, Manfredini R, Rodríguez-Borrego MA, Lopez-Soto PJ. Risky Behaviours of Spanish University Students: Association with Mediterranean Diet, Sexual Attitude and Chronotype. *NUTRIENTS*. 2021. 13(11):- DOI: 10.3390/nu13114042
IF: 5,719 Q1 D2
3. Dios-Guerra C, Carmona-Torres JM, Morales-Cane I, Rodríguez-Borrego MA, Lopez-Soto PJ. Evolution in the use of health services by older people in Spain (2009-2017). *HEALTH & SOCIAL CARE IN THE COMMUNITY*. 2021. 29(5):E11-E20. DOI: 10.1111/hsc.13229
IF: 2,821 Q1 D2
4. Gonzalez-Gancedo J, Morales-Cane I, Rodríguez-Munoz M, Hidalgo-Lopezosa P, Valverde-Leon MD, Fernandez-Martinez ME, Fabbian F, Rodríguez-Borrego MA, Lopez-Soto PJ. Mortality and critical conditions in COVID-19 patients at private hospitals: weekend effect?. *EUROPEAN REVIEW FOR MEDICAL AND PHARMACOLOGICAL SCIENCES*. 2021. 25(8):3377-3385. DOI: 10.26355/eurrev_202104_25750
IF: 3,507 Q2 D5
5. Hidalgo-Lopezosa P, Cubero-Luna AM, Jimenez-Ruz A, Hidalgo-Maestre M, Rodríguez-Borrego MA, Lopez-Soto PJ. Association between Birth Plan Use and Maternal and Neonatal Outcomes in Southern Spain: A Case-Control Study. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*. 2021. 18(2):- DOI: 10.3390/ijerph18020456
IF: 3,39 Q1 D3

» **ACTIVITY:**

- N° ONGOING PROJECTS: 4
- N° GRANTED PROJECTS IN 2021: 1
- N° PHD THESES: 3

» **ADDITIONAL INFORMATION:**

- NETWORKS: 1
 - 1. PAIDI CTS-666 scientific group
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 - 1. PFIS (ISCIII) - FRANCISCO JOSE RODRIGUEZ CORTES

GE09:

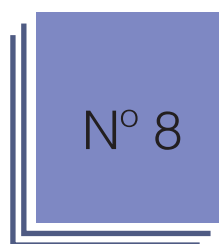
RESEARCH IN PERITONEAL AND RETROPERITONEAL ONCOLOGICAL SURGERY

SCIENTIFIC PROGRAM 4: CANCER (ONCOLOGY AND ONCOHEMATOLOGY)

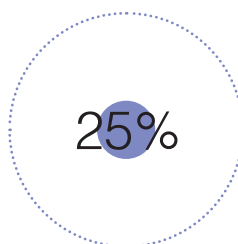
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Arjona	Sánchez	Álvaro	R3	0000-0002-3024-3009
Medina	Fernández	Javier	R3	
Romero	Ruíz	Antonio	R3	
Rufián	Peña	Sebastián	R3	
Vázquez	Borrego	María del Carmen	R3	
Casado	Adam	Ángela	R2	
Díaz	López	César	R2	
Ortega	Salas	Rosa	R2	
Sánchez	Hidalgo	Juan Manuel	R2	
Espinosa	Redondo	María Esther	R1	
Martin	Rodríguez	Cristina	R1	
Martínez	López	Ana	R1	
Rodríguez	Ortiz	Lidia	R1	
Rufián	Andújar	Blanca	R1	
Valenzuela	Molina	Francisca	R1	
Granados	Rodríguez	Melissa	T	

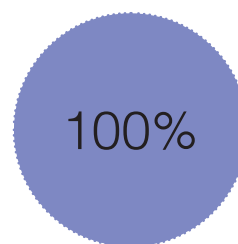
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

peritoneal carcinomatosis	HIPEC
pseudomyxoma peritonei	mesothelioma
sarcoma	Colon cancer

» HIGHLIGHTED PUBLICATIONS:

1. Rufian-Andujar B, Valenzuela-Molina F, Rufian-Pena S, Casado-Adam A, Sanchez-Hidalgo JM, Rodriguez-Ortiz L, Medina-Fernandez FJ, Diaz-Lopez C, Ortega-Salas R, Martinez-Lopez A, Briceno-Delgado J, Romero-Ruiz A, Arjona-Sanchez A. From the Ronnett to the PSOGI Classification System for Pseudomyxoma Peritonei: A Validation Study. *ANNALS OF SURGICAL ONCOLOGY*. 2021. 28(5):2819-2827. DOI: 10.1245/s10434-020-09560-w
IF: 5,344 Q1 D1
2. Arjona-Sanchez A, Aziz O, Passot G, Salti G, Esquivel J, Van der Speeten K, Piso P, Nedelcut DS, Sommariva A, Yonemura Y, Turaga K, Selvasekar CR, Rodriguez-Ortiz L, Sanchez-Hidalgo JM, Casado-Adam A, Rufian-Pena S, Briceno J, Glehen O. Laparoscopic cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for limited peritoneal metastasis. The PSOGI international collaborative registry. *EJSO*. 2021. 47(6):1420-1426. DOI: 10.1016/j.ejso.2020.11.140
IF: 4,424 Q1 D2
3. Rodriguez-Ortiz L, Arjona-Sanchez A, Ibanez-Rubio M, Sanchez-Hidalgo J, Casado-Adam A, Rufian-Pena S, Briceno-Delgado J. Laparoscopic cytoreductive surgery and HIPEC: a comparative matched analysis. *SURGICAL ENDOSCOPY AND OTHER INTERVENTIONAL TECHNIQUES*. 2021. 35(4):1778-1785. DOI: 10.1007/s00464-020-07572-x
IF: 4,584 Q1 D2
4. Romero-Ruiz A, Pineda B, Ovelleiro D, Perdices-Lopez C, Torres E, Vazquez MJ, Guler I, Jimenez A, Pineda R, Persano M, Romero-Baldonado C, Arjona JE, Lorente J, Munoz C, Paz E, Garcia-Maceira FI, Arjona-Sanchez A, Tena-Sempere M. Molecular diagnosis of polycystic ovary syndrome in obese and non-obese women by targeted plasma miRNA profiling. *EUROPEAN JOURNAL OF ENDOCRINOLOGY*. 2021. 185(5):637-652. DOI: 10.1530/EJE-21-0552
IF: 6,664 Q1 D2
5. Bastiaenen VP, Aalbers AGJ, Arjona-Sánchez A, Bellato V, van der Bilt JDW, D'Hoore AD, Espinosa-Redondo E, Klaver CEL, Nagtegaal ID, van Ramshorst B, van Santvoort HC, Sica GS, Snaebjornsson P, Wasmann KATGM, de Wilt JHW, Wolthuis AM, Tanis PJ. Risk of metachronous peritoneal metastases in patients with pT4a versus pT4b colon cancer: An international multicentre cohort study. *Eur J Surg Oncol*. 2021 Sep;47(9):2405-2413. DOI: 10.1016/j.ejso.2021.05.009
IF: 4,037 Q1 D2

» ACTIVITY:

- N° ONGOING PROJECTS: 4
- N° CLINICAL TRIALS: 4
- N° PHD THESES: 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: 2
 1. NICOLÁS MONARDES (SAS) – ANTONIO ROMERO RUÍZ
 2. INTENSIFICACIÓN (ISCIII) - ÁLVARO ARJONA SÁNCHEZ
- AGREEMENTS WITH COMPANIES: 3
- AWARDS: 1
 1. Alvaro Arjona Sánchez, Premio Cátedra de Oncología Quirúrgica ASISA-UAH 2021, concedido por la Sociedad Española de Oncología Quirúrgica y Universidad Alcalá de Henares.

GA01:

LUNG TRANSPLANTS. THORACIC NEOPLASMS

SCIENTIFIC PROGRAM 3:
INFECTIOUS AND IMMUNOLOGICAL DISEASES AND
ORGAN TRANSPLANTATION

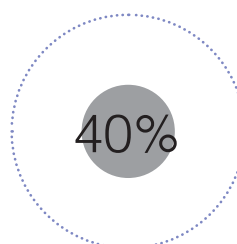
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Salvatierra	Velázquez	Ángel	R3	0000-000204639-7344
Álvarez	Kindelán	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. Gonzalez FJ, Alvarez E, Moreno P, Poveda D, Ruiz E, Fernandez AM, Salvatierra A, Alvarez A. The influence of the native lung on early outcomes and survival after single lung transplantation. PLOS ONE. 2021. 16(4):- . DOI: 10.1371/journal.pone.0249758
IF: 3,24 Q2 D4
2. Pozo-Laderas JC, Guler I, Rodriguez-Peralvarez M, Robles JC, Mula A, Lopez-Cillero P, de la Fuente C. Early postoperative mortality in liver transplant recipients involving indications other than hepatocellular carcinoma. A retrospective cohort study. MEDICINA INTENSIVA. 2021. 45(7):395-410. DOI: 10.1016/j.medin.2020.02.004
IF: 2,491 Q3
3. Duenas-Jurado JM, Gutierrez PA, Casado-Adam A, Santos-Luna F, Salvatierra-Velazquez A, Carcel S, Robles-Arista CJC, Hervas-Martinez C. New models for donor-recipient matching in lung transplantations. PLOS ONE. 2021. 16(6):- . DOI: 10.1371/journal.pone.0252148
IF: 3,24 Q2 D4
4. Roman AR, de la Cruz JLCC, Macia I, Campuzano IE, Almanzar SF, Roel MD, Munoz CG, Fontan EMG, Trueba IM, Vielva LR, Garcia JRC, Tellez EM, Gonzalez CP, Lopez MFJ, Maestre UJ, Poce RM, Lorente DS, Kindelan AA, Pulla MP. Outcomes of surgical resection after neoadjuvant chemoimmunotherapy in locally advanced stage IIIA non-small-cell lung cancer. EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY. 2021. 60(1):81-88. DOI: 10.1093/ejcts/ezab007
IF: 4,191 Q1 D2
5. Sarceda JRJ, Nadal SB, Poce RM, de Castro PL, Balsalobre RM, Cuesta JCP, Flor RE, Ferrer JP, Algar FJA, Garcia APG, Jimenez MF, Sales-Badia JG, Pereira E, Massuti B, Provencio M, Trancho FH. Spanish Lung Cancer Group SCAT trial: surgical audit to lymph node assessment based on IASLC recommendations. TRANSLATIONAL LUNG CANCER RESEARCH. 2021. 10(4):1761-1772. DOI: 10.21037/tlcr-20-1055
IF: 6,498 Q1 D2

» ACTIVITY:

- Nº CLINICAL TRIALS: 1

» 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
- AGREEMENTS WITH COMPANIES: 2

GA03:

PNEUMOLOGY

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

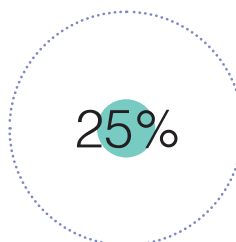
» TEAM

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

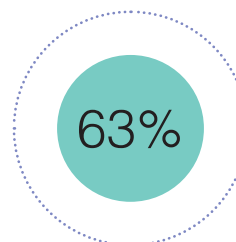
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



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. Naranjo-Bonilla P, Munoz-Villanueva MC, Gimenez-Gomez R, Jurado-Gamez B. Retinal and choroidal thickness measurements in obstructive sleep apnea: impacts of continuous positive airway pressure treatment. GRAEFES ARCHIVE FOR CLINICAL AND EXPERIMENTAL OPHTHALMOLOGY. 2021. 259(11):3381-3393. DOI: 10.1007/s00417-021-05322-w
IF: 3,117 Q2 D4
2. Perez-Sanchez C, Barbarroja N, Pantaleao LC, Lopez-Sanchez LM, Ozanne SE, Jurado-Gamez B, Aranda E, Lopez-Pedraza C, Rodriguez-Ariza A. Clinical Utility of microRNAs in Exhaled Breath Condensate as Biomarkers for Lung Cancer. JOURNAL OF PERSONALIZED MEDICINE. 2021. 11(2):- . DOI: 10.3390/jpm11020111
IF: 4,945 Q1 D2
3. Casanova C, Gonzalez-Davila E, Martinez-Gonzalez C, Cosio BG, Fuster A, Feu N, Solanes I, Cabrera C, Marin JM, Balcells E, Peces-Barba G, de Torres JP, Marin-Oto M, Calle M, Golpe R, Ojeda E, Divo M, Pinto-Plata V, Amado C, Lopez-Campos JL, Celli BR. Natural Course of the Diffusing Capacity of the Lungs for Carbon Monoxide in COPD Importance of Sex. CHEST. 2021. 160(2):481-490. DOI: 10.1016/j.chest.2021.03.069
IF: 9,41 Q1 D1
4. Jaen-Moreno MJ, Feu N, del Pozo GI, Gomez C, Carrion L, Chauca GM, Guler I, Montiel FJ, Sanchez MD, Alcalá JA, Gutierrez-Rojas L, Molina V, Bobes J, Balanza-Martinez V, Ruiz-Rull C, Sarramea F. Chronic obstructive pulmonary disease in severe mental illness: A timely diagnosis to advance the process of quitting smoking. EUROPEAN PSYCHIATRY. 2021. 64(1):- . DOI: 10.1192/j.eurpsy.2021.12
IF: 5,361 Q1 D2
5. Blanco JR, Cobos-Ceballos MJ, Navarro F, Sanjoaquin I, de las Revillas FA, Bernal E, Buzon-Martin L, Viribay M, Romero L, Espejo-Perez S, Valencia B, Ibanez D, Ferrer-Pargada D, Malia D, Gutierrez-Herrero FG, Olalla J, Jurado-Gamez B, Ugedo J. Pulmonary long-term consequences of COVID-19 infections after hospital discharge. CLINICAL MICROBIOLOGY AND INFECTION. 2021. 27(6):892-896. DOI: 10.1016/j.cmi.2021.02.019
IF: 8,067 Q1 D1

» ACTIVITY:

- Nº ONGOING PROJECTS: 1
- Nº CLINICAL TRIALS: 4

» ADDITIONAL INFORMATION:

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

GA04:

ENDOCRINOLOGY AND NUTRITION. INSULIN RESISTANCE, DIABETES AND METABOLISM

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

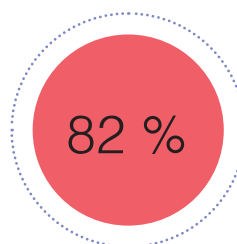
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Gálvez	Moreno	María 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 QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Herrero-Aguayo V, Saez-Martinez P, Lopez-Canovas JL, Prados-Carmona JJ, Alcantara-Laguna MD, Lopez FL, Molina-Puerta MJ, Calanas-Continente A, Membrives A, Castilla J, Ruiz-Ravelo J, Alonso-Echague R, Yubero-Serrano EM, Castano JP, Gahete MD, Galvez-Moreno MA, Luque RM, Herrera-Martinez AD. Dysregulation of Components of the Inflammasome Machinery After Bariatric Surgery: Novel Targets for a Chronic Disease. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*. 2021. 106(12):E4917-E4934. DOI: 10.1210/clinem/dgab586
IF: 5,958 Q1 D2
2. Casado-Diaz A, Rodriguez-Ramos A, Torrecillas-Baena B, Dorado G, Quesada-Gomez JM, Galvez-Moreno MA. Flavonoid Phloretin Inhibits Adipogenesis and Increases OPG Expression in Adipocytes Derived from Human Bone-Marrow Mesenchymal Stromal-Cells. *NUTRIENTS*. 2021. 13(11):- . DOI: 10.3390/nu13114185
IF: 5,719 Q1 D2
3. Herrera-Martinez AD, Junquera-Banares S, Turrion-Merino L, Arrieta-Blanco F, Botella-Carretero J, Vazquez-Martinez C, Calanas-Continente A. Case Report: Extensive Dermatitis Secondary to Severe Malnutrition, Zinc and Vitamin Deficiencies After Malabsorptive Bariatric Surgery. *FRONTIERS IN ENDOCRINOLOGY*. 2021. 12():-. DOI: 10.3389/fendo.2021.623543
IF: 5,555 Q1 D3
4. Rebollo-Roman A, Alhambra-Exposito MR, Herrera-Martinez Y, Leiva-Cepas F, Alzas C, Munoz-Jimenez C, Ortega-Salas R, Molina-Puertas MJ, Galvez-Moreno MA, Herrera-Martinez AD. Catecholaminergic Crisis After a Bleeding Complication of COVID-19 Infection: A Case Report. *FRONTIERS IN ENDOCRINOLOGY*. 2021. 12():-. DOI: 10.3389/fendo.2021.693004
IF: 5,555 Q1 D3
5. Perez-Castrillon JL, Duenas-Laita A, Brandi ML, Jodar E, del Pino-Montes J, Quesada-Gomez JM, Castro FC, Gomez-Alonso C, Lopez LG, Martinez JMO, Exposito MRA, Galarraga B, Gonzalez-Macias J, Bouillon R, Hernandez-Herrero G, Fernandez-Hernando N, Arranz-Gutierrez P, Chinchilla SP. Calcifediol is superior to cholecalciferol in improving vitamin D status in postmenopausal women: a randomized trial. *JOURNAL OF BONE AND MINERAL RESEARCH*. 2021. 36(10):1967-1978. DOI: 10.1002/jbmr.4387
IF: 6,741 Q1 D2

» CLINICAL GUIDES:

1. Francisco J Vilchez-López, Laura Larrán-Escandon, José M García-Almeida, Carmén Arraiza-Irigoyen, José A Irlles Rocamor, María J. Molina-Puerta, Juan B. Molina Soria, Jose L. Pererira Cunill, Juana M Rabat-Restrepo, Maria I Rebollo-Pérez, Maria P. Serrano-Aguayo, Carmen Tenorio-Jiménez, Gabriel Olveira and Pedro García- Luna. Evidence based recommendations of the Andalusian Group for Nutrition Relection and Investigation (GARIN) for the manegement of adult patients with short bowel síndrome. NUTR HOSP 2021;38(6):1287-1303. DOI: 10.20960/nh.03705

» ACTIVITY:

- N° ONGOING PROJECTS: 3
- N° GRANTED PROJECTS IN 2021: 1
- N° CLINICAL TRIALS: 3

» ADDITIONAL INFORMATION:

- NETWORKS: 1
 1. PAIDI CTS-651
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 1
 1. JUAN RODÉS (ISCIII) –AURA DULCINEA HERRERA MARTÍNEZ
- AGREEMENTS WITH COMPANIES: 7

GA05:

STUDY OF GROWTH. ENDOCRINOLOGY AND CHILD NUTRITION

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

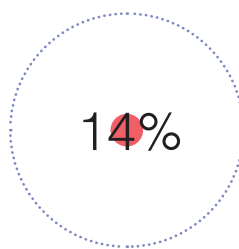
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Cañete Estrada	Ramón	R4	
Jiménez Reina	Luis	R4	
Cañete Vázquez	María Dolores	R3	
García Martínez	Elena	R3	
Martos Estepa	Rosario	R3	
Párraga Quiles	María José	R3	
Ruiz González	María Dolores	R3	
Tofe Valera	Inés	R3	
Torres Borrego	Javier	R3	
Valle Jiménez	Miguel	R3	
Vázquez Rueda	Fernando	R3	
Gómez Guzmán	Elena	R1	

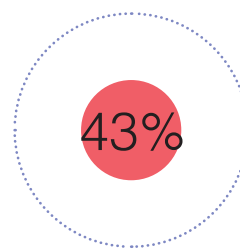
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



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. Valle-Martos R, Valle M, Martos R, Canete R, Jimenez-Reina L, Canete MD. Liver Enzymes Correlate With Metabolic Syndrome, Inflammation, and Endothelial Dysfunction in Prepubertal Children With Obesity. *FRONTIERS IN PEDIATRICS*. 2021. 9():-. DOI: 10.3389/fped.2021.629346
IF: 3,418 Q1 D2
2. Pastor-Villaescusa B, Plaza-Diaz J, Egea-Zorrilla A, Leis R, Bueno G, Hoyos R, Vazquez-Cobela R, Latorre M, Canete MD, Caballero-Villarraso J, Gil A, Canete R, Aguilera CM. Evaluation of the gut microbiota after metformin intervention in children with obesity: A metagenomic study of a randomized controlled trial. *BIOMEDICINE & PHARMACOTHERAPY*. 2021. 134():-. DOI: 10.1016/j.biopha.2020.111117
IF: 6,529 Q1 D1
3. Lopez-Vinay T, Penalva G, Garcia-Martinez L, Caston JJ, Munoz-Rosa M, Cano A, Recio M, Cisneros JM, Perez-Nadales E, Aguirre JR, Garcia-Martinez E, Salcedo I, del Prado JR, de la Fuente C, Martinez-Martinez L, Gracia-Ahufinger I, Torre-Cisneros J. Impact of an Antimicrobial Stewardship Program on the Incidence of Carbapenem Resistant Gram-Negative Bacilli: An Interrupted Time-Series Analysis. *ANTIBIOTICS-BASEL*. 2021. 10(5):-. DOI: 10.3390/antibiotics10050586
IF: 4,639 Q2 D3
4. Caballero-Villarraso J, Aguado R, Canete MD, Roldan L, Canete R, Santamaria M. Hormone replacement therapy in children with growth hormone deficiency: impact on immune profile. *ARCHIVES OF PHYSIOLOGY AND BIOCHEMISTRY*. 2021. 127(3):245-249. DOI: 10.1080/13813455.2019.1628070
IF: 4,076 Q1 D3
5. Aranda-Valera IC, Garrido-Castro JL, Martinez-Galisteo A, Pena-Amaro J, Gonzalez-Navas C, Cuesta-Vargas A, Jimenez-Reina L, Collantes-Estevez E, Lopez-Medina C. Patients with Axial Spondyloarthritis Show an Altered Flexion/Relaxation Phenomenon. *DIAGNOSTICS*. 2021. 11(5):-. DOI: 10.3390/diagnostics11050810
IF: 3,706 Q2 D3

» ACTIVITY:

- N° CLINICAL TRIALS: 9

» ADDITIONAL INFORMATION:

- NETWORKS: 2
 1. CIBERobn: CIBER on Obesity and Nutrition
 2. PAIDI CTS-329
- AGREEMENTS WITH COMPANIES: 1
- INTERNATIONAL PROJECTS: 1
 1. INES M^a TOFÉ VALERA; ALBINO - Effect of ALlopurinol in addition to hypothermia for hypoxic-ischemic Brain Injury on Neurocognitive Outcome; Funding Agency: COMISIÓN EUROPEA; Reference: PHC-18-2015-002

RADIOLOGY

SCIENTIFIC PROGRAM 5:
CHRONIC AND INFLAMMATORY DISEASES

» TEAM

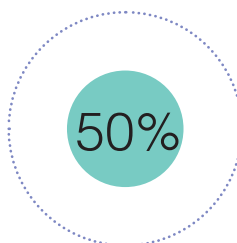
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
Álvarez	Benito	Marina	R4
			0000-0002-0273-3393
Delgado	Acosta	Fernando	R3
García-Revilla	García	José	R3
Vicente	Rueda	Josefa	R3
Benito	Ysamat	Alberto	R2
Bravo	Rodríguez	Francisco de Asís	R2
Contreras	De Miguel	Elvira	R2
Elías	Cabot	Esperanza	R2
Espejo	Herrero	Juan José	R2
Espejo	Pérez	Simona	R2
Fernández	Valverde	Francisco	R2
García	Ortega	María José	R2
Gordillo	Arnau	Jose Enrique	R2
Izquierdo	Palomares	Lucía Nuria	R2
Jiménez	Gómez	Elvira	R2
López	Ruíz	Daniel	R2
Mesa	Quesada	Juan	R2
Muñoz	Carrasco	Rafaela	R2
Muñoz	Sánchez	Raquel	R2
Oteros	Fernández	Rafael	R2
Pedrosa	Garriguet	Margarita	R2
Pérez	Montilla	María 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

FAMILY NAME		FIRST NAME	EURAXESS CATEGORY	ORCID
Cara	García	María	R1	
Cortes	García	José Ignacio	R1	
Escribano	Fernández	José	R1	
Fernández	López	Isabel María	R1	
Garcia	Jurado	Pedro Blas	R1	
Lombardo	Galera	María Sagrario	R1	
Pulido	Carmona	Cristina	R1	
Sanabria	Gay	Ana Belén	R1	
Amate	Rivas	Cristina	T	
Cerro	Luna	Ana Isabel	T	

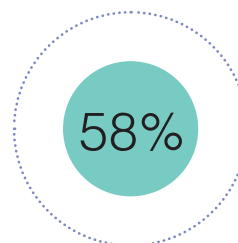
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

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

» HIGHLIGHTED PUBLICATIONS:

1. Raya-Povedano JL, Romero-Martin S, Elias-Cabot E, Gubern-Merida A, Rodriguez-Ruiz A, Alvarez-Benito M. AI-based Strategies to Reduce Workload in Breast Cancer Screening with Mammography and Tomosynthesis: A Retrospective Evaluation. *RADIOLOGY*. 2021. 300(1):57-65. DOI: 10.1148/radiol.2021203555
IF: 11,105 Q1 D1
2. Patino-Trives AM, Perez-Sanchez C, Perez-Sanchez L, Luque-Tevar M, Abalos-Aguilera MC, Alcaide-Ruggiero L, Arias-de la Rosa I, Roman-Rodriguez C, Segui P, Espinosa M, Font P, Barbarroja N, Escudero-Contreras A, Gonzalez-Reyes JA, Villalba JM, Collantes-Estevez E, Aguirre-Zamorano MA, Lopez-Pedraza C. Anti-dsDNA Antibodies Increase the Cardiovascular Risk in Systemic Lupus Erythematosus Promoting a Distinctive Immune and Vascular Activation. *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY*. 2021. 41(9):2417-2430. DOI: 10.1161/ATVBAHA.121.315928
IF: 8,311 Q1 D1

3. Perez-Sanchez L, Patino-Trives AM, Aguirre-Zamorano MA, Luque-Tevar M, Abalos-Aguilera MC, Arias-de La Rosa I, Segui P, Velasco-Gimena F, Barbarroja N, Escudero-Contreras A, Collantes-Estevez E, Perez-Sanchez C, Lopez-Pedreira C. Characterization of Antiphospholipid Syndrome Atherothrombotic Risk by Unsupervised Integrated Transcriptomic Analyses. *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY*. 2021. 41(2):865-877. DOI: 10.1161/ATVBAHA.120.315346
IF: 8,311 Q1 D1
4. Blanco JR, Cobos-Ceballos MJ, Navarro F, Sanjoaquin I, de las Revillas FA, Bernal E, Buzon-Martin L, Viribay M, Romero L, Espejo-Perez S, Valencia B, Ibanez D, Ferrer-Pargada D, Malia D, Gutierrez-Herrero FG, Olalla J, Jurado-Gamez B, Ugedo J. Pulmonary long-term consequences of COVID-19 infections after hospital discharge. *CLINICAL MICROBIOLOGY AND INFECTION*. 2021. 27(6):892-896. DOI: 10.1016/j.cmi.2021.02.019
IF: 8,067 Q1 D1
5. Blasco J, Puig J, Daunis-i-Estadella P, Gonzalez E, Monso JF, Manso X, Oteros R, Jimenez-Gomez E, Rey IB, Vega P, Murias E, Jimenez JM, Lopez-Rueda A, Renu A, Aixut S, Chaparro OC, Rosati S, Moreu M, Remollo S, Tejedor YA, Terceno M, Mosqueira A, Nogueira RG, San Roman L. Balloon guide catheter improvements in thrombectomy outcomes persist despite advances in intracranial aspiration technology. *JOURNAL OF NEUROINTERVENTIONAL SURGERY*. 2021. 13(9):773-778. DOI: 10.1136/neurintsurg-2020-017027
IF: 5,836 Q1 D1

» CLINICAL GUIDES: 2

1. Margarita Chevalier del Río; Manuel José Buades Forner; M^a Luisa Chapel Gómez; Oliver Díaz Montesdeoca; Julia Garayoa Roca; Santiago Miquelez Alonso; Teresa Monserrat Fuertes; Patxi Rosales Espizua; Ricardo Torres Cabrera; Marina Álvarez Benito; Joaquín Mosquera Osés; Sara Romero Martín (2021). Protocolo de control de calidad de sistemas de tomosíntesis de mama. *Revista de Física Médica*, 22(1), 39-12. <https://doi.org/10.37004/sefm/2021.22.1.003>
2. Álvarez Benito, Marina; Benítez Gomá, Joan; Cara García, María; Calvo Tudela, Ángel; Contreras De Miguel, Elvira; Contreras Puertas, Pablo; De la Haba Rodríguez, Juan; Elías Cabot, Esperanza; Espinosa Calvo, María; Fuentes Vahamonde, Helena; León Salinas, Carlos; Morales Estévez, Cristina; Ortega Salas, Rosa; Pedrosa Garriguet, Margarita; Pulido Carmona, Cristina; Raya Povedano, José Luis; Rioja Torres, Pilar; Robles Quesada, Teresa; Rodríguez Alonso, Beatriz; Romero Martín, Sara; Sanabria Gay, Ana Belén; Sánchez Medianero, M^a Teresa; Torres Lorite, Manuela; Tudela Beltrán, Luz (2021). PROTOCOLO CÁNCER DE MAMA. Prevención, Diagnóstico, Tratamiento y Seguimiento. https://www.sspa.juntadeandalucia.es/servicioandaluzdesalud/hrs3/fileadmin/user_upload/area_medica/comite_tumores/protocolo_cancer_mama_2021.pdf

» ACTIVITY:

- Nº CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- NETWORKS: 2
 1. CIBERObn: CIBER on Obesity and Nutrition
 2. PAIDI CTS-329
- AGREEMENTS WITH COMPANIES: 6

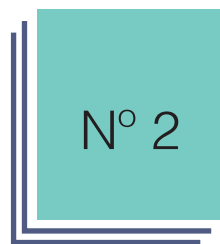
CARDIOVASCULAR PATHOLOGY

SCIENTIFIC PROGRAM 5: CHRONIC AND INFLAMMATORY DISEASES

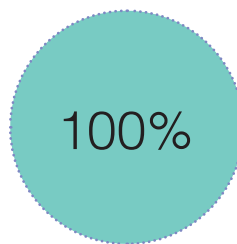
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Muñoz	Carvajal	Ignacio	R4	0000-0003-3843-8609
Blázquez	Ruíz	María del Valle	R3	
Carmona	Flores	Rosario	R3	
Casares	Mediavilla	Jaime Guillermo	R3	
Chacón	Quevedo	Antonio	R3	
Elías	Fuentes	Agustín	R3	
Inmaculada	Cabrera	Arenas	R1	
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	
Bilbao	Carrasco	Lucía	R1	
Cabrera	Arenas	Inmaculada	R1	
Cáliz	Fuentes	Javier	R1	
Cifuentes	Enríquez de Salamanca	Helena	R1	
Conejero	Jurado	María Teresa	R1	
Domínguez	Del Castillo	José Joaquín	R1	
González-Caldevilla	Fernández	Alejandro	R1	
Inga	Távora	Laura Isabel	R1	
Jurado	Morata	Aurea	R1	
López	Romero	Rosalía	R1	
Riballo	Cortés	Raquel	N	
Carmona	Trigo	María del Carmen	ADM	
Ferres	Serrano	Juan José	T	

» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Cardiovascular	Cardiac Surgery
Pathology	Vascular Surgery

» HIGHLIGHTED PUBLICATIONS:

1. Fernandez-Carbonell A, Rodriguez-Guerrero E, Merino-Cejas C, Conejero-Jurado MT, Villalba-Montoro R, Romero-Morales MD, Alados-Arboledas P, Casares-Mediavilla J, Fernandez-Carbonell M, Lopez-Cillero P, Caro-Barrera JR. Predictive Factors for Pulmonary Homograft Dysfunction After Ross Surgery: A 20-Year Follow-up. ANNALS OF THORACIC SURGERY. 2021. 111(2):1338-1344. DOI: 10.1016/j.athoracsur.2020.06.032
IF: 4,33 Q1 D2
2. 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, Castella M, Valderrama JF, Pulitani I, Canovas S, Ferreiro A, Garcia-Valentin A, Carnero M, Pareja P, Corrales JA, Blazquez JA, Macias D, Fletcher-Sanfeliu D, Martinez D, Martin E, Martin M, Margarit J, Hernandez-Estefania R, Monguio E, Otero J, Silva J. Differences in life expectancy between men and women after aortic valve replacement. EUROPEAN JOURNAL OF CARDIO-THORACIC SURGERY. 2021. 60(3):681-688. DOI: 10.1093/ejcts/ezab140
IF: 4,191 Q1 D2

» ACTIVITY:

- N° CLINICAL TRIALS: 1

» ADDITIONAL INFORMATION:

- AGREEMENTS WITH COMPANIES: 2
- INTERNATIONAL PROJECTS:
 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

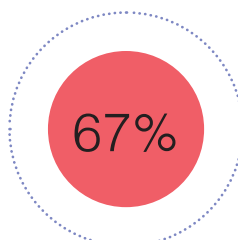
» TEAM

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	María Dolores	R2	
Pacheco Capote	Carmen	R2	
Benítez Velasco	Ana	R1	
Carmona Asenjo	Elvira	R1	
Castejón Echevarne	Simona	R1	
Guiote Moreno	María 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 Ruíz	Antonio	T	
Moriana Porras	María del Carmen	T	

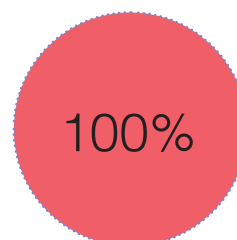
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

NUCLEAR MEDICINE	SPECT/CT
PET/CT	ONCOLOGY

» HIGHLIGHTED PUBLICATIONS:

1. Vidal-Sicart S, Rioja ME, Prieto A, Goñi E, Gómez I, Albala MD, Lumbreras L, León LF, Gómez JR, Campos F. Sentinel Lymph Node Biopsy in Breast Cancer with 99mTc-Tilmanocept: A Multicenter Study on Real-Life Use of a Novel Tracer. *J Nucl Med.* 2021 May 10;62(5):620-627. doi: 10.2967/jnumed.120.252064. Epub 2020 Oct 9. PMID: 33037087
IF: 10,057 Q1 D1
2. Barbero-Gomez J, Gutierrez PA, Vargas VM, Vallejo-Casas JA, Hervas-Martinez C. An ordinal CNN approach for the assessment of neurological damage in Parkinson's disease patients. *EXPERT SYSTEMS WITH APPLICATIONS.* 2021. 182():-. DOI: 10.1016/j.eswa.2021.115271
IF: 6,954 Q1 D1
3. Duran-Rosal AM, Camacho-Canamon J, Gutierrez PA, Moreno MVG, Rodriguez-Caceres E, Casas JAV, Hervas-Martinez C. Ordinal classification of the affection level of 3D-images in Parkinson diseases. *SCIENTIFIC REPORTS.* 2021. 11(1):-. DOI: 10.1038/s41598-021-86538-y
IF: 4,379 Q1 D3

» ACTIVITY:

- N° CLINICAL TRIALS:1

» ADDITIONAL INFORMATION:

- AGREEMENTS WITH COMPANIES: 3

GA11:

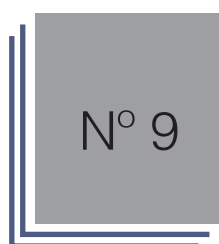
LEARNING AND ARTIFICIAL NEURAL NETWORKS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

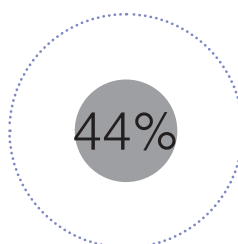
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Hervás	Martínez	César	R4	0000-0001-5549-2848
Gutiérrez	Peña	Pedro Antonio	R4	
Fernández	Caballero	Juan Carlos	R3	
García	Alonso	Carlos	R3	
Pérez	Ortiz	María	R3	
Rodero	Cosano	María Luisa	R3	
Salinas	Pérez	José Alberto	R3	
Sánchez	Monedero	Javier	R3	
Torres	Jiménez	Mercedes	R3	
Durán	Rosal	Antonio M	R2	
Gómez	Orellana	Antonio	R2	
Barbero	Gómez	Javier	R1	
Guijo	Rubio	David	R1	
Vargas	Yun	Victor	R1	

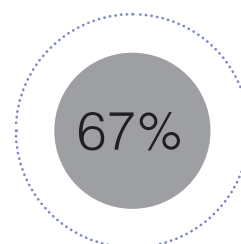
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Ordinal classification	Regression models
Artificial neural networks	Ordinal regression
Processing of biomedical images	Evolutionary computation
Time series segmentation	

» HIGHLIGHTED PUBLICATIONS:

1. Guijo-Rubio D, Durán-Rosal AM, Gutiérrez PA, Troncoso A, Hervás-Martínez C. Time-Series Clustering Based on the Characterization of Segment Typologies. IEEE TRANSACTIONS ON CYBERNETICS. 2021. 51(11):5409-5422. DOI: 10.1109/TCYB.2019.2962584
IF: 11,448 Q1 D1
2. Amiri B, Gómez-Orellana AM, Gutiérrez PA, Dizene R, Hervás-Martínez C, Dahmani K. A novel approach for global solar irradiation forecasting on tilted plane using Hybrid Evolutionary Neural Networks. JOURNAL OF CLEANER PRODUCTION. 2021. 287():-. DOI: 10.1016/j.jclepro.2020.125577
IF: 9,297 Q1 D1
3. Á. Carmona-Poyato, N.L. Fernández-García, F.J. Madrid-Cuevas y A.M. Durán-Rosal. A new approach for optimal offline time-series segmentation with error bound guarantee. Pattern Recognition. 2021. 115. DOI: 10.1016/j.patcog.2021.107917
IF: 7,740 Q1 D2
4. Barbero-Gómez J, Gutiérrez PA, Vargas VM, Vallejo-Casas JA, Hervás-Martínez C. An ordinal CNN approach for the assessment of neurological damage in Parkinson's disease patients. EXPERT SYSTEMS WITH APPLICATIONS. 2021. 182():-. DOI: 10.1016/j.eswa.2021.115271
IF: 6,954 Q1 D1
5. F. Jansen, J. Sánchez-Monedero y L. Dencik. Biometric identity systems in law enforcement and the politics of (voice) recognition: The case of SiiP. Big Data & Society. 2021. 8(2). DOI: 10.1177/20539517211063604
IF: 5,987 Q1 D1

» ACTIVITY:

- N° ONGOING PROJECTS: 5
- N° GRANTED PROJECTS IN 2021: 2
- N° PHD THESES: 2

» ADDITIONAL INFORMATION:

- NETWORKS: 3
 1. DAMA Network
 2. MAPAS Network
 3. PAIDI TIC-148
- COMPETITIVE FUNDING OBTAINED FOR CONTRACTS: 3
 1. Programa Predoctoral del Ministerio de Ciencia, Innovación y Universidades – David Guijo Rubio (Ref. FPU16/02128).
 2. Programa Predoctoral del Ministerio de Ciencia, Innovación y Universidades – Víctor Manuel Vargas Yun (Ref. FPU18/00358).
 3. Programa de Formación de Personal Investigador del Ministerio de Ciencia, Innovación y Universidades – Javier Barbero Gómez (Ref. PRE2018-085659).
- AWARDS:
 1. David Guijo Rubio; Premio extraordinario de doctorado; Universidad de Córdoba

GA12:

SEVERE MENTAL ILLNESS-HEALTH ALERTS

SCIENTIFIC PROGRAM 1: ACTIVE AGEING AND FRAILTY

» TEAM

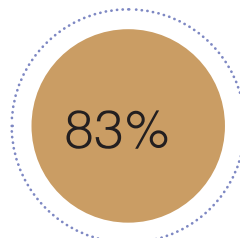
FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Sarramea	Crespo	Fernando	R3	0000-0003-0457-2340
Gutiérrez	Rojas	Luis	R3	
Luque	Luque	Rogelio	R3	
Alcalá	Partera	José Ángel	R2	
Jaén	Moreno	María José	R2	
Alcántara	García	Montserrat	R1	
Arribas	Lozano	Teresa	R1	
Blanco	Quesada	Francisca	R1	
Canalejo	Rodríguez	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	María Teresa	R1	
Gómez	Moreno	Cristina	R1	
Laguna	Muñoz	David	R1	
López	Carnerero	María Soledad	R1	
Mellado	Martinez	María José	R1	
Montiel	Lopez	Francisco Javier	R1	
Ortiz	Alfaro	María José	R1	
Osuna	Carmona	Maribel	R1	
Padilla	Obrero	Leonor	R1	
Polonio	De Dios	Inmaculada	R1	
Prada	Carrasco	Carmen	R1	
Prados	Ojeda	Juan Luis	R1	
Redondo	Écija	Justa	R1	
Rivera	Hidalgo	María Luisa	R1	
Ruiz	Rull	Cristina Esther	R1	

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID
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:

1. Jaen-Moreno MJ, Feu N, del Pozo GI, Gomez C, Carrion L, Chauca GM, Guler I, Montiel FJ, Sanchez MD, Alcalá JA, Gutierrez-Rojas L, Molina V, Bobes J, Balanza-Martinez V, Ruiz-Rull C, Sarramea F. Chronic obstructive pulmonary disease in severe mental illness: A timely diagnosis to advance the process of quitting smoking. *EUROPEAN PSYCHIATRY*. 2021. 64(1):- . DOI: 10.1192/j.eurpsy.2021.12
IF: 5,361 Q1 D2
2. Caso JR, MacDowell KS, Gonzalez-Pinto A, Garcia S, De Diego-Adelino J, Carceller-Sindreu M, Sarramea F, Caballero-Villarraso J, Gracia-Garcia P, De la Camara C, Aguera L, Gomez-Lus ML, Alba C, Rodriguez JM, Leza JC. Gut microbiota, innate immune pathways, and inflammatory control mechanisms in patients with major depressive disorder. *TRANSLATIONAL PSYCHIATRY*. 2021. 11(1):- . DOI: 10.1038/s41398-021-01755-3
IF: 6,222 Q1 D2
3. Prados-Ojeda JL, Luque-Luque R, Gordillo-Urbano RM, Guler I, Lopez-Medina C, Collantes-Estevez E, Escudero-Contreras A. Assessment of Subclinical Psychotic Symptoms in Patients with Rheumatoid Arthritis and Spondyloarthritis. *JOURNAL OF CLINICAL MEDICINE*. 2021. 10(16):- . DOI: 10.3390/jcm10163461
IF: 4,241 Q1 D3
4. Cervera-Martinez J, Atienza-Carbonell B, Mota JC, Bobes-Bascaran T, Crespo-Facorro B, Esteban C, Garcia-Portilla MP, Gomes-da-Costa S, Gonzalez-Pinto A, Jaen-Moreno MJ, Sarramea F, Vieta E, Zorrilla I, Tabares-Seisdedos R, Kapczinski F, De Boni RB, Balanza-Martinez V. Lifestyle changes and mental health during the COVID-19 pandemic: A repeated, cross-sectional web survey. *JOURNAL OF AFFECTIVE DISORDERS*. 2021. 295():173-182. DOI: 10.1016/j.jad.2021.08.020
IF: 4,839 Q1 D2

5. Giner-Murillo M, Atienza-Carbonell B, Cervera-Martinez J, Bobes-Bascaran T, Crespo-Facorro B, De Boni RB, Esteban C, Garcia-Portilla MP, Gomes-da-Costa S, Gonzalez-Pinto A, Jaen-Moreno MJ, Kapczinski F, Ponce-Mora A, Sarramea F, Tabares-Seisdedos R, Vieta E, Zorrilla I, Balanza-Martinez V. Lifestyle in Undergraduate Students and Demographically Matched Controls during the COVID-19 Pandemic in Spain. INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH. 2021. 18(15):- . DOI: 10.3390/ijerph18158133
IF: 3,39 Q1 D3

» **ACTIVITY:**

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

» **ADDITIONAL INFORMATION:**

- NETWORKS: 3
 1. CIBERSAM
 2. PAIDI CTS 550
 3. GETBA
- AGREEMENTS WITH COMPANIES: 2

GA13:

PREVENTIVE MEDICINE AND PUBLIC HEALTH

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

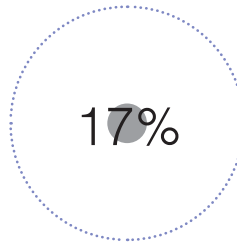
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID	
Salcedo	Leal	María Inmaculada	R3	0000-0002-0864-6856
Barranco	Quintana	José Luis	R3	
Díaz	Molina	Carmen	R3	
Narbona	Rodriguez	Francisco Javier	R3	
Rodríguez	Torronteras	Alejandro	R3	
Torcello	Gaspar	Ricardo	R3	
Ayora	Torres	M ^a del Pilar	R2	
Coca	Baena	M ^a Teresa	R2	
Díaz	Gavira	Concepción	R2	
González	Nebauer	Valeria	R2	
Herrera	Tierno	Jesús	R2	
Romero	Muñoz	María Jesús	R2	
Serrano	Ortiz	Álvaro	R2	
Fernández	Martínez	Nicolás Francisco	R1	
Gavilán	León	Francisco José	R1	
Ortiz	González-Serna	Rocío	R1	
Ruiz	Montero	Rafael	R1	

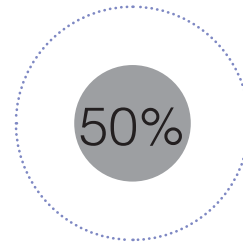
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Public Health	Vaccine uptake
Healthcare associated infections	Adherence
Vaccination	Environmental Biosafety

» HIGHLIGHTED PUBLICATIONS:

1. Fernandez-Martinez NF, Ortiz-Gonzalez-Serna R, Serrano-Ortiz A, Rivera-Izquierdo M, Ruiz-Montero R, Perez-Contreras M, De Alba IGF, Romero-Duarte A, Salcedo-Leal I. Sex Differences and Predictors of In-Hospital Mortality among Patients with COVID-19: Results from the ANCOHVID Multicentre Study. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*. 2021. 18(17):- DOI: 10.3390/ijerph18179018
IF: 3,39 Q1 D3
2. Beltran-Aroca CM, Ruiz-Montero R, Labella F, Girela-Lopez E. The role of undergraduate medical students training in respect for patient confidentiality. *BMC MEDICAL EDUCATION*. 2021. 21(1):- DOI: 10.1186/s12909-021-02689-6
IF: 2,463 Q2 D4
3. Beltran-Aroca CM, Ruiz-Montero R, Llergo-Munoz A, Rubio L, Girela-Lopez E. Impact of the COVID-19 Pandemic on Palliative Care in Cancer Patients in Spain. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*. 2021. 18(22):- DOI: 10.3390/ijerph182211992
IF: 3,39 Q1 D3
4. Romero-Duarte A, Rivera-Izquierdo M, de Alba IGF, Perez-Contreras M, Fernandez-Martinez NF, Ruiz-Montero R, Serrano-Ortiz A, Gonzalez-Serna RO, Salcedo-Leal I, Jimenez-Mejias E, Cardenas-Cruz A. Sequelae, persistent symptomatology and outcomes after COVID-19 hospitalization: the ANCOHVID multicentre 6-month follow-up study. *BMC MEDICINE*. 2021. 19(1):- DOI: 10.1186/s12916-021-02003-7
IF: 8,775 Q1 D1

» 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).

GA14:

IMMUNOGENOMICS AND MOLECULAR PATHOGENESIS

SCIENTIFIC PROGRAM 3: INFECTIOUS AND IMMUNOLOGICAL DISEASES AND ORGAN TRANSPLANTATION

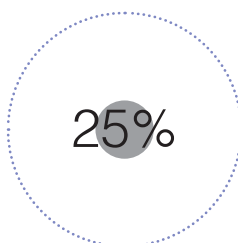
» TEAM

FAMILY NAME	FIRST NAME	EURAXESS CATEGORY	ORCID ID	
Garrido	Pavón	Juan José	R4	0000-0001-6592-2231
Montoya	González	María	R3	
Aguilar	Jurado	Carmen	R3	
Zaldívar	López	Sara	R2	
García	García	Tránsito	R2	
Jiménez	Marín	Ángeles	R2	
Argüello	Rodríguez	Héctor	R2	
Entrenas	García	Carmen	R1	
Ortiz	Sanjuan	Juan Manuel	R1	
Suárez	Cárdenas	José Manuel	R1	
Fernández	Rodríguez	Raúl	R1	

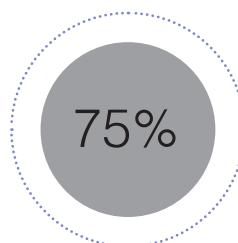
» SCIENTIFIC PRODUCTION



PUBLICATIONS



PUBLICATIONS
IN FIRST DECILE



PUBLICATIONS
IN FIRST QUARTILE

» KEYWORDS:

Host-Microbiome-Pathogen Interplay	Intestinal Immunity
Inflammatory Response in Zoonosis	Immunometabolism
SARS-CoV-2 Accessory Proteins	MicroARNs and Immunity
Co-infections in COVID-19	Transcriptomics, Proteomics, Metabolomics
Enterobacterial infections	Metaproteomics

» HIGHLIGHTED PUBLICATIONS:

1. Redondo N, Zaldívar-López S, Garrido JJ, Montoya M. SARS-CoV-2 Accessory Proteins in Viral Pathogenesis: Knowns and Unknowns. *FRONTIERS IN IMMUNOLOGY*. 2021. 12: 708264. DOI: 10.3389/fimmu.2021.708264
IF: 7,561 Q1 D2
2. Aguilar C, Costa S, Maudet C, Vivek-Ananth RP, Zaldívar-López S, Garrido JJ, Samal A, Mano M, Eulalio A. Reprogramming of microRNA expression via E2F1 downregulation promotes *Salmonella* infection both in infected and bystander cells. *NATURE COMMUNICATIONS*. 2021. 12(1): 3392. DOI: 10.1038/s41467-021-23593-z
IF: 14,919 Q1 D1
3. Gresse R, Garrido JJ, Jiménez-Marín A, Denis S, Van de Wiele T, Forano E, Blanquet-Diot S, Chaucheyras-Durand F. *Saccharomyces Cerevisiae* Var *Boulardii* CNCM I-1079 Reduces Expression of Genes Involved in Inflammatory Response in Porcine Cells Challenged by Enterotoxigenic *E. Coli* and Influences Bacterial Communities in an In Vitro Model of the Weaning Piglet Colon. *ANTIBIOTICS-BASEL*. 2021. 10(9):1101. DOI: 10.3390/antibiotics10091101
IF: 4,639 Q2 D3
4. Flores JM, Gámiz V, Jiménez-Marín A, Flores-Cortes A, Gil-Lebrero S, Garrido JJ, Hernando MD. Impact of *Varroa destructor* and associated pathologies on the colony collapse disorder affecting honey bees. *RESEARCH IN VETERINARY SCIENCE*. 2021. 135():85-95. DOI: 10.1016/j.rvsc.2021.01.001
IF: 2,534 Q1 D3

» ACTIVITY:

- N° ONGOING PROJECTS: 3

» 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. Ministerio de Ciencia e Innovación. Tránsito García García.
- AGREEMENTS WITH COMPANIES: 1

GA15:

FOODS FOR HEALTH

SCIENTIFIC PROGRAM 2: NUTRITION AND ENDOCRINE AND METABOLIC DISEASES

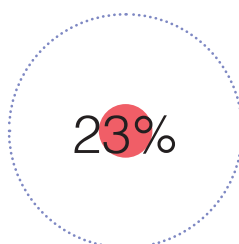
» TEAM

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	José Manuel	R3	
Obregón	Cano	Sara	R3	
Pereira	Caro	María Gema	R3	
Hernández	Reyes	Alberto	R1	
Moreno	Ortega	Alicia	R1	

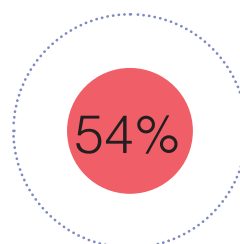
» SCIENTIFIC PRODUCTION



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. Dobani S, Latimer C, McDougall GJ, Allwood JW, Pereira-Caro G, Moreno-Rojas JM, Ternan NG, Pourshahidi LK, Lawther R, Tuohy KM, Del Rio D, O'Connor G, Rowland I, Almutairi TM, Crozier A, Gill CIR. Ex vivo fecal fermentation of human ileal fluid collected after raspberry consumption modifies (poly)phenolics and modulates genoprotective effects in colonic epithelial cells. REDOX BIOLOGY. 2021. 40():-. DOI: 10.1016/j.redox.2021.101862
IF: 11,799 Q1 D1
2. Camara-Martos F, Obregon-Cano S, Mesa-Plata O, Cartea-Gonzalez ME, de Haro-Bailon A. Quantification and in vitro bioaccessibility of glucosinolates and trace elements in Brassicaceae leafy vegetables. FOOD CHEMISTRY. 2021. 339():-. DOI: 10.1016/j.foodchem.2020.127860
IF: 7,514 Q1 D1
3. Mansinhos I, Goncalves S, Rodriguez-Solana R, Ordonez-Diaz JL, Moreno-Rojas JM, Romano A. Ultrasonic-Assisted Extraction and Natural Deep Eutectic Solvents Combination: A Green Strategy to Improve the Recovery of Phenolic Compounds from *Lavandula pedunculata* subsp. *lusitanica* (Chaytor) Franco. ANTIOXIDANTS. 2021. 10(4):-. DOI: 10.3390/antiox10040582
IF: 6,312 Q1 D1
4. Sevillano-Cano J, Camara-Martos F, Zamora-Diaz R, Sevillano-Morales JS. Lead concentration in game migratory upland bird meat: Influence of ammunition impacts and health risk assessment. FOOD CONTROL. 2021. 124():-. DOI: 10.1016/j.foodcont.2020.107835
IF: 5,548 Q1 D2
5. Munoz-Redondo JM, Bertoldi D, Tonon A, Ziller L, Camin F, Moreno-Rojas JM. Tracing the geographical origin of Spanish mango (*Mangifera indica* L.) using stable isotopes ratios and multi-element profiles. FOOD CONTROL. 2021. 125():-. DOI: 10.1016/j.foodcont.2021.107961
IF: 5,548 Q1 D2

» ACTIVITY:

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

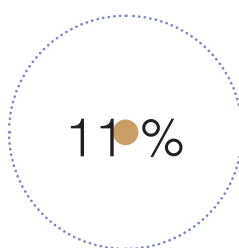
» TEAM

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

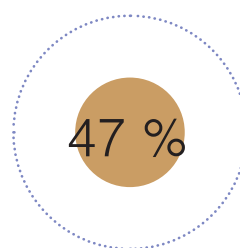
» SCIENTIFIC PRODUCTION



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. Molina-Luque R, Ulloa N, Romero-Saldana M, Zilic M, Gleisner A, Lanuza F, Molina-Recio G. Association between the FTO SNP rs9939609 and Metabolic Syndrome in Chilean Children. NUTRIENTS. 2021. 13(6):- DOI: 10.3390/nu13062014
IF: 5,717 Q1 D2
2. Molina-Luque R, Carrasco-Marin F, Marquez-Urrizola C, Ulloa N, Romero-Saldana M, Molina-Recio G. Accuracy of the Resting Energy Expenditure Estimation Equations for Healthy Women. NUTRIENTS. 2021. 13(2):- DOI: 10.3390/nu13020345
IF: 5,717 Q1 D2
3. Velasco FA, Palomares JM, Olivares J. Lightweight method of shuffling overlapped data-blocks for data integrity and security in WSNs. COMPUTER NETWORKS. 2021. 199():-. DOI: 10.1016/j.comnet.2021.108470
IF: 4,474 Q1 D3
4. Mayor-Silva LI, Romero-Saldana M, Moreno-Pimentel AG, Alvarez-Melcon A, Molina-Luque R, Meneses-Monroy A. The role of psychological variables in improving resilience: Comparison of an online intervention with a face-to-face intervention. A randomised controlled clinical trial in students of health sciences. NURSE EDUCATION TODAY. 2021. 99():-. DOI: 10.1016/j.nedt.2021.104778
IF: 3,442 Q1 D1
5. Vargas-Martinez AM, Romero-Saldana M, De Diego-Cordero R. Economic evaluation of workplace health promotion interventions focused on Lifestyle: Systematic review and meta-analysis. JOURNAL OF ADVANCED NURSING. 2021. 77(9):3657-3691. DOI: 10.1111/jan.14857
IF: 3,187 Q1 D1

» ACTIVITY:

- N° GRANTED PROJECTS IN 2021: 2
- N° PHD THESES: 3

» ADDITIONAL INFORMATION:

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

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SCIENTIFIC REPORT
IMIBIC 2021



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, among others, the Networks for Cooperative Research in Health (*Redes Temáticas de Investigación Cooperativa en Salud*, RETICs) and in the Biomedical Research Networking Centers (*Centros de Investigación Biomédica en Red*, CIBERs). In addition, IMIBIC is a member of two European infrastructures (EATRIS & ECRIN) and several other national and international networks.

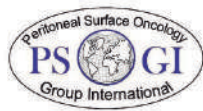
Among the 48 groups integrated into the IMIBIC, 12 groups are involved in 16 different RETICs. Additionally, 15 groups are involved in 8 CIBERs (including the newly created CIBERinfec) and there are 37 groups involved in the Andalusian Plan for Research, Development & Innovation (PAIDI Program).

» 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
	Dra. María Mercedes Gil Campos
	Dra. 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 Díaz
	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)
	Dra. Carmen Moreno Aguilar
6	The Research Network for Inflammation and Rheumatic Diseases (RIER)
	Dr. Eduardo Collantes Estévez
	Dra. 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)
	Dra. Inmaculada Concepción Herrera Arroyo

13	Spanish Pediatric Clinical Trials Network (RECLIP)
	Dra. M ^a Mercedes Gil Campos
14	Spanish Network of Multiple Sclerosis (REEM)
	Dr. Eduardo Agüera Morales
15	NutriEpigen (<i>Precision Nutrition and Physical Exercise as Modulators of the Epigenome in Diet-related Pathologies</i>)
	Dr. José López Miranda
16	ADIPOPLAST (Research Network on Adipose Plasticity and Related Pathologies)
	Dra. M ^a del Mar Malagón Poyato

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

Many IMIBIC researchers belong to or lead groups within 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	Dra. 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	Dra. Julia Carrasco Valiente
CTS-179	Dr. Escolástico Aguilera Tejero

PAIDI GROUP**IMIBIC RESEARCHERS**

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-329	Dr. Ramón Cañete Estrada
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	Dra. 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	Dra. Bárbara Luque Salas
HUM-924	Dr. Juan Antonio Moriana
TEP-226	Dra. 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 ISCI: 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 for the study of 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 Proteomic
- 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 Toxic
- GESMD: Spanish Group of Myelodysplastic Syndromes
- COCHRANE Skin group

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SCIENTIFIC REPORT
IMIBIC 2021



TRAINING

Training is regarded as a fundamental institutional tool for achieving and improving the scientific objectives of the Institute. Each year, it devises a wide-ranging 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. This programme includes the organization 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 lectures by leading experts in Biomedicine, and is intended to recognize and reward national and international top scientists.

IMIBIC is similarly committed to generating talent and runs two postgraduate programmes in collaboration with the University of Córdoba: the Master 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



10.1 TRAINING PROGRAMS

» PHD IN BIOMEDICINE

IMIBIC leads the Doctoral Programme in Biomedicine at the University of Córdoba. This programme offers high-quality training, taking an interdepartmental, multidisciplinary perspective to deliver advanced training to develop human resources for teaching and research. In addition to encouraging professional qualifications in the field of Biomedical Sciences, it also attracts new scientific talent to the Institute

In 2021, this doctoral program was coordinated by:

- Raúl M. Luque Huertas, PhD. From September 2020 to December 2021.
- Marco A. Calzado Canale, PhD. From December, 2021.

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 Master's degree has a two-pronged focus: to train students specialising in this area, as well as personnel specialized in techniques and methodologies of translational biomedical research, enabling students to carry out technical work to support 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 during 2021 at IMIBIC. 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 diverse 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 2021, a total of 20 external seminars were held.

In addition, young researchers (preferentially post-doctoral researchers) from our Institute have an opportunity to present studies in progress in a fortnightly cycle of intramural seminars, launched for the first time in 2015. In 2021, a total of 9 intramural seminars were held



10.3 INSTITUTIONAL EVENTS

» 12TH IMIBIC YOUNG INVESTIGATOR MEETINGS

IMIBIC Young Investigator Meetings provide an ideal environment for enhancing the skills and knowledge of young scientists and fostering translational research, facilitating an interface between basic experimental science and clinical medicine in order to improve health and quality of life. The Meetings are aimed at promoting inter-disciplinary research and, especially, high-quality training by sharing the results obtained by young researchers from IMIBIC and related institutions, as well as from other groups of the University of Cordoba.

Specifically, IMIBIC Young Investigator Meetings pursue:

- 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 post-doctoral 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 for our young researchers in particular.

The 12th Meeting took place at the IMIBIC building on 28 and 29 October 2021. The programme of the Meeting included different sessions representing IMIBIC Scientific Programs, as follows:



Córdoba, 28–29 oct. 2021

PROGRAMME

Day 1 (28th OCT)

08:15 – 08:45

Registration and Poster display

08:45 – 09:00

Opening ceremony (IMIBIC Assembly Hall)

09:00 – 10:45

SESSION I. Cancer (IMIBIC Assembly Hall)

Chairs: **Dr. Rocío Guzmán & Dr. Juan Moreno.**

→ **Ia. 09:00 – 09:15**

Application of a biocomputational approach to identify alterations in the spliceosomic landscape in lung carcinoids. **Victor García Vioque.**

→ **Ib. 09:15 – 09:30**

The metabolic rewiring induced by impaired denitrosylation contributes to tumor progression and immune escape in colorectal cancer. **Rafael Mena Osuna.**

→ **Ic. 09:30 – 09:45**

Unleashing the therapeutic role of somatostatin and cortistatin in prostate cancer. **Francisco Porcel Pastrana.**

→ **Id. 09:45 – 10:00**

Interval carcinomas in a Breast Cancer Screening Program: differences between women studied with digital mammography or tomosynthesis. **Cristina Pulido Carmona.**

→ **Ie. 10:00 – 10:15**

Surgical treatment of malignant pleural mesothelioma.

Multicenter study. **Eloisa Ruiz López.**

→ **If. 10:15 – 10:30**

Splicing machinery landscape in hepatocellular carcinoma: a central role of EIF4A3 in hepatocarcinogenesis. **Natalia Hermán Sánchez.**

→ **Ig. 10:30 – 10:45**

Revealing the pharmacologically regulable CDC25A/DYRK2 axis: a novel master cell cycle and survival modulator. **Alejandro Correa Sáez.**

10:45 – 11:15

Break

11:15 – 13:15

SESSION II. Multidisciplinary (IMIBIC Assembly Hall)

Chairs: **Dr. Almudena Pino & Dr. Juan Solivera.**

→ **IIa. 11:15 – 11:30**

Assessment of the liver disease risk in inflammatory arthritis. Molecular mechanisms involved in hepatocyte dysfunction in the context of psoriatic arthritis. **Cristobal Román Rodríguez.**

→ **IIb. 11:30 – 11:45**

Reduction of renal mass interferes with the phosphaturic action of rapamycin. **Azahara Espartero Castro.**

→ **IIc. 11:45 – 12:00**

Kinetics of the intestinal loads of *Klebsiella pneumoniae* producing KPC carbapenemase following selective digestive decolonization with oral gentamicin: a 1-year, prospective cohort study. **Alejandra Méndez Natera.**

→ **IId. 12:00 – 12:15**

Unsupervised clustering analysis of the circulating inflammatory profile of Rheumatoid Arthritis patients stratify patients according to their cardiovascular risk. **Laura Muñoz Barrera.**

→ **IIe. 12:15 – 12:30**

Fibroblast growth factor 23 down-regulation by chronic metabolic acidosis in rats. **Ángela Vidal Carrascosa.**

→ **IIf. 12:30 – 12:45**

SARS-CoV-2 ORF7a and ORF7b cooperate in multiple membrane-based processes ranging from cell adhesion, olfaction and immune response interference. **Tránsito García García.**

→ **IIg. 12:45 – 13:00**

Association of gut microbiota and enthesitis in axial spondyloarthritis. Data from CASTRO Registry. **Ignacio Gómez García.**

13:15 – 15:30

Lunch (IMIBIC Cafeteria)

15:30 – 16:30

Poster session I (IMIBIC Meeting & Multipurpose Room)

Chairs: **Dr. María Victoria García & Dr. Carlos Pérez.**

→ **PSI.a.** Effect of the consumption of yogurt with *Bifidobacterium lactis* B420/205 and *Lactobacillus acidophilus* 207 on the parameters associated with glucose homeostasis in patients with type 2 diabetes mellitus of the Clinics Hospital from Asunción, Paraguay. **María Eugenia Ruiz Díaz Narváez.**

→ **PSI.b.** Sexual dimorphism in markers of pathways related with the hallmarks of aging in mice overexpressing CYB5R3 and fed a nicotinamide ribosidesupplemented diet. **Luz Marina Sánchez Mendoza.**



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- **PSI.c.** The expression of splicing machinery components is dysregulated in human neuroendocrine lung tumors. **María Teresa Caro Cuenca.**
- **PSI.d.** TWEAK/Fn14 axis modulates acute kidney injury associated with rhabdomyolysis. **Melania Guerrero-Hue.**
- **PSI.e.** Mutations in colistin resistance genes in colistin-resistant subpopulations of wild-type *Klebsiella pneumoniae* of clinical origin. **Irene Sánchez León.**
- **PSI.f.** Glycogen syntase kinase-3 as a relevant target for the treatment of colorectal cancer. **Aurora Rivas Crespo.**
- **PSI.g.** Use of LC/MS for the identification of new allergens involved in olive pollen allergy. **Samanta Lozano de la Haba.**
- **PSI.h.** Putative pathophysiological roles of miRNAs in the regulation of pituitary expression of GnRH-R, LHβ and FSHβ, in the context of obesity-induced hypogonadism. **Yolanda Guerrero Ruiz.**
- **PSI.i.** A Preliminary Study of Circulating Tumour Cells in Patients with Hepatocellular Carcinoma Undergoing Neoadjuvant Transarterial Chemoembolization. **María Lola Espejo Cruz.**
- **PSI.j.** Social support in times of pandemic. Intervention study. **Elena López Cerdá.**
- **PSI.k.** In vitro evaluation of the effect of exosomes derived from umbilical cord MSCs grown in normoxia and hypoxia on cell types involved in skin regeneration. **Aina Torres Pallares.**
- **PSI.l.** Improvement of cetuximab-dependent cellular cytotoxic activity of human NK cells against colorectal cancer cells. **Carmen Navarrete Sirvent.**
- **PSI.m.** Health-Related Quality of Life in Cardiovascular Patients explicated by Positivity and Self-Efficacy. **Tamara Gutiérrez Domingo.**
- **PSI.n.** Peritonitis predictive factors in incidental patients in peritoneal dialysis. **Cayetana Moyano Peregrin.**
- **PSI.ñ.** Role of the phosphatase PNKP in temozolamide resistance. **Ariadna Muñoz Fernández.**
- **PSI.o.** Relevance of an AP lyase / DNA 3'-phosphatase pathway in the repair of abasic sites in human cells. **Marina Jordano Raya.**
- **PSI.p.** Are smoking and alcohol associated with peripheral musculoskeletal involvement in patients with Spondyloarthritis? Results from the ASASPerSpA study. **María Lourdes Ladehesa Pineda.**
- **PSI.q.** Histological changes of major pectoralis muscle fibres after breast prosthesis implantation. **Juan Cámara Pérez.**
- **PSI.r.** Inhibition of dipeptidyl peptidase 8/9 negatively affects human mesenchymal stem cell differentiation in vitro. **Bárbara Torrecillas Baena.**
- **PSI.s.** MicroRNAs involved in oxidative stress from patients with cardiovascular disease in response to two cardio-healthy diets: from CORDIOPREV study. **Maite Sánchez Giraldo.**
- **PSI.t.** Evolution of metabolic phenotypes of obesity after 5-year intervention with two healthy diets. Cordioprev study. **Laura Martín Piedra.**
- **PSI.u.** Role of intestinal microbiota in the sex-dimorphism differences in the cardiovascular diseases. **Helena García Fernández.**
- **PSI.v.** Role of DNA repair mechanisms in temozolamide resistance. **Inés Grávalos Cano.**
- **PSI.w.** Enhancing subjective well-being in cardiovascular disease patients through a mHealth psychological intervention in emotion regulation. **Naima Z Farhane Medina.**
- **PSI.x.** Medium-term clinical impact of the ejection fraction recovery in patients with severe left ventricle dysfunction. **Jorge Perea Armijo.**
- **PSI.y.** Healthy habits intervention program. WhatsApp broadcast. **Eva María Sánchez Cañete.**
- **PSI.z.** Severe aortic stenosis survival and mortality analysis, in a series of patients, clinical and economic factors. **María Teresa Conejero Jurado.**
- **PSI.aa.** Rare indications of lung transplantation in Andalucía. **David Poveda Chávez.**
- **PSI.bb.** Phase I / II single-arm efficacy and safety study of the use of neutral argon plasma in the debulking of miliary implants on the peritoneal surface. **Francisca Valenzuela Molina.**
- **PSI.cc.** Late complications in patients with Stent-treated coarctation of the aorta: Long-term follow-up. **Cristina Pericet Rodríguez.**
- **PSI.dd.** Management and knowledge of soft tissue tumors / sarcoma: Update of primary care physicians. **Raquel Gracia Rodríguez.**



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16:30 – 18:15

Session III. Nutrition, Endocrine and metabolic diseases

(IMIBIC Assembly Hall)

Chairs: **Dr. Alejandra Pera & Dr. André M. Sarmiento.**

→ **IIIa. 16:30 – 16:45**

Long-term consumption of a Mediterranean diet or a low-fat diet on kidney function in coronary heart disease patients: an analysis of the CORDIOPREV randomized controlled trial. **Alicia Podadera Herreros.**

→ **IIIb. 16:45 – 17:00**

Molecular Diagnosis of Polycystic Ovary Syndrome in Obese and Non-Obese Women by Targeted Plasma miRNA Profiling. **Cecilia Perdices López.**

→ **IIIc. 17:00 – 17:15**

Evaluation of the effect of COVID-19 on body composition and the development of obesity in Spanish preschool children: Coral Study. **Laura Velarde Morales.**

→ **IIIId. 17:15 – 17:30**

Microvascular endothelial function, long-term dietary intervention and cardiovascular risk of recurrence: from the cordioprev study. **Marta Millán Orge.**

→ **IIIe. 17:30 – 17:45**

Hypothalamic lipid sensing: a new player in the metabolic control of puberty. **Elvira Rodríguez Vázquez.**

→ **IIIIf. 17:45 – 18:00**

Relationship between Physical Activity, Oxidative Stress, and Total Plasma Antioxidant Capacity in Spanish Children from the GENOBX Study. **Francisco Javier Aguilar Gómez-Cárdenas.**

→ **IIIg. 18:00 – 18:15**

Circulating miRNA profile in childhood early obesity and metabolic syndrome. **Miguel Ruiz Cruz.**

Day 2 (29th OCT)

08:30 – 09:00

Registration and Poster display

09:00 – 10:45

Session IV. Cancer II (IMIBIC Assembly Hall)

Chairs: **Dr. Oriol Rangel & Dr. Rafael Pineda.**

→ **IVa. 09:00 – 09:15**

GSK-3 inhibition as an immunotherapeutic approach in colorectal cancer. **Ana Mantrana Soldado.**

→ **IVb. 09:15 – 09:30**

SF3B1 inhibition disrupts malignancy and prolongs survival in glioblastoma patients through the imbalance of BCL2L1-splicing and

mTOR/Bcatenin-pathways. **Antonio Carlos Fuentes Fayos.**

→ **IVc. 09:30 – 09:45**

The emerging role of the dual-specificity tyrosineregulated kinase 2 (DYRK2) regulating FBXW7 tumor suppressor in cancer development and progression. **Rafael Manuel Jiménez Izquierdo.**

→ **IVd. 09:45 – 10:00**

Dysregulation of the splicing machinery in rare tumors: The splicing process is altered in Pseudomyxoma Peritonei.

María Trinidad Moreno Montilla.

→ **IVe. 10:00 – 10:15**

The Combination of Neutrophil-Lymphocyte Ratio and Platelet-Lymphocyte Ratio with Liquid Biopsy Biomarkers Improves Prognosis Prediction in Metastatic Pancreatic Cancer.

Marta Toledano Fonseca.

→ **IVf. 10:15 – 10:30**

Spliceosome dysregulation accompanies diet-induced chronic liver disease progression towards hepatocellular carcinoma in mouse models. **Antonio García Estrada.**

→ **IVg. 10:30 – 10:45**

Incidence of cancer in the native lung after single lung transplantation. **Alba María Fernández González.**

10:45 – 11:15

Break

11:15 – 12:15

Poster session II (IMIBIC Meeting & Multipurpose Room)

Chairs: **Dr. María Victoria García & Dr. Clementina López.**

→ **PSII.a.** Oncometabolism as a potential target in the poor prognosis subtype of colorectal cancer. **Ana Adela Calero García.**

→ **PSII.b.** Pharmacological inhibition of Nox4 protects against acute kidney injury associated to massive intravascular hemolysis. **Cristina García Caballero.**

→ **PSII.c.** Autophagy and mitochondrial alterations by anti-aging interventions with NAD⁺ boosters and CYB5R3 overexpression are sex dependent in mice kidney. **Miguel Pérez Rodríguez.**

→ **PSII.d.** Utility of copy number variation analysis detected by next generation sequencing in acute myeloid leukemia patients. **Kamila Janusz.**

→ **PSII.e.** SARS-CoV-2 and CMV chronic infection. **Pablo Álvarez Heredia.**

→ **PSII.f.** Circadian biorhythm and cardiometabolic risk among patients with coronary heart disease. **Juan Luis Romero Cabrera.**



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- **PSII.g.** The Yin-Yang of Adipose Tissue Fibrosis. **Carmen Tercero Alcázar.**
- **PSII.h.** Improvement of “off-the-shelf” allogeneic CAR-T cells. **Kristina Pavlovic Pavlovic.**
- **PSII.i.** Alterations of mitochondrial ultrastructure due to aging and CYB5R3 overexpression. **Sara López Bellón.**
- **PSII.j.** Influence of low back pain, sequenced movement, short-term rest, and age on lumbar muscle mechanical properties. **Sandra Alcaraz Clarina.**
- **PSII.k.** Low fat diet modulates oxidative stress through FOXO1A genetic variant in coronary heart disease patients with type 2 diabetes. **Cristina Hidalgo Moyano.**
- **PSII.l.** Sensitisation Profile of Patients Allergic To Apis Mellifera. **Ana Belén Carmona Casado.**
- **PSII.m.** Impact of the use of diuretics after the onset of hemodialysis. **Victoria Eugenia García Montemayor.**
- **PSII.n.** Preliminary results on the establishment of an animal model of pseudomyxoma peritonei with human xenograft. **Blanca Rufián Andújar.**
- **PSII.ñ.** Additive antitumor effect of metformin and simvastatin combination in glioblastoma: evidence for a potential drug repurposing. **Miguel Eduardo García García.**
- **PSII.o.** Impact of the number of comorbidities on the outcome measures and on the retention rate of the first anti-TNF in patients with Ankylosing Spondylitis. Two-year follow-up REGISPONSER-AS. **María Ángeles Puche Larrubia.**
- **PSII.p.** Outcomes in patients with anti-gbm glomerulonephritis in a multicentric spanish cohort. **Marina Sánchez-Agesta Martínez.**
- **PSII.q.** Lipoprotein subclasses, particle sizes and standard lipid panel and their relationship with peripheral artery disease in coronary heart disease patients: from the CORDIOPREV study. **María del Pilar Coronado Carvajal.**
- **PSII.r.** Evaluation of Sedentary Behavior and Physical Activity Levels using Different Accelerometry Protocols in Children from the GENOBOX study. **José Manuel Jurado Castro.**
- **PSII.s.** Pediatrics eating disorders during the sars-cov19 pandemic in reina sofia university hospital. **María Jordano González.**
- **PSII.t.** A proposal for modification of P SOGI classification according to Ki-67 proliferation index in pseudomyxoma peritonei. **Ana Martínez López.**
- **PSII.u.** Rab34 or how to turn lipid storage on and off. **Jaime David López Alcalá.**
- **PSII.v.** Prevalence and Associated Factors of Low Bone Mineral Density in the Femoral Neck and Total Hip in Axial Spondyloarthritis: Data from the CASTRO Cohort. **Laura Bautista Aguilar.**
- **PSII.w.** Relationships between Body Mass Index and Psychosocial variables to predict the well-being of children and adolescents: a preliminary study. **Joaquín Villacéja Rodríguez.**
- **PSII.x.** Construction of a predictive test for postpartum depression. **Irene Cabedo Olaya.**
- **PSII.y.** Intratumoral Bromelain and Acetylcysteine for Recurrent and Unresectable Pseudomyxoma Peritonei. A Phase I/II, unicentric study. **Lidia Rodríguez Ortiz.**
- **PSII.z.** Aortic valve infiltrating pro-inflammatory cells in aortic stenosis patients. **José Joaquín Domínguez del Castillo.**
- **PSII.aa.** Ventilatory therapies and Intensive Care admissions for patients with COVID-19: a systematic review. **María del Rocio Valverde León.**
- **PSII.bb.** Analyzing the Role of Autophagy in the Control of Puberty and Reproductive Function. **Manuel Jiménez Puyer.**
- **PSII.cc.** Relation between Helicobacter spp. isolated in bile and biliary tract malignancies. **Beatriz Gros Alcalde.**

12:15 – 12:30

Presentation of the UCAIBs

12:30 – 13:30

Plenary Lecture: Pluripotency for organ regeneration.

Dr. Núria Monserrat, ICREA Research Professor, Institute for Bioengineering of Catalonia (IBEC).

13:30 – 14:00

Awards and Closing ceremony

This edition was organized in 6 sessions (2 sessions on cancer, 1 on nutrition and frailty, 1 multidisciplinary and 2 poster sessions) with two types of presentation: lectures and poster talks. A total of 89 papers were received and the number of registered attendees was 160.

» 11TH MAIMONIDES COMMEMORATIVE LECTURE AND IMIBIC AWARDS

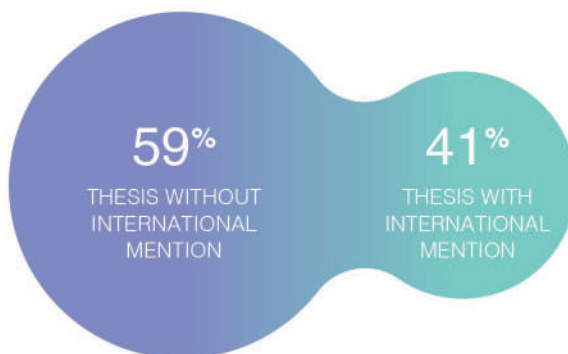
The aim of this initiative is to recognize the biomedical research carried out by IMIBIC staff and to emphasize the importance of the results obtained at the Institute. In 2021, the “Enrique Aguilar Benítez de Lugo” Prize was awarded to the most important scientific publication led by IMIBIC researchers in collaboration with international groups, which was published by the Group “GC10- Hormonal regulation of energy balance, puberty and reproduction.” (<https://doi.org/10.1016/j.cmet.2020.10.001>). In addition, the award for the best clinical research work was awarded to the Group “GC03- Infectious Diseases” (<https://doi.org/10.3201/eid2701.190782>).

Each year, an outstanding biomedical scientist is invited to present the “Maimónides Lecture”, which focusses on the latest knowledge on basic, applied, and/or translational biomedical science of excellence. In 2021, the guest speaker was Professor M^a José Alonso, full Professor of Biopharmaceutics and Pharmaceutical Technology at the University of Santiago de Compostela and an international leader in the field of Pharmaceutical Nanotechnology and Nanomedicine. Professor Alonso’s laboratory is specialized in the formulation of macromolecules, i.e., peptides, proteins, antigens, monoclonal antibodies, and polynucleotides, using polymer-based delivery systems. Her major research achievements are: (i) pioneering the design of novel nanomaterials based on the polysaccharide chitosan and arginine-rich polypeptides of interest for intracellular protein delivery; (ii) reporting for the first time the encapsulation of proteins, antigens, and polynucleotides into PLGA and PLA-PEG nanoparticles, and (iii) reporting for the first time on the influence of PEG on the capacity of nanoparticles to overcome mucosal barriers (ocular, nasal, intestinal).

She is the author of more than 300 scientific contributions and the inventor of numerous patent families. She has received multiple awards in recognition of her work. She has been cited among the top ten in the area of Pharmacology for the quality of her scientific articles (Times Higher Education international ranking, 2010) and is on the ‘Power List’ of the most influential researchers in the area of Biopharmaceuticals (The Medicine Maker, 2020).

10.4 RESULTS OF TRAINING ACTIVITIES

» THESES PRESENTED –2020/2021 ACADEMIC COURSE



» RESEARCH STAYS

IMIBIC is committed to promoting the training of its PhD students in national and international centres of reference in biomedical research, to providing opportunities to experience research in a foreign setting, to facilitating the integration of graduates in the scientific community, and to creating networks. In fact, the “Plan Propio” of the Institute includes actions to promote these stays.

Fourteen researchers from the IMIBIC completed a research stay at a national or international centre in 2021, eleven of whom were students of the PhD programme in Biomedicine and will thus have the opportunity to be awarded an international mention.

External visitors are also invited to carry out their research at our Institute. A total of 12 visiting scientists stayed at IMIBIC during 2021.

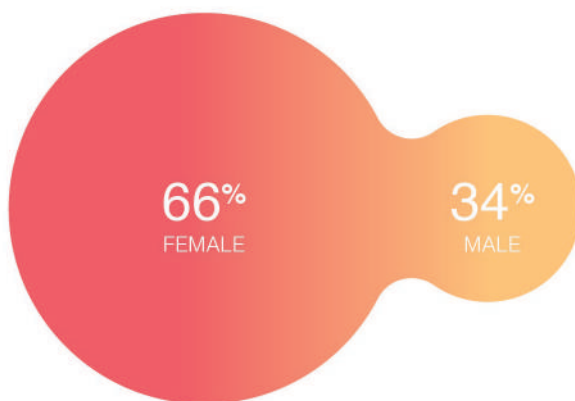
» TRAINING ATTENDANCE IN 2021

The total number of participants in all training activities held at IMBIC in 2021, including courses, conferences, seminars and other activities, was 586. Predominant participants were women.

» TRAINING ACTIVITIES BY TYPE



» PARTICIPATION IN TRAINING ACTIVITIES:







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 favourable ecosystem to support innovation and translation to the Spanish National Health System. The more specific aims 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. Both units work in close collaboration to transform the ideas of the IMIBIC inventors into minimum viable products, scaling these ideas in the innovation TRLs.

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

- Patent registration and licensing.
- Knowledge transfer towards 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) as an example of full alignment with European, national and regional policies.

As a result of the actions carried out in 2021, 24 patents or intellectual property registrations were applied for. Three licenses were also presented.

In accordance with the Innovation and Technology Transfer Plan, 5 prototypes have been created and work will continue to advance the innovation process (TRL) either in collaboration with companies or through funding raised by IMIBIC.

With respect to the creation of companies, the Innovation and Technology Transfer Unit is advising Dr. Carlos Pérez, a researcher of the GC05 research group "Systemic and Chronic Inflammatory Autoimmune Diseases of the Locomotor System and Connective Tissue" in the creation of a company, which is expected to be launched during 2022.

Funding obtained through the ISCIII/Strategic Action in Health in 2021 for the implementation of innovation projects was 226.000 €. The funds will be used to develop a device aimed at the prevention of diabetes, and a software that will ensure better management of pharmacological alternatives in the Spanish National Health System.

Two applications were presented to CDTI (Centre for the Development of Industrial Technology) calls by two IMIBIC groups with the participation of the Unit, which will provide services in these projects for a total amount of 165.400 €.

In 2021, IMIBIC participated in the new ITEMAS platform (Innovation in Medical and Health Technologies), funded by the Carlos III National Health Institute (ISCIII). According to this agreement, IMIBIC was the coordinator of the Quality Commission. Likewise, the Unit was included in the Hub "3D Printing" of the ISCIII Biobanks and Biomodels Platform.

The IMIBIC Innovation Unit also successfully passed the recertification audit of its Quality Management System, in compliance with UNE 166.002:2014.

EVOLUTION OF RESULTS

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

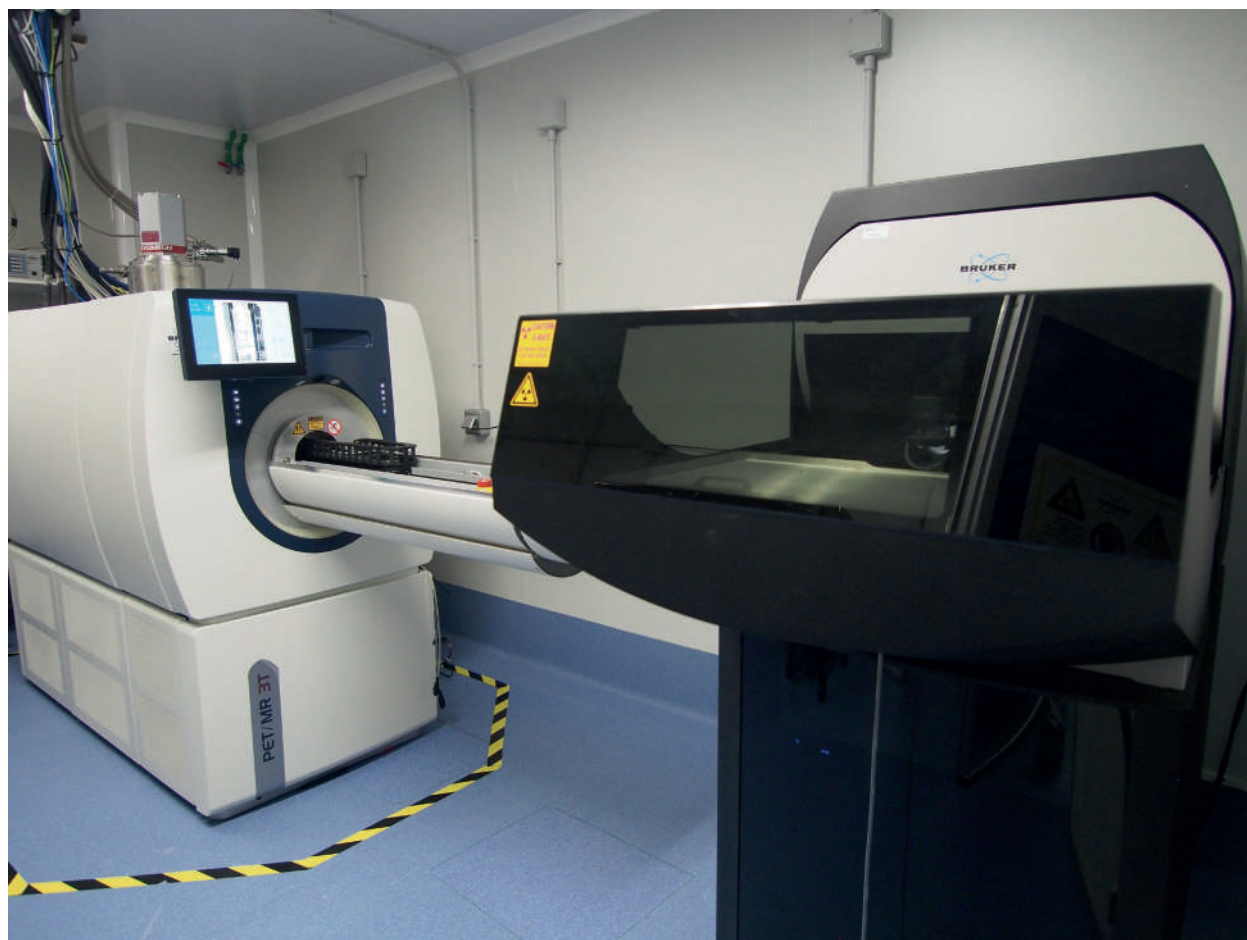
Finally, 18 confidentiality agreements and 8 collaboration/service agreements were signed with companies in 2021.

12



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 (SIP) is a highly advanced facility which provides 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 occupies 800 m² and has 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, among others.

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

» EQUIPMENT AND FACILITIES

» ISOTOPE UNIT

The unit has one laboratory located on floor -2 that is dedicated to working with both γ and β radioactive isotopes. The Unit was authorized by the Nuclear Safety Council in December 2014 to work with the following isotopes:

ISOTOPES	MAXIMUM ACTIVITY (Mbcq)
Carbon (C-14)	370
Tritium (H-3)	370
Phosphorus (P-32)	370
Phosphorus (P-33)	370
Sulfur (S-35)	370
Chrome (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
- Harvester cell
- A sample preparer
 - » Make: Janus
- Two refrigerated ultracentrifuges with capacity for 200 samples.
- Three gas cabinets for working exclusively with radioactive isotopes, two with a lead and one with a methacrylate guillotine.
- Two radiation detectors:
 - » Make: Lamse
 - » Model: RM10013-RDM

» PRECLINICAL IMAGING UNIT

- **PET / MR 3T** is one of few combined magnetic resonance and PET equipment available nationwide. The PET equipment is based on highly sensitive, continuous LYSO crystal technology with 2 rings with 8 detectors that can provide 80 mm (transaxial) X 148 mm (axial) fields of view, up to 285 mm (axial) by moving the bed, with MRI-compatible silicon photomultipliers, sensitivity of 5%, up to 9% (NEMA standard) and sub-millimetre resolution (≤ 0.7 mm); The MRI equipment is 3 Tesla and 18 cm magnet with cryogen free technology, without the need for a cooling line, with magnet homogeneity of ± 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 displays an automatic positioning system for the animal in both the PET and MRI modalities, and a touch screen 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 which will be done in the near future.

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

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

» MAIN SERVICES

- Training in the handling of β and γ counters.
- Labelling of proteins with ¹²⁵I.
- Identification of protein levels in serum, plasma and other biofluids using the RIA technique.
- In situ hybridization (ISH) with ³³P labelled probes.
- Radioactive techniques for analysis of cell death and proliferation.
- Consultation regarding the different isotopic techniques that are employed in the laboratory.
- Optimization of protocols.
- To advise on experimental design, selection of equipment and supervision of procedures.
- To advise 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 PET-MR and MicroCT preclinical imaging systems within 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 Reina Sofia University Hospital. This work was carried out in order to define the optimal equipment and workflows prior to bidding for the equipments.

» 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. GC27. Raúl Luque: "Splicing alternativo y miRNAs como potenciales biomarcadores y dianas terapéuticas."
2. GE09. Antonio Romero: "Caracterización molecular del pseudomixoma preitoneal y desarrollo de biomarcadores y terapias diana".
3. GC13. Juan Muñoz: "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 Óseas Asociadas a la Enfermedad Renal Crónica y la Regulación de la Síntesis Osteocítica de FGF23 y Esclerostina."
4. GC04. Eduardo Muñoz y Carmen Navarrete: "Daño cerebral inducido". Adela García: "Estudio del efecto de fármacos en modelo de isquemia en extremidades inferiores". "Estudio del efecto derivado de los cannabinoides en el modelo de esclerodermia inducido por angiotensina".
5. GC17. Antonio Casado: "Efecto de la PTH sobre la cicatrización de heridas".
6. GA04: "Telotristat etiprate: utilidad en la fibrosis mesentérica y la enfermedad cardíaca por carcinoide. Efecto auto/paracrino de la serotonina en la fibrosis del síndrome carcinoide."
7. Instituto de Bioingeniería de Cataluña. Grupo de Imagen molecular en Medicina de precisión: "Imagen celular y preclínica por RM mejorada con polarización inducida por parahidrógeno"

» COURSES AND WORKSHOPS

1. XV Advanced Training Course on Animal Protection and Experimentation (Module A), organised by the University of Córdoba.
2. Radioactive Facility Operator training course in the specific field of Nuclear Medicine (HCUR-MN-O/319/2021) – CSN/GC/ACT) 116/HCUR/0046/2021.
3. XI Workshop on Innovative Mouse Models. IMM2021. University of Amsterdam.
4. Webinar Session on Cardiac PET/MRI Imaging in Small Rodents. Bruker.

12.2 ANIMAL EXPERIMENTATION UNIT



» STAFF

Ana M^a Molina López

Director of SAEX

Anabel Pozo Salas

Clinical Diagnostic Laboratory Technician - MINECO

Estefanía Escudero Jabonero

Technician in Anatomical Pathology and Cytology – MINECO

» BRIEF DESCRIPTION

The IMIBIC Animal Experimentation facilities are part of the Experimental Animal Service (SAEX) of the University of Cordoba. The aim 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 main objective of the Animal Experimentation Unit 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 intended 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 IMIBIC animal experimentation unit facilities, coordinated by the Animal Experimentation Service of the University of Córdoba, were opened in 2017.

In 2021, the Unit was included in the Hub “Biomodels” of the ISCIII Biobanks and Biomodels Platform.

» EQUIPMENT AND FACILITIES

TheU comprises:

- 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 has a respirometry system, two racks for metabolic cages, optogenetic and quantitative analysis equipment as well as equipment for body composition MRI.
- 4 multi-purpose rooms for experimental procedures with animals: two rooms for use on rats and two for use on 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 Room: Suitable for surgery on rodents and larger animals (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: has micro-CT/PET/MR for rodents, as well as a gamma library, a ventilated cabinet for 6 animals and an anaesthesia machine.
- Operating room: Consists of 6 surgery workstations for animal (pig) research and experimental surgery or selective surgery on anatomical pieces (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, and 4 scales.

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

» KEY FACTS

- NUMBER OF IMIBIC USERS: **60**
- NUMBER OF PUBLICATIONS:

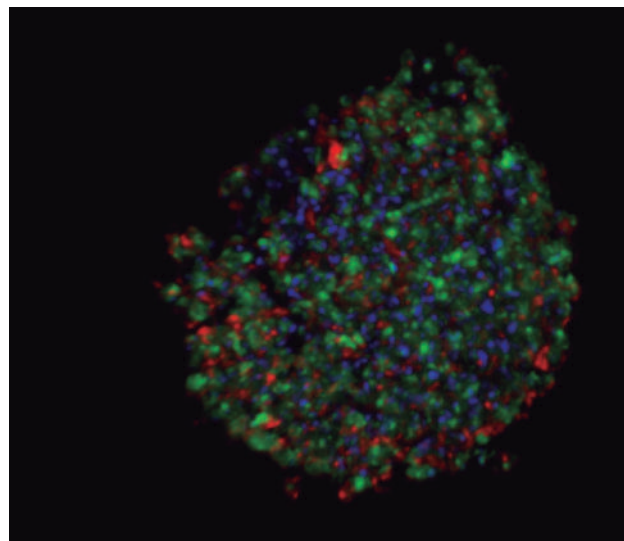
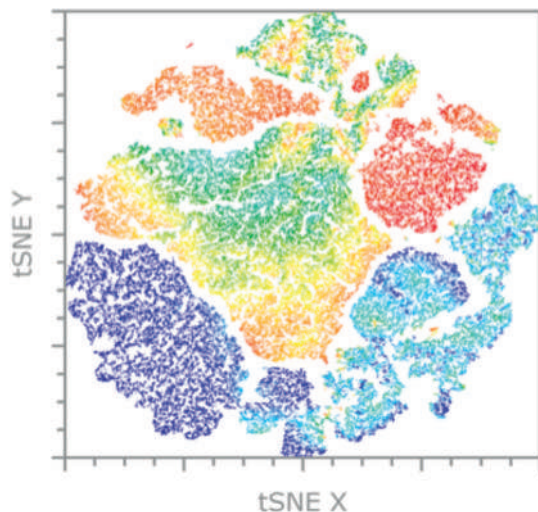
In 2021, the Operating Room has been widely used for training activities by both internal users from the Reina Sofia University Hospital and external companies. Training has been provided for both testing new surgical techniques and new devices and surgical materials.

» 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 KNDy 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. 18/09/2017/132 / Posible uso de multiagonistas hormonales para el tratamiento de síndrome de ovario poliquístico/ Manuel Tena Sempere/GC-10.
5. 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.
6. 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.
7. 1/06/2020/071 / Estudio del efecto de fármacos en el modelo de traumatismo cerebral inducido/Carmen María Navarrete Rueda/GC-04.
8. 23/03/2018/034 / Estudio del efecto de derivados cannabinoides en el modelo de esclerodermia inducida por angiotensina II/Belén Palomares Cañero/GC-04.

9. 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.
10. 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.
11. 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
12. 14/03/2018/026 / Efecto del calcimimético AMG641 sobre el remodelado óseo en un modelo de enfermedad renal/ Yolanda Almadén Peña./ GC13
13. 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.
14. 12/12/2019/196 / Desarrollo de un modelo de ratón de Pseudomixoma peritoneal con xenoimplante humano/ Manuel Tena Sempere/GE-09.

12.3 FLOW CYTOMETRY AND ADVANCED OPTICAL MICROSCOPY UNIT



» STAFF

Esther Peralbo Santaella, PhD

Senior Flow Cytometry Technical Specialist- Contract, Programme for Linking Technicians to Common Research Support Structures; Funding Agency: ANDALUSIAN HEALTH SERVICE; Reference: F2-0009-2018

Gema García Jurado, PhD

Senior Microscopy Technical Specialist – Contract, ISCIII Platform providing support for R&D&I in Biomedicine and Health Sciences 2017-2020. PT20/00079.

» BRIEF DESCRIPTION

The Unit comprises two technology areas of great importance in the field of biomedical research: flow cytometry and confocal fluorescence microscopy.

Its mission is to offer IMIBIC researchers and public and private institutions access to equipment with a broad spectrum of applications in these areas, as well as to provide technical expertise and training. The Unit also provides scientific and technical advice and support in experimental design, sample preparation, cytometry data analysis, image processing analysis and data interpretation.

» EQUIPMENT AND FACILITIES

» FLOW CYTOMETRY AREA

Analysers:

- » **BD LSRFortessa SORP (UPGRADED WITH UV LASER):** 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 (NEW):** 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 collection: into tubes, onto plates or slides. Temperature control. Aerosol Management Option (AMO).

Analysis software: FCS Express 7 (**NEW**), BD FACSDiva.

» APPLICATIONS

There is a wide range of flow cytometry applications, including, but not limited to:

- Multicolour analysis of cell surface and intracellular antigens for identification, characterization and quantification of cellular subpopulations (Immunophenotyping)
- Apoptosis assays (plasma membrane integrity, mitochondrial function, caspase activity, DNA fragmentation, etc.)
- DNA content and cell cycle analysis
- Cell viability
- Functional assays, such as cell proliferation (e.g. CFSE), calcium flux, intracellular pH, ROS production, etc.
- Gene expression analysis using reporter genes
- Analysis of microvesicles
- Analysis of microorganisms
- Fluorescence-activated cell sorting (FACS) to separate specific cell populations or single cells

» ADVANCED OPTICAL MICROSCOPY AREA

- » **Zeiss LSM 710 Spectral Confocal Laser Scanning Microscope:** motorized inverted 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). Integrated large incubation chamber.
- » **Leica THUNDER Imager 3D assay (NEW):** 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 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 colour HD.
- » **NikonEclipse Ti-S inverted fluorescence microscope.** Illumination: brightfield, contrast phase and epifluorescence. Filter cubes for DAPI, FITC and Cy3. Digital camera colour.
- » **Image Analysis workstation with software:** AIVIA CellBio, FIJI, LAS X, Zen Blue, QuPath, CellProfiler, Icy. **(NEW)**

» APPLICATIONS

The main applications carried out in this area include:

- Laser scanning confocal microscopy
- Automated wide-field microscopy
- High-content screening
- Live 3D imaging
- On-line computational clearing
- Spectral imaging and linear unmixing

» MAIN SERVICES

- Stand-alone (non-operator assisted) flow cytometry analysers and microscopy equipment (for internal users properly trained in the use of the equipment only).
- Operator-assisted use of instruments.
- Cell sorting: provided as an operator-assisted service only.
- Image processing and analysis.
- Flow cytometry data analysis.
- Advice and support on experimental design, sample preparation methods, interpretation and presentation of data.
- Development/implementation of flow cytometry and microscopy assays/applications, and image analysis tools according to user needs.

» KEY FACTS

In 2021, the number of research groups of IMIBIC supported by the Cytometry and Microscopy Unit increased, providing its services to 18 IMIBIC research groups: 14 consolidated, 3 emerging and 1 associated. The Unit also provided services to 2 research groups from the University of Cordoba (Biochemistry and Molecular Biology Department and Anatomy and Comparative Pathological Anatomy Department).

The equipment in the Unit was also added to and upgraded in 2021. These infrastructures were partially funded by a MICINN grant (EQC2019-005227-P).

- NUMBER OF IMIBIC USERS: **38**
- NUMBER OF EXTERNAL USERS: **3**
- COURSES: **1**

» FEATURED ARTICLES

A total of 14 scientific articles using data generated from the Unit were published during 2021, one of them co-authored with Unit staff:

- Amado V, González-Rubio S, Zamora J, Alejandro R, Espejo-Cruz ML, Linares C, Sánchez-Frías M, **García-Jurado G**, Montero JL, Ciria R, Rodríguez-Perálvarez M, Ferrín G, De la Mata M. "Clearance of Circulating Tumor Cells in Patients with Hepatocellular Carcinoma Undergoing Surgical Resection or Liver Transplantation." *Cancers* vol. 13,10 2476. 19 May. 2021, doi:10.3390/cancers13102476.

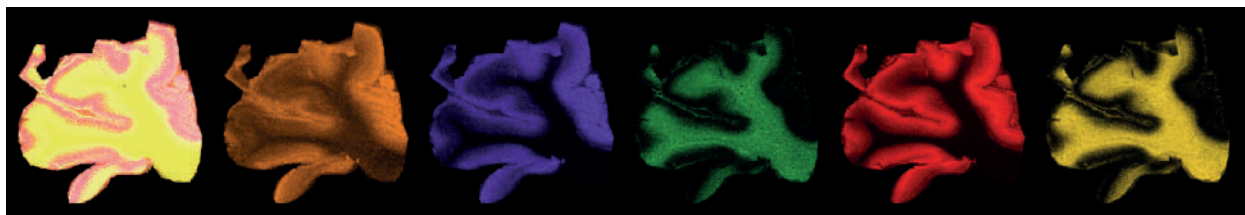
Articles acknowledging the support of the Unit are listed below:

- Ruiz-Limon, Patricia et al. "Potential Role and Impact of Peripheral Blood Mononuclear Cells in Radiographic Axial Spondyloarthritis-Associated Endothelial Dysfunction." *Diagnostics (Basel, Switzerland)* vol. 11,6 1037. 4 Jun. 2021, doi:10.3390/diagnostics11061037 .
- López-Sánchez, Laura M et al. "Nitric oxide-targeted therapy inhibits stemness and increases the efficacy of tamoxifen in estrogen receptor-positive breast cancer cells." *Laboratory investigation; a journal of technical methods and pathology* vol. 101,3 (2021): 292-303. doi:10.1038/s41374-020-00507-z.
- Sánchez-Ceinos, Julia et al. "miR-223-3p as a potential biomarker and player for adipose tissue dysfunction preceding type 2 diabetes onset." *Molecular therapy. Nucleic acids* vol. 23 1035-1052. 20 Jan. 2021, doi:10.1016/j.omtn.2021.01.014.

» COURSES AND WORKSHOPS

- 1.Course: "Análisis de imágenes de fluorescencia con FIJI/ImageJ" ("Fluorescence Image Analysis with FIJI/Image J"). Continuous training activity, accredited by the Andalusian Agency for Healthcare Quality (ACSA), 0.59 credits. Instructor: Gema García Jurado. 19th- 20th October 2021.

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 “Programme for Linking 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 “Programme for Linking Technicians to Common Research Support Structures” call for proposals; Funding Agency: ANDALUSIAN HEALTH SERVICE; Reference: RF2-0013-2022

Ismael Luna Álvarez

Support Technician. Junior Data analyst, MS-Imaging development and support

- AID for the promotion of Youth Employment and implementation of the Youth Guarantee Plan in R+D+i. MICINN 2019

Pilar Luna García

Support Technician. Wet laboratory, sample preparation and lab maintenance support.

- Operational Programme for Youth Employment and Youth Employment Initiative (POEJ 2021). Junta de Andalucía, 2021.

» BRIEF DESCRIPTION

IMIBIC’s Mass Spectrometry and Molecular Imaging Unit (IMSMI) provides highly specialised support in the latest mass spectrometry techniques available to researchers and users who require it. This Unit specialises in offering services in three of the major omics, such as 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) Clinical Proteomics line consisting of high-performance liquid chromatography (Evosep-One) coupled with mass spectrometry (LC-MS/MS). It provides researchers and users with 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) Lipidomics line consisting of ultra-high performance liquid chromatography coupled with mass spectrometry (LC-MS/MS). It provides a service for the identification and quantification of lipid species in samples in a targeted or untargeted manner at high resolution.
- iii) Metabolomics line consisting of ultra-high performance liquid chromatography coupled with mass spectrometry (LC-MS/MS). It offers a service for the identification and quantification of metabolites in samples in a targeted or untargeted manner at high resolution.
- iv) Molecular Imaging (MS Imaging), which provides researchers and users with spatial information about metabolites, lipids, proteins/peptides directly from tissues and biopsy specimens.

The IMSMI Unit provides individualised support tailored to user 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, Friedrichsdorf, 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 Real-time (Bruker) (Last update: 2021)
- Basic laboratory equipment for sample preparation (Last update: 2014)

» MAIN SERVICES

- Identification and characterization of proteins by MALDI-TOF/TOF
- 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 Imaging mass spectrometry (Proteomics/Lipidomics/Metabolomics)
- Project supervision and collaboration
- Training in the software used for data analysis

» KEY FACTS

- NUMBER OF IMIBIC USERS: **29**
- NUMBER OF EXTERNAL USERS: **17**
- NUMBER OF PUBLICATIONS: **1**
- NUMBER OF MEETINGS WITH IMIBIC GROUPS: **166**
- NUMBER OF MEETINGS WITH EXTERNAL GROUPS: **65**
- PARTICIPATION IN INTERLABORATORY COMPARISON STUDIES: **1**

» FEATURED ARTICLES

1. Chicano-Galvez, E.; Salzet, M.; Fournier, I. Chapter 11 MALDI Mass Spectrometry Imaging and Spatially-resolved Proteomics. In MALDI Mass Spectrometry Imaging: From Fundamentals to Spatial Omics; The Royal Society of Chemistry, 2021; pp. 234–261 ISBN 978-1-83916-241-1.

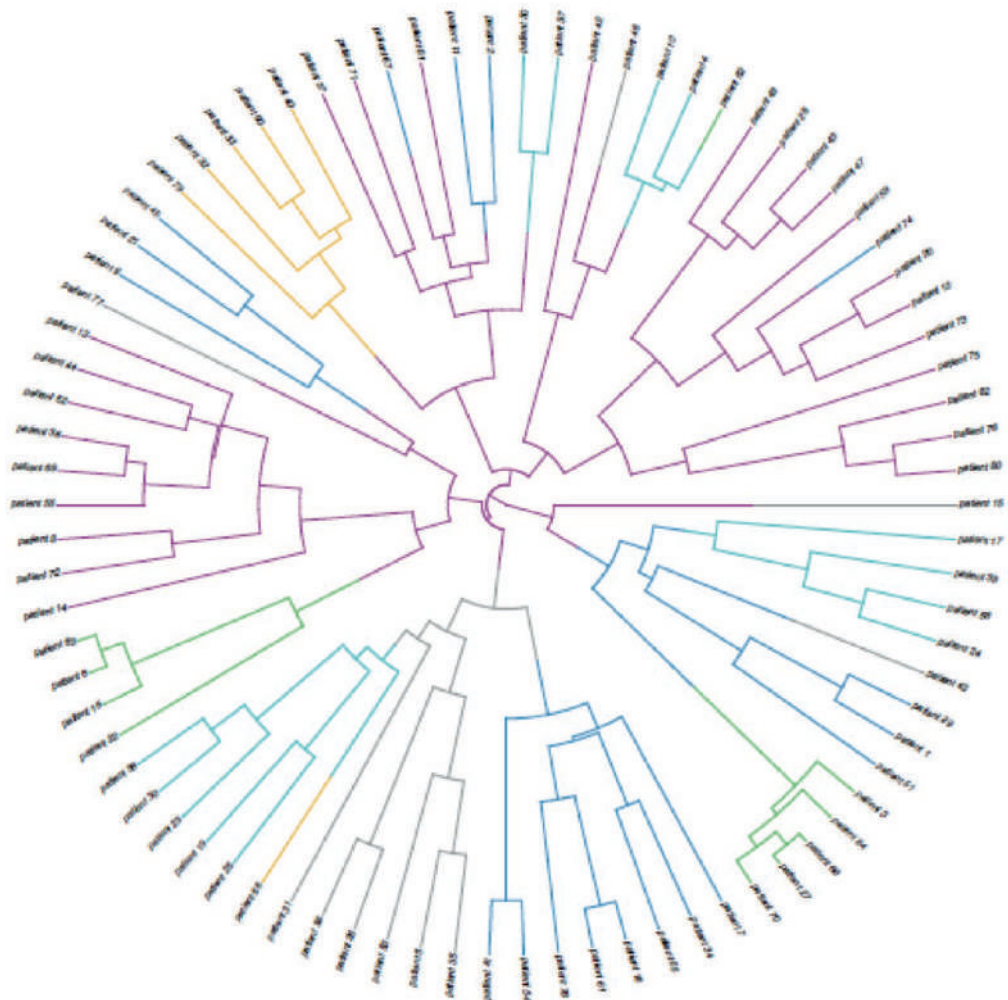
» PROJECTS

1. Caracterización del microentorno tumoral (TME) en cáncer de colon mediante MS-Imaging (Proyecto multicéntrico de la AECC2020, participación del Hospital Vall d' Hebron, IMIM, Incliva, Universidad Oviedo, Unidad Espectrometría de Masas e Imagen Molecular IMIBIC)
2. Estudio estrés oxidativo en cerebro de ratón modelo Alzheimer/Parkinson. Universidad Castilla La Mancha. Dept. Biología Celular Facultad de Medicina UCLM (Ciudad Real)
3. Caracterización Molecular del bulbo olfatorio humano mediante MS-Imaging. Unidad de Proteómica Navarrabiomed/ Unidad Espectrometría de Masas e Imagen Molecular IMIBIC
4. Caracterización de hipocampo humano en Alzheimer y Parkinson. Dept. Neuroplasticidad, Facultad de Medicina UCLM (Ciudad Real)
5. Desarrollo de tecnología MS-Imaging aplicada a detección, caracterización de enfermedades porcinas que afectan a producción animal. Dept. Anatomía y Anatomía Patológica Comparadas Universidad de Córdoba.
6. MS-Imaging para caracterización de lesiones producidas por Leishmaniasis en humanos. Centro Investigaciones en enfermedades Tropicales, Universidad de Santander, Colombia y GC03 Enfermedades Infecciosas
7. Metabólica no dirigida en cultivos celulares para caracterización de diferentes subpoblaciones de cultivos celulares de cáncer de colon. GC-06 Nuevas terapias en cáncer
8. Análisis proteómico masivo para la caracterización del matrisoma del tejido adiposo y papel de la remodelación de la matriz extracelular en la resistencia a insulina asociada a obesidad. GC-11. Metabolismo y diferenciación adipocitaria. Síndrome metabólico.
9. Proteómica dirigida para validación de resultados. GC-05. Enfermedades autoinmunes sistémicas-inflamatorias crónicas del aparato locomotor y tejido conectivo.
10. Análisis proteómico masivo de modelo murino de pseudomixoma peritoneal. GE09. Investigación en cirugía oncológica peritoneal y retroperitoneal.
11. Proteómica de precisión para caracterización de la marcha alérgica polen-alimentos en el Sur de Europa a través de Proteínas Transportadoras de Lípidos (LTPs): Búsqueda de evidencias moleculares y celulares. GC-01. Inmunología y Alergia
12. Análisis proteómico masivo para caracterización de marcadores de biorremediación en aguas contaminadas. Dept. Bioquímica y Biología Molecular Universidad de Córdoba.
13. Análisis proteómico masivo de hipotálamo de ratones modelo de síndrome de ovario poliquístico. GC10. Regulación hormonal del balance energético, la pubertad y la reproducción.
14. Huella proteómica del cáncer de próstata significativo no detectable en resonancia magnética: Diagnóstico de precisión. GE05. Enfermedades del aparato genitourinario.
15. Análisis proteómico dirigido para la cuantificación de biomarcadores en ratas modelo de fallo renal. GC13. Metabolismo del calcio. Calcificación vascular
16. Análisis MS-Imaging para caracterización de tejido aórtico de ratas bajo tratamiento con diferentes dietas simulando dieta mediterránea y dieta con alimentos ultraprocesados. GC09. Nutrigenómica. Síndrome metabólico
17. Identificación de proteínas en la puesta de huevos en reptiles. GE07. Calidad visual
18. Desarrollo de una herramienta de visualización de datos MS-Imaging. Unidad de Espectrometría de Masas e Imagen Molecular.

» COURSES AND WORKSHOPS

1. Master's degree in Translational Biomedical Research. Subject Proteomics
2. Open seminars via social networks (twitterchats)
3. Individualised advanced training for research staff: Proteomics/Metabolomics/MS Imaging.
4. Tutoring of pre-doctoral students and students in professional training.

12.5 BIOINFORMATICS UNIT



» STAFF

Sebastián Ventura Soto, PhD

Head of Unit, Team Leader of the “Knowledge Discovery and Intelligent Systems” (KDIS) research group - Professor of Computer Sciences and Artificial Intelligence at the University of Córdoba.

Fernando Abollo Jiménez, PhD

Technician - Contract from the Carlos III Institute of Health in the 2019 Strategic Action in Health (AES-2019) call.

Juan Antonio Marín Sanz

Technician - FIBICO contract, through the Youth Guarantee Plan (MINECO).

» BRIEF DESCRIPTION

The mission of the Bioinformatics Unit is to provide bioinformatics analysis to research groups that require it. More specifically, the unit focuses on implementing platforms that will include different types of sequential analysis. In this way, the unit can provide services in this field while implementing new analyses and updating those already provided. The decision of which platforms to implement and the order of their development is mainly determined by the needs of the centre.

» EQUIPMENT AND FACILITIES

The equipment of the unit has greatly improved since the Institute acquired a powerful HPC system, which will have an impact on future services and uses of the unit. The unit is currently equipped with the following computing resources:

- BullX R428-E3 node:
 - 4x Intel Xeon E5-4610v2 8c,
 - 32-core,
 - 256 GB RAM
- HPC system:
 - 8 x Intel Xeon Platinum 8260 (24-core – 48 threads each),
 - 3072 GB RAM DDR4-2933 per server,
 - 4x GPUs NVIDIA V100S (32 GB each),
 - 8x SSD SATA (1,92 TB each)
 - 48 TB HDD I 12 TB HDD Raid System

» MAIN SERVICES

The Bioinformatics Unit is constantly updating and increasing the number of services it offers users, also in accordance with its computing resources

- Bioinformatics consultancy
- Modelling of clinical and omics data using artificial intelligence techniques (logistic regression, LASSO, RandomForest, etc).
- Omics data analysis (genomics, transcriptomics, proteomics)
- Single-cell RNA-seq and single-cell DNA-seq
- ATAC-seq
- Analysis of splicing, fusion transcripts, and SNPs.
- Enrichment and biological significance analysis.
- Phylogenetic analysis.
- Structural and functional genomics.
- Specific technical support in research projects involving genomic data.

» KEY FACTS

The Bioinformatics Unit has continued to promote the use of computational biology and OMIC data analysis among the different research groups, which has resulted in an increase in the number of services offered during 2021, especially, the addition of single-cell omics analysis as a result of the increased computing capacity provided by the new HPC.

Some indicators for the year:

NUMBER OF IMIBIC USERS (groups): 7

NUMBER OF PUBLICATIONS: 1 pubmed:33833756)

NUMBER OF ONGOING PROJECTS: 5 (2021/22 ongoing projects)

NUMBER OF MEETINGS WITH IMIBIC GROUPS: 23

» PROJECTS

During 2021, the unit was involved in the following project;

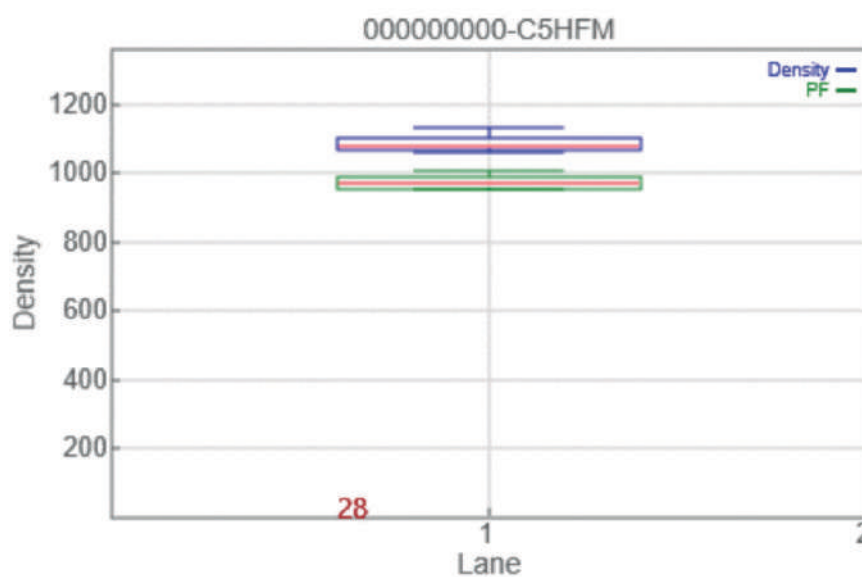
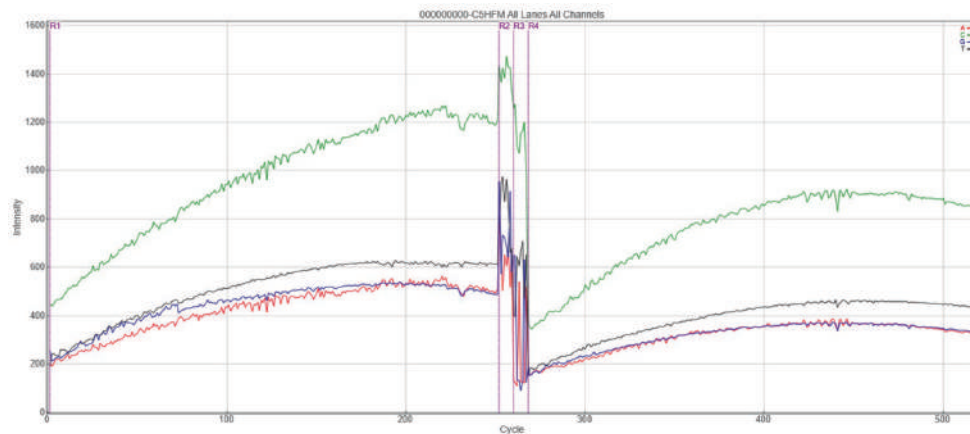
- *Precision Medicine Infrastructure associated with Science and Technology (IMPACT)* of the Strategic Action in Health (2017-2020)
 - PI: Alfonso Valencia Herrera
 - File: IMP/00019
 - Amount: 4.549.380,00 €
 - Role: Member of a research support team

» COURSES AND WORKSHOPS

Courses or workshops given:

- Introduction to statistics with R (5-7 Oct 21): 10 h
- Introduction to RNA-seq (2-5 Nov 2021): 10 h

12.6 GENOMICS UNIT



» STAFF

Álvaro Jiménez Arranz

Coordinator. Senior Technical Specialist - Recipient of a competitive contract from the 2015 Call for “Ayudas para la Vinculación de Técnicos de Apoyo a ECAIs” (SSPA, Junta de Andalucía).

Eloy Álvarez López

Technical Specialist - Recipient of a competitive contract from the 2018 Call for “Ayudas para la promoción de empleo joven e implantación de la Garantía Juvenil en I+D+i” (MICINN).

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 function of the Genomics Service is to make state-of-the-art equipment available to researchers, and to provide scientific and technical advice for the development of various analytical techniques used in comprehensive DNA and RNA studies (genotyping / expression / regulation). This allows researchers to obtain the high-quality results that are essential for the development of outstanding translational biomedical research. The Unit offers its services to IMIBIC researchers as well as to those at other public and private institutions. The Genomics Unit collaborates 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 platform sequencing technology based on SBS (sequencing by synthesis), which is currently the most widely adopted NGS (next-generation sequencing) technology in the world on account of its speed, accuracy and quality. This sequencer can generate up to 15 Gb/run and perform 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 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 study a large number of mRNAs, miRNAs and DNA molecules simultaneously with high sensitivity and gold standard reproducibility. Its applications include gene expression analysis, gene fusion, copy number variation (CNV) and simultaneous analysis of mRNA and RNA regulators such as miRNAs and lncRNAs.
 - » The nCounter Dx is CE and IVD certified for conducting quality of care analyses, which, together with these various applications, makes the nCounter a tool with high potential for clinical use. There is a CE-marked test for in vitro diagnostics (CE-IVD) currently on the market, which was approved by the FDA for breast cancer (Prosigna-PAM50), based on a molecular gene expression analysis of 50 genes, which makes it possible to classify tumours into one of four intrinsic subtypes related to disease prognosis and choice of treatment. The launch of other validated kits for in-vitro diagnostics (CE-IVD / FDA) is also currently underway, such as the one based on 20 differential gene expression patterns, aimed at determining DLBCL (Diffuse Large B-Cell Lymphoma) subtypes and related disease treatment.
- **Digital PCR (dPCR): QX200 Digital Droplet PCR System**
 - » Due to droplet partitioning, 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.

- **Quantitative PCR (qPCR)**

The Unit has 4 platforms aimed at genotyping PCR and gene expression studies:

- » Light Cycler 480 (96-well platform)
- » Light Cycler 96 (96-well platform)
- » 7900 HT Fast (384-well platform)
- » Fluidigm Biomark HD-Juno system (high-throughput microfluidics-based platform): This new equipment has been installed and ready for use in the Unit laboratory since the beginning of the year. Among other things, this technology enables thousands of qPCR nano-reactions to be performed in a single protocol.

- **Other**

Other instruments in the Unit for the quantification, quality analysis, and determination of the size of nucleic acid fragments include:

- » Nanodrop ND1000 (Spectrophotometer)
- » DeNovix DS-11 (Spectrophotometer)
- » Quantus (Fluorometer)
- » 2200 TapeStation (Microelectrophoresis)

The Unit has also been awarded several competitive grants from the ISCIII for the acquisition of new equipments, namely the upgrade of qPCR instruments (96 and 384-well platforms) and equipment for single cell genomic and transcriptomic analysis.

» MAIN SERVICES

- Technical support and provision of scientific and methodological advice on the choice and optimization of genomic techniques
- Support in the design of targeted NGS or NCounter panels
- Technical and scientific support in the use of qPCR platforms and probe design
- Nucleic acid quality controls (spectrophotometry, fluorometry and microelectrophoresis)
- Analysis of targeted gene expression panels (up to 800 genes) using the NCounter System
- PAM50 breast cancer prognostic signature analysis (Prosigna™)
- Screening of up to 800 miRNAs in tissue, peripheral blood cells and serum/plasma using NanoString Technologies (NCounter System)
- Screening of up to 800 lncRNAs using the NCounter System
- Gene expression and genotyping studies using real-time PCR

- Absolute quantification by Digital Droplet PCR (viral load analysis)
- Liquid biopsy-cfDNA analysis: Rare mutation detection by ddPCR and analysis of SNVs and indels by NGS
- NGS library preparation
- Microbiome characterization by 16S rRNA gene sequencing using NGS
- NGS analysis of SNVs, indels and CNVs associated with oncology and onco-hematology
- NGS (next generation sequencing) by Illumina Miseq
- Training and support in the use of data analysis software associated with Unit technology
- Project supervision and partnerships

» KEY FACTS

In 2021, the Genomics Unit continued the steadily increasing trend in the number of projects and users since it was created in 2015; 8265 research and clinical diagnostic samples were analysed in the past year and support actions for 109 users. These users belonged to 18 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 Reina Sofia University Hospital (Pathological Anatomy, Oncology and Microbiology). In addition, several external centres have requested our services since 2018 (ULL-University of La Laguna, Tenerife; CIMA-Center for Applied Medical Research, Navarra; CUN/UNAV-Navarra University Clinic.).

The protocols and services implemented previously 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 (tumor mutational burden) analysis in tissue, the sequencing of SARS-CoV-2, and virome analysis of vertebrate tissue to discover potentially pathogenic viruses that may involve zoonotic diseases. The Unit also participates in interlaboratory validation with clinical samples of the Plasma-SeqSensei Colorectal Cancer RUO kit from Sysmex, aimed at searching for mutations to evaluate response to drugs and their monitoring in cfDNA of patients with colorectal cancer.

Consolidation of the integration of the Genomics Unit into a multidisciplinary team with the Reina Sofia University Hospital continues with a view to implementing protocols for genetic/genomic diagnosis, such as the PAM50-breast cancer prognostic gene signature (Prosigna™). The Genomics Unit received accreditation as a Clinical Genetics Unit from the Junta de Andalucía in 2020 and continues to be a member of the Pethema Foundation Program, which aims to implement NGS as a diagnostic tool for Myeloid Leukaemia, and of the Pharmacogenetics Work Group of SCReN (The Spanish Clinical Research Network of the National Institute of Health Carlos III) within the Cordoba group.

As mentioned previously, new high-throughput qPCR equipment based on microfluidics (Fluidigm Biomark HD-Juno system) was installed and has been ready for use in the Unit laboratory since the beginning of the year.

The Unit has also received a grant from the 2021 Call of the “Programa Estatal de Investigación y Equipamiento Científico-Técnico” (MICINN) for the acquisition of new technologies, mainly the upgrade of qPCR instruments (96- and 384-well platforms) and equipment

- NUMBER OF IMIBIC USERS: **109 (23 IMIBIC GROUPS)**
- NUMBER OF EXTERNAL USERS: **7 (5 EXTERNAL CENTRES)**
- NUMBER OF PUBLICATIONS: **7**
- COURSES AND TRAINING SESSIONS: **6**

» FEATURED ARTICLES

A total of seven scientific articles were published in 2021 using equipment from the Genomics Unit:

- Clinical Utility of microRNAs in Exhaled Breath Condensate as Biomarkers for Lung Cancer. Pérez-Sánchez C, Barbarroja N, Pantaleão LC, López-Sánchez LM, Ozanne SE, Jurado-Gámez B, Aranda E, Lopez-Pedraza C, Rodríguez-Ariza A. *J Pers Med.* 2021 Feb 9;11(2):111. doi: 10.3390/jpm11020111. PMID: 33572343; PMCID: PMC7916163 (GC05)
- The Combination of Neutrophil-Lymphocyte Ratio and Platelet-Lymphocyte Ratio with Liquid Biopsy Biomarkers Improves Prognosis Prediction in Metastatic Pancreatic Cancer. Toledano-Fonseca M, Cano MT, Inga E, Gómez-España A, Guil-Luna S, García-Ortiz MV, Mena-Osuna R, De la Haba-Rodríguez JR, Rodríguez-Ariza A, Aranda E. *Cancers (Basel).* 2021 Mar 10;13(6):1210. doi: 10.3390/cancers13061210. PMID: 33802006; PMCID: PMC7998484 (GC06)
- Epigenetic and post-transcriptional regulation of somatostatin receptor subtype 5 (SST5) in pituitary and pancreatic neuroendocrine tumors. Pedraza-Arevalo S, Ibáñez-Costa A, Blázquez-Encinas R, Branco MR, Vázquez-Borrego MC, Herrera-Martínez AD, Venegas-Moreno E, Serrano-Blanch R, Arjona-Sánchez Á, Gálvez-Moreno MA, Korbonits M, Soto-Moreno A, Gahete MD, Charalambous M, Luque RM, Castaño JP. *Mol Oncol.* 2022 Feb;16(3):764-779. doi: 10.1002/1878-0261.13107. Epub 2021 Oct 26. PMID: 34601790; PMCID: PMC8807362 (GC08)

- Molecular diagnosis of polycystic ovary syndrome in obese and non-obese women by targeted plasma miRNA profiling. Romero-Ruiz A, Pineda B, Ovelleiro D, Perdices-Lopez C, Torres E, Vazquez MJ, Guler I, Jiménez Á, Pineda R, Persano M, Romero-Baldonado C, Arjona JE, Lorente J, Muñoz C, Paz E, Garcia-Maceira FI, Arjona-Sánchez Á, Tena-Sempere M. *Eur J Endocrinol*. 2021 Oct 8;185(5):637-652. doi: 10.1530/EJE-21-0552. PMID: 34403358 (GC10)
- Networking for advanced molecular diagnosis in acute myeloid leukemia patients is possible: the PETHEMA NGS-AML project. Sargas C, Ayala R, Chillón MC, Larráyoz MJ, Carrillo-Cruz E, Bilbao C, Yébenes-Ramírez M, Llop M, Rapado I, García-Sanz R, Vázquez I, Soria E, Florido-Ortega Y, Janusz K, Botella C, Serrano J, Martínez-Cuadrón D, Bergua J, Amigo ML, Martínez-Sánchez P, Tormo M, Bernal T, Herrera-Puente P, García R, Algarra L, Sayas MJ, Costilla-Barriga L, Pérez-Santolalla E, Marchante I, Lavilla-Rubira E, Noriega V, Alonso-Domínguez JM, Sanz MA, Sánchez-García J, Gómez-Casares MT, Pérez-Simón JA, Calasanz MJ, González-Díaz M, Martínez-López J, Barragán E, Montesinos P. *Haematologica*. 2021 Dec 1;106(12):3079-3089. doi: 10.3324/haematol.2020.263806. PMID: 33179471; PMCID: PMC8634186 (GC16)
- Prognostic significance of FLT3-ITD length in AML patients treated with intensive regimens. Castaño-Bonilla T, Alonso-Domínguez JM, Barragán E, Rodríguez-Veiga R, Sargas C, Gil C, Chillón C, Vidriales MB, García R, Martínez-López J, Ayala R, Larrayoz MJ, Anguita E, Cuello R, Cantalapiedra A, Carrillo E, Soria-Saldise E, Labrador J, Recio I, Algarra L, Rodríguez-Medina C, Bilbao-Syeiro C, López-López JA, Serrano J, De Cabo E, Sayas MJ, Olave MT, Sánchez-García J, Mateos M, Blas C, López-Lorenzo JL, Lainez-Gonzalez D, Serrano J, Martínez-Cuadrón D, Sanz MA, Montesinos P. *Sci Rep*. 2021 Oct 20;11(1):20745. doi: 10.1038/s41598-021-00050-x. PMID: 34671057; PMCID: PMC8528825 (GC16)
- Dual agonist-antagonist effect of ulipristal acetate in human endometrium and myometrium. Salas A, Vázquez P, Bel-lo AR, Báez D, Almeida TA. *Expert Rev Mol Diagn*. 2021 Aug;21(8):851-857. doi: 10.1080/14737159.2021.1941878. Epub 2021 Jun 24. PMID: 34110938 (ULL)

» 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 GC01 and GC06
- Training in ddPCR data analysis using QuantaSoft analysis software: Groups GC06 and GC24
- Training in qPCR data analysis using LC96, 7900HT and Biomark HD analysis software: Groups GC05, GC07, GC08, GC09, GC11, GC13, GC16, GC26, GC27, GE06

Two application workshops were given in the area of “Advanced Genomics: techniques and applications”: “High throughput qPCR applications- Fluidigm Juno-Biomark HD” and “*Single-cell* applications- Dolomite Bio Nadia”

12.7 CLINICAL RESEARCH UNIT



» STAFF

Juan de la Haba Rodríguez, PhD

Clinical Research Coordinator

María Esther Pacheco Rodríguez, PhD

Clinical Pharmacologist

Antonio Miguel Luque Pineda

José Carlos Garrido Gracia

María Ruiz García

Fiama Tibaldi Trejo

Clinical Trial Managers

Juan María Fernández Marín

Eva María Castell Cano

María Dolores Díaz Ruano

Miguel Puentes Aguado

Fernando Román Arenas

Miguel Ángel Gutiérrez-Ravé Pereda

Nurses

Rubén Sánchez Nieves

Inmaculada Gálvez Membrives

Rafaela Vacas Bueno

Nursing Assistants

» BRIEF DESCRIPTION

The IMIBIC Clinical Research Unit promotes clinical research at the IMIBIC and Reina Sofia University Hospital and also aims to establish collaborations with other research centres. IMIBIC is currently a member of the Spanish Clinical Research Network (SCReN). The Unit focuses on the development of clinical trials 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 has a Clinical Research Plan which is included in the 2021-2025 Strategic Plan. This plan includes a set of indicators which enable the unit to monitor it in quantitative terms. This monitoring is evidenced by the Clinical Research Committee, which meets every six months.

Finally, it is important to highlight that the IMIBIC Clinical Research Unit is part of the SCREN Platform (**S**panish **C**linical **R**esearch **N**etwork ISCIII).

» EQUIPMENT AND FACILITIES

- 10 doctor's consulting rooms and a storeroom
- 2 hospital wards, each containing: a crash trolley with semi-automatic defibrillator and emergency medication, intravenous fluids, an insulin pump, healing trolleys, oxygen outlets in all positions and audiovisual 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
- Customized 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
- 2 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, CROs, and Investigators

» KEY FACTS

NUMBER OF NEW PHASE I AND II CLINICAL TRIALS: **32**

NUMBER OF NEW INDEPENDENT CLINICAL STUDIES (CLINICAL TRIALS, OBSERVATIONAL STUDIES AND CLINICAL INVESTIGATIONS WITH MEDICAL DEVICES) PROMOTED BY IMIBIC INVESTIGATORS: **4**

ANNUAL INVOICING FOR CLINICAL STUDIES (CLINICAL TRIALS, OBSERVATIONAL STUDIES AND CLINICAL RESEARCH WITH MEDICAL DEVICES) PROMOTED BY THE PHARMACEUTICAL INDUSTRY AND TOTAL VOLUME OF FINANCIAL REPORTS SIGNED DURING THE YEAR: **4.097 m€ (invoicing) and 7.896 m€ (total volume of financial reports signed)**

In 2021, the sponsor Dr. FRANZ KÖHLER CHEMIE GMBH contracted FIBICO as CRO for the management, implementation and monitoring of the clinical trial Custodiol-N, protocol code CL-N-LTX-III/08-ESP/19, a clinical trial to evaluate the efficacy of an organ preservation fluid in liver transplantation. Seven hospitals in Spain will participate in the study.

» FEATURED ARTICLES

1. WHO Rapid Evidence Appraisal for COVID-19 Therapies (REACT) Working Group, Shankar-Hari M, Vale CL, et al. Association Between Administration of IL-6 Antagonists and Mortality Among Patients Hospitalized for COVID-19: A Meta-analysis. JAMA. 2021;326(6):499-518. doi:10.1001/jama.2021.11330

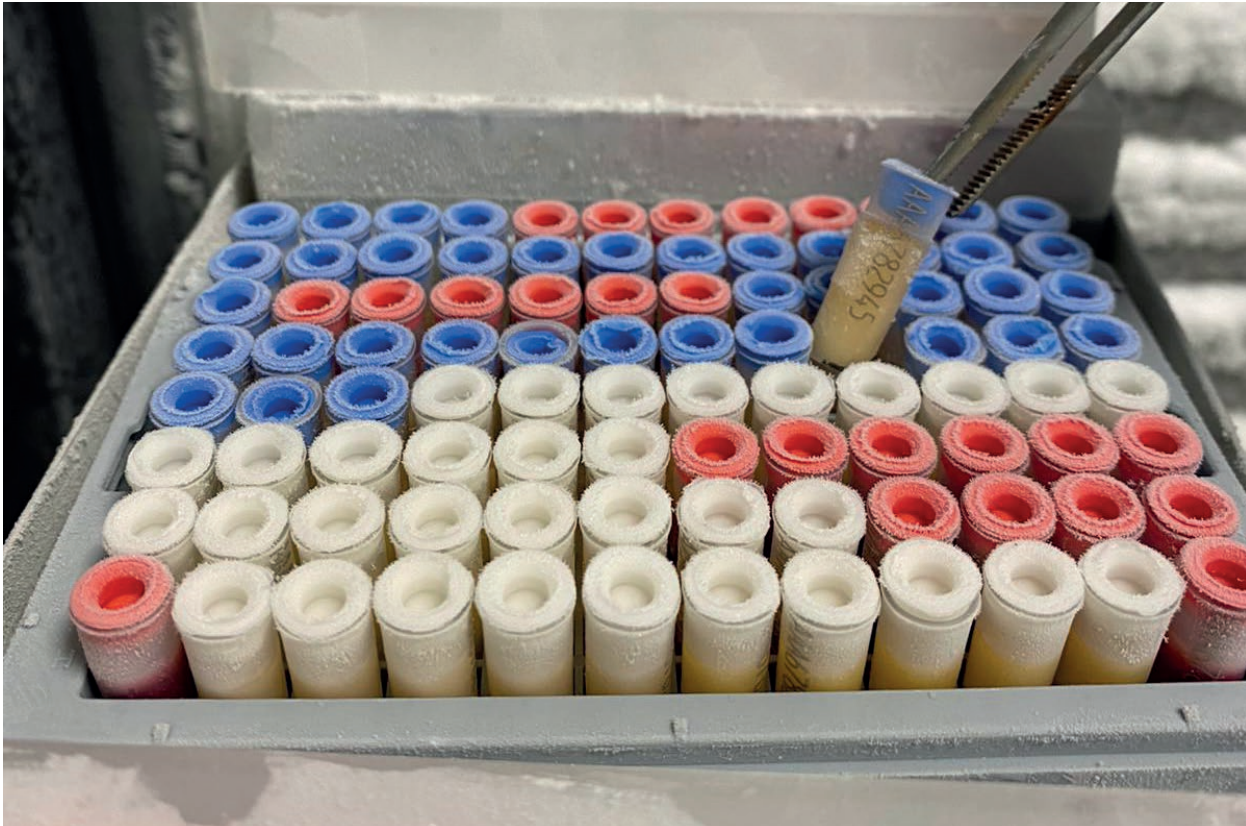
» PROJECTS

1. KAPEDIS / Ensayo clínico aleatorizado, de superioridad, doble ciego, controlado con placebo, en fase ii, para demostrar la eficacia del trasplante de microbiota fecal en la descolonización intestinal selectiva de los pacientes colonizados por *Klebsiella pneumoniae* / Dr. Juan José Castón Osorio / GC03
2. BROAC-PMP / Bromelina + N-Acetilcisteína intratumoral en Pseudomixoma Peritoneal recidivado e irresecable. Estudio Fase I de brazo único / Dr. Álvaro Arjona Sanchez / GE09
3. SIRS20 / Evaluación de sistemas de adsorción para la prevención y el tratamiento del síndrome de respuesta inflamatoria / Dr. Ignacio Muñoz Carvajal / GA09

» COURSES AND WORKSHOPS

1. Good Clinical Research Documentation Practices - José Carlos Garrido Gracia – 17-NOV-2020.

12.8. BIOBANK UNIT



» STAFF

Rosa M^a Ortega Salas, PhD
Scientific Manager

Alba Aguilera García

Fernando López López

Technicians (funded by SSPA Biobank Services/ISCIII Biobanks and Biomodels Platform)

» BRIEF DESCRIPTION

The Biobank Unit is a research support platform whose role is to serve as a link between doctors, researchers and patients donating biological samples for biomedical research in order to ensure 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. It is part of the thematic network of Hospital Biobanks belonging to the National Institute of Health Carlos III (ISCIII), and a subprogram of the Thematic Networks for Cooperative Research in Health (RETICS).

» EQUIPMENT AND FACILITIES

The Unit has its own laboratory resources for sample transformation (safety booths, PCR cabinet, cryostat microtome, floating bath, centrifuge, histo bath, automated tissue processor for embedding in paraffin, 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.
- Quicube: Automatic, 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: storing samples at different temperatures.
- Processing: transforming multiple types of biological sample in accordance with 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 in accordance with ISO 9001:2015, which is 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 Unit was also included in the Hub "Biobank" of the ISCIII Biobanks and Biomodels Platform.

» KEY FACTS

It should be noted that, over the year 2021, the Biobank's invoicing has increased from 2.042 € to 22.022 €.

- NUMBER OF IMIBIC USERS: **23**
- NUMBER OF EXTERNAL USERS: **9**

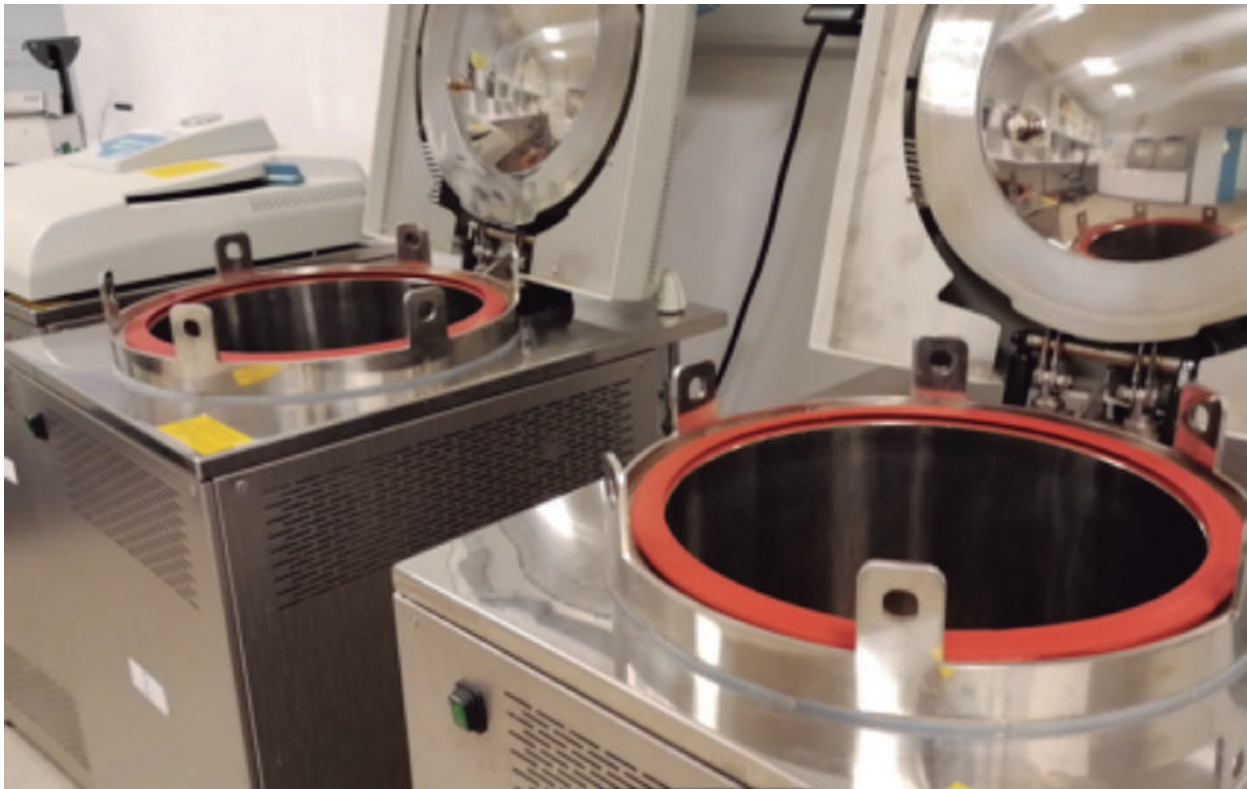
» FEATURED ARTICLES

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

» PROJECTS

- Units of ISCIII Support Platforms supporting R + D+ i in Biomedicine and Health Sciences, Strategic Health Action 2017-2020. File code PT20/00079.

12.9 GENERAL PROCEDURES UNIT



» STAFF

Esther Rivero Cortés,
Laboratory Manager-

» BRIEF DESCRIPTION

The IMIBIC General Procedures Support Unit provides the laboratory management services that are essential for the organization of the Maimonides Biomedical Research Institute of Córdoba, including technical support, and 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 for common and autonomous use by researchers in order to ensure the optimal and uninterrupted operation of laboratory experimental procedures, the maintenance of quality standards and good laboratory practices, as well as to guarantee 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
 - Bioplex Biorad Pro II
 - Other auxiliary equipment
- Sterilization Room
 - 3 Selecta Presoclave-II Autoclaves
 - 2 Memmert UN110 ovens
 - Ultra turrax Selecta Omni GLH 02 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
 - 3 Thermo Scientific UFX60086V Deep freezers (-80°C)
 - Eppendorf Cryocube F570-86 Deep freezer (-80°C)
 - Effimed UFV-800 Deep freezer (-80°C)

» MAIN SERVICES

- Management, technical support, and supervision of the correct use of scientific equipment in IMIBIC rooms and facilities, and of the common auxiliary equipment of IMIBIC (fume cupboards, autoclaves, centrifuges, etc.).
- Implementation and promotion of Good Laboratory Practice at IMIBIC.
- Management of usage logs and booking system for scientific equipment.
- Care and maintenance of laboratory equipment shared by IMIBIC groups.
- Drafting documentation (technical instructions, protocols, reports, SOPs, equipment lists, etc.) for documentary records.
- Autoclaving treatment of research materials of research groups in the sterilization room.
- Supervising the proper management and disposal of laboratory waste in compliance with the regulations. Coordinating with the External Prevention Service in the event of doubts or suggestions. Providing 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 the available space in the event of failure of the research groups' freezers.
- Mentoring and training of new laboratory technicians.
- Providing any other support and management of general procedures that may arise.

» KEY FACTS

- NUMBER OF IMIBIC USERS: **All technical and research staff of the center**
- 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 (Junta de Andalucía). 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 (Junta de Andalucía). 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

12.10 TECHNOLOGICAL INNOVATION UNIT



» STAFF

David Requena Polonio
Innovation and Technology Transfer Coordinator

Miguel de Alba Aparicio
Software engineering technician

Ignacio Isla Cros
Software technician

Miguel Ángel Narváez Vera
Mechanical engineering technician

» BRIEF DESCRIPTION

Technological Innovation. One of our basic functions is to apply the use of the new Information and Communication Technologies to the different research groups, so that they can be applied to their projects according to need, without the research team having to spend additional time learning them. Likewise, advisory and consultancy 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, with prototypes of medical devices, as well as their effective transfer to patients and society in general.

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 major boost for innovation development and technology transfer related to the rapid prototyping of systems in the field of medicine.

» EQUIPMENT AND FACILITIES

- FDM 3D printers (2 units): Ultimaker S5 equipped with Air Manager S5 and Material Station.
- 3D printer SLA: Formlabs Form 3 with Form Wash, Form Finish Kit, Resin Tank and Build Platform.
- 3D design software - Solidworks 2021
- CNC machine with protective cover: Stepcraft 840
- Test stations for electronic devices and PCBs.
- Hanmatek SD1 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
- Desktop milling machine monoFab SRM-20
- Laser cutting machine with camera LS900

» MAIN SERVICES

- 3D modeling and 3D printing with FDM and SLA technology.
- Design and manufacture of devices, electronic and electromechanical equipment in general.
- Electronic circuit prototyping (with FPGA, microcontrollers, DSP, AO, etc.)
- Schematic and PCB design, PCB circuit assembly with different substrates (maximum size 229x305mm).
- Infrared and hot air soldering / desoldering (BGA), SMD component mounting and throughhole technology
- Low-level programming: microcontrollers, FPGA reconfigurable hardware devices, etc.
- Software development
- Design and implementation of algorithms
- Construction of databases and data capture from instruments
- Engineering and consulting

» KEY FACTS

- NUMBER OF IMIBIC USERS: **35**
- NUMBER OF EXTERNAL USERS: **83**
- NUMBER OF ONGOING PROJECTS: **16**
- COURSES AND TRAINING SESSIONS: **4**
- REGISTERED PATENTS: **6**

» PROJECTS

1. Creation and development of the Biomedical Engineering and Technological Innovation Unit of Córdoba (CIBiT); R+D+i program, Andalusian Research Plan /Miguel González Andrades
2. COVID Evidence Project: Enriched web database of Covid-19-related bibliographical references to facilitate quick targeted searches/ Juan Ruano/ UGC Dermatology
3. Radiology app. Development of an app for tele-training in radiological medical imaging/ Marina Álvarez/ UGC Radiology.
4. Website to calculate cumulative exposure to tacrolimus (CET).
5. Platform for the analysis of health technologies applied to health centres (TIS).
6. Website and app for testing children to check whether growth is in accordance with biological age (DAUCO).

» COURSES AND WORKSHOPS

The Technological Innovation Unit attended forums, meetings with companies and trade fairs, with the aim of presenting the services offered by the unit. At the same time, contacts have been made with companies in institutions, which are producing results in the form of applications for competitive funding and possible future collaborations.

Some of the meetings held are detailed below:

1. Forum "Transfiere": "Fondos Europeos. Next Generation: Plan de recuperación para Europa / Transformación digital en el ámbito sanitario. Macroproyecto del hospital regional de Málaga, Málaga Tech Park y Universidad de Málaga / Nuevas oportunidades de financiación y sus interlocutores".
2. Attendance to ITEMAS meeting 2021.
3. Bio partnering IBIS 2021
4. Matchmaking: Salud Digital organized by FENIN.
5. Webinar "MARCADO CE APLICADO A SOFTWARE MÉDICO Y PRODUCTOS IVD. NUEVOS REGLAMENTOS" (CE marking applied to medical software and IVD products: New Regulations)
6. Class: Additive manufacturing for medical devices
7. Taught class on Innovation in Master's in Biomedicine.
8. Webinar PÍLDORA OEPM-ITEMAS "Cómo solicitar una patente PCT"(How to apply for a PCT patent)
9. Seminar: Licenses and results transfer.
10. Seminar: Technological information.
11. Seminar: Patentability of biotechnological inventions.
12. Seminar: Patentability of computer-implemented inventions.
13. Webinar "UAE's Sci-Tech Virtual Tour with the Kingdom of Spain - A discussion with Academia".
14. Course: Innovation and transfer. Practical aspects of transferring developments to your Company.
15. Attendance at a first aid course to learn the technique of cardiopulmonary resuscitation, with the aim of developing a medical device to help perform it correctly.
16. Training: how to use the acquired laser-cutting machine.
17. Training: how to use the acquired desktop milling machine.

13

SCIENTIFIC REPORT
IMIBIC 2021



COMMUNICATION & RRI

Number of events: **85**

Number of news items in mass media: **>500**

Number of website visits: **74.588**

Number of visits to IMIBIC:

- Institutional: **17**

- Educational: **35**

Number of people visiting IMIBIC: **1290**

Social media interaction data: **>1.000.000**

» IMIBIC - RRI ACTIONS IN 2021

Scientific dissemination activities aimed at secondary school students: these activities, which made up most of the scientific dissemination activities, included the following types of activity, tailored according to the age/level of the participating students, the characteristics of the school and the type of activity:

- **“School Visits Programme 2021”**. These visits are aimed, for the most part, at upper-level secondary school students (Bachillerato and ESO). During 2021, IMIBIC hosted 8 visits as part of this programme, with a total of 64 students and 14 teachers. Various educational centres from our city took part in these visits, including: CES Lope de Vega, CEIP San Juan de la Cruz, IES Góngora and Colegio Virgen del Carmen.
- **“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 10 consecutive years. The Institute participated in 13 programmed visits, with 635 high school students and 22 teachers from various schools in Córdoba and the province attending.

Scientific dissemination activities for other social groups: In this section, tailored according to the characteristics, age and interests of the social groups participating, the following activities took place:

- **“UCO 2020/2021 Teaching Innovation Project”** The main objective of this project is to promote the teaching of experimental science in primary education and was approved in the “Plan for Innovation and good teaching practices, academic year 2020/2021” of the University of Córdoba. Five virtual visits were made during which IMIBIC was presented to 225 third-year students studying for their Bachelor’s Degree in Primary Education at the University of Córdoba (Faculty of Educational Sciences).
- **“Activities associated with the University Hospital Reina Sofía”**: This year, due to the precautions arising from the COVID-19 pandemic, it was not possible to hold either the University Hospital Reina Sofía (HURS) Open Day for future Resident Specialists waiting to choose the hospital where they will carry out their training, or the IMIBIC Open Day for Resident Specialists in the HURS who have recently started their training. Instead, the I Open Day on Primary Care Research in Cordoba was held as a virtual event. Seventeen presentations were given and 478 people registered.
- **“Visits from the Polytechnic School of the University of Cordoba”**, IMIBIC received 3 visits from the Higher Polytechnic School of the University of Cordoba, with a total of 50 students and 3 members of the teaching staff participating.
- **“Virtual Walk Through Science”**. The activity, which was held for the first time in the format of a virtual science fair due to the pandemic, included a website with scientific institution stands. IMIBIC had a stand presenting the Institute and its activities in a variety of videos.

Projects and events related to Responsible Research and Innovation (RRI) carried out or held during 2021 included, among others, the E-ducass project, the XVI ANIS Conference, the Anūla for IMIBIC Project, the 1st Biomedicine and Medical Industry Fair and the IMIBIC visits programme.

E-ducass: this project was funded by the ISCIII as part of the Strategic Action in Health. The project is aligned with health literacy and addresses novel solutions for vulnerable populations with health inequalities.

European Researchers’ Night: Eleven groups of researchers from the Institute, the Reina Sofia University Hospital and the University of Cordoba representing different biomedical disciplines answered questions from citizens about research into the most prevalent pathologies such as cancer, obesity, cardiovascular diseases, allergies, cellular aging and Covid-19. IMIBIC researchers also took science to the hospital’s youngest patients by organising and carrying out several practical workshops where children could learn what research involves and its importance in improving clinical practice.

XVI ANIS (National Association of Health Informers) “One Health” conference: the topic chosen for this edition was “One Health: the urgent challenge of a single health” and was held on 22-23 October 2021; in addition to the theme advertised in the title, other topics of interest related to health communication were discussed. The event was attended by more than 150 health communicators in person and a similar number online.

ANŪLA for IMIBIC: the aim of this project is to recognise the research work being carried out in various projects at the IMIBIC, the Reina Sofia University Hospital and the University of Cordoba in pursuit of sustainability, by marketing T-shirts with the slogan “True health, true future” designed by the company ANŪLA. A third of the sales will go to this project, which aims to promote a healthy lifestyle based on balanced and sustainable diets in vulnerable populations, which would help improve the present relationship between global warming and food. It will focus on 360 families at risk of food insecurity.

1st Biomedicine and Medical Industry Fair: This fair was attended both in person and virtually and was held on November 9th at IMIBIC. The event included two round tables where a panel of experts discussed topics such as collaboration with the productive fabric and experiences of doctoral theses with an “Industrial Doctorate” Mention, and a talk on the Industrial Doctorate mention in the Doctoral Programme in Biomedicine at the University of Cordoba.

As part of the RRI actions, we should highlight by the one hand, the participation of key non-scientific actors within some of the internal committees, including the following: Equality, Training, Innovation and Clinical Research.

On the other hand, we must also highlight the grants within the “Plan Propio” for Open Access publications.

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GOALS FOR 2022



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From an institutional point of view, the goals set for the year 2022 and approved by the Governing Council of the Institute are as follows:

Implementation of the actions foreseen in the IMIBIC Internationalisation Plan 2021-2025

To propose actions to dynamise and promote interaction between the scientific programmes, with a view to increasing intra-mural collaborations.

Integration of the research perspective in primary care in the different internal training and recognition events of the Institute.

Attracting private investors oriented towards innovation projects developed at the Institute.





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