



13th IMIBIC
**YOUNG
INVESTIGATORS
MEETING**

PROGRAMME

Day 1 (13th OCT)

08:30 – 09:00

Registration and Poster display

09:00 – 09:30

Opening ceremony (IMIBIC Assembly Hall)

09:30 – 11:00

SESSION I. Cancer I (IMIBIC Assembly Hall)

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

→ **Ia. 09:30 – 09:45**

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

→ **Ib. 09:45 – 10:00**

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

→ **Ic. 10:00 – 10:15**

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

→ **Id. 10:15 – 10:30**

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

→ **Ie. 10:30 – 10:45**

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

→ **If. 10:45 – 11:00**

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

11:00 – 11:30

Coffee Break (IMIBIC Cafeteria)

11:30 – 12:45

SESSION II. Multidisciplinary I (IMIBIC Assembly Hall)

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

→ **IIa. 11:30 – 11:45**

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

→ **IIb. 11:45 – 12:00**

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

→ **IIc. 12:00 – 12:15**

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

→ **IIId. 12:15 – 12:30**

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

→ **IIe. 12:30 – 12:45**

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

12:45 – 13:45

Poster session I (IMIBIC Meeting & Multipurpose Room)

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

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

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

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

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

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



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



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

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

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

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

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

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

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

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

13:45 – 15:45

Lunch (IMIBIC Cafeteria)

15:45 – 17:15

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

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

→ **IIIa. 15:45 – 16:00**
Dysregulation of splicing machinery as early biomarker of diabetic nephropathy: From the CORDIOPREV study. **Alicia Podadera Herreros.**

→ **IIIb. 16:00 – 16:15**
Molecular and clinical implications of somatostatin receptor profile and somatostatin analogues treatment in high-grade astrocytomas. **Ana de la Salud De la Rosa Herencia.**

→ **IIIc. 16:15 – 16:30**
Role of Let-7b-5p and miR-191-5p in the development of early obesity and associated metabolic comorbidities. **Carmen Torres Granados.**

→ **IIIId. 16:30 – 16:45**

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

→ **IIIe. 16:45 – 17:00**

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

→ **IIIIf. 17:00 – 17:15**

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

17:15 – 18:30

SESSION IV. Multidisciplinary II (IMIBIC Assembly Hall)

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

→ **IVa. 17:15 – 17:30**

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

→ **IVb. 17:30 – 17:45**

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

→ **IVc. 17:45 – 18:00**

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

→ **IVd. 18:00 – 18:15**

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

→ **IVe. 18:15 – 18:30**

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

Day 2 (14th OCT)

08:00 – 08:30

Registration and Poster display

08:30 – 10:00

Session V. Cancer II (IMIBIC Assembly Hall)

Chairs: Dr. Rafael González & Dr. Yolanda Jiménez

→ **Va. 08:30 – 08:45**

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



→ **Vb. 08:45 – 09:00**

Orphan base specificity of abasic sites processing during DNA Base Excision Repair. **Marina Jordano Raya.**

→ **Vc. 09:00 – 09:15**

Breaking the mucin barrier: Discovering and testing new therapeutic targets in Pseudomyxoma peritonei. **María Carmen Vázquez Borrego.**

→ **IVd. 09:15 – 09:30**

Splicing factor SRSF6 as a novel therapeutic target for advanced prostate cancer. **Jesús Miguel Pérez Gómez.**

→ **IVe. 09:30 – 09:45**

Exploring the potential therapeutic role of somatostatin/cortistatin endocrine system in prostate cancer. **Prudencio Sáez Martínez.**

→ **IVf. 09:45 – 10:00**

Alteration in RNA metabolism unveils new therapeutic opportunities in pancreatic adenocarcinoma. **Ricardo Blázquez Encinas-Rey.**

10:00 – 10:30

Coffee Break (IMIBIC Cafeteria)

10:30 – 11:30

Poster session II (IMIBIC Meeting & Multipurpose Room)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



- **PSII.v.** Phase I/II study of the single-arm efficacy and safety of the use of neutral argon plasma in the cytoreduction of miliary implants on the peritoneal surface. **Alfonso Carlos Pontes García.**
- **PSII.w.** Association between metabolic syndrome and uric acid: a systematic review and meta-analysis. **Elena Raya Cano.**
- **PSII.x.** SARS-CoV-2 infection increases CMV-associated cardiovascular risk. **Ester Irene Reina Alfonso.**
- **PSII.y.** Muscle mechanical properties of pelvic floor and paravertebral muscles, and lumbar range of motion in women with and without urge incontinence urinary: case-control study. **M^a Teresa Garzón Alfaro.**
- **PSII.z.** Evaluation of the in vitro and in silico interaction of a cationic peptide against colistin-resistant *P.aeruginosa* membrane models. **Sandra Patricia Rivera Sanchez.**
- **PSII.aa.** The novel multiagonist, GLP1-estrogen, improves the management of non-alcoholic fatty liver disease in lean and obese models of polycystic ovary syndrome. **Andrea Rodríguez Martín.**
- **PSII.bb.** Metabolic adaptation of female mice overexpressing *CYB5R3* and submitted to a caloric restriction intervention. **Luz Marina Sánchez Mendoza.**
- **PSII.cc.** S-nitrosoglutathione reductase deficiency in colorectal cancer confers metabolic vulnerabilities that can be therapeutically exploited. **María Teresa Sánchez Montero.**
- **PSII.dd.** Anti-glomerular basement membrane glomerulonephritis. A study in real life. **Marina Sánchez-Agosta Martínez.**
- **PSII.ee.** Could the primary cilium predict progression from actinic keratosis to squamous cell carcinoma?. **Alicia Sanz Zorrilla.**
- **PSII.ff.** Comparative Study of a Sjögren's Syndrome Cohort (Primary and Secondary). **José Miguel Sequí Sabater.**
- **PSII.gg.** Analysis of the potential role of hepatic kisspeptin in energy and metabolic homeostasis. **Esperanza Uceda Rodríguez.**
- **PSII.hh.** Oxidative environment and redox homeostasis in a rare malignant disease: Pseudomyxoma Peritonei. **Francisca Valenzuela Molina.**
- **PSII.ii.** Ferroptosis is involved in acute kidney injury associated to massive intravascular hemolysis. **Mercedes Vallejo Mudarra.**
- **PSII.jj.** Prognostic value of RAS mutation status changes in circulating tumor DNA of metastatic colorectal cancer patients. **Alicia Vargas Aliaga.**

→ **PSII.kk.** Gut microbial composition as a diagnostic tool for colorectal cancer. **Ana María Vega Rojas.**

→ **PSII.ll.** The role of physical activity on psychological well-being in children and adolescent with type 1 diabetes: preliminary data of a cross-sectional study. **Joaquín Villaécija Rodríguez.**

→ **PSII.mm.** Adipokines and hepatokines as potential biomarkers of hepatocellular carcinoma. **Javier Manuel Zamora Olaya.**

11:30 – 13:00

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

Chairs: Dr. Clementina López & Dr. Cristian Rodelo

→ **VIa. 11:30 – 11:45**

Personalized diagnostic and therapeutic potential of miR-191-5p in the pathophysiological relationship between obesity and prostate cancer. **Francisco Porcel Pastrana.**

→ **VIb. 11:45 – 12:00**

The role of intestinal microbiota in the different prevalence of coronary disease between genders. **Helena García Fernández.**

→ **VIc. 12:00 – 12:15**

Impaired metabolic and inflammatory profile in adult patients with a history extra-uterine growth restriction. **Laura Palomino Fernández.**

→ **VIId. 12:15 – 12:30**

Micronutrients and their implications in the incidence of type 2 Diabetes Mellitus. Pieces of evidence from the CORDIOPREV study. **Lorenzo Rivas García.**

→ **VIe. 12:30 – 12:45**

Effect of diet on the expression of microRNAs and its relationship with aging in patients with coronary heart disease: CORDIOPREV study. **Maite Sánchez Giraldo.**

→ **VIIf. 12:45 – 13:00**

Novel multiagonist therapy for efficient management of metabolic complications polycystic ovary syndrome. **Victor Serrano López.**

13:00 – 14:00

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

14:00 – 14:30

Awards and Closing ceremony