CIABIOMED 2025

ETSII – US

OCTOBER 23-24, 2025

https://2025.iabiomed.org/en

PROGRAM

BIOMED

Sociedad Española de
Inteligencia Artificial en Biomedicina

WELCOME

On behalf of the Organizing Committee, it is an honor to warmly welcome you to the **First Congress of the Spanish Society of Artificial Intelligence in Biomedicine (CIABiomed 2025)**, which will be held on **October 23 and 24, 2025**, at the **Higher Technical School of Computer Engineering of the University of Seville**.

This congress was created with the aim of becoming a leading meeting point for the **scientific and professional community** linked to **artificial intelligence** and **biomedicine**, bringing together researchers, healthcare professionals, representatives of the technology industry, and students interested in this exciting field.

Throughout these conferences, we will have the opportunity to attend keynote lectures given by renowned experts, as well as oral presentations, and special sessions covering a wide range of topics: from the development of explainable algorithms and models to their implementation in clinical settings, the ethics of AI, interoperability, and technology transfer.

CIABiomed 2025 represents not only a space for scientific dissemination, but also a forum for **interdisciplinary dialogue**, **collaboration**, and the **creation of synergies** that drive research and innovation in biomedicine, always with an ethical and responsible approach.

We would like to express our sincere gratitude to all those who have made the organization of this conference possible: speakers, authors, members of the scientific committee, collaborating institutions, sponsors, and volunteers. Your support and dedication have been fundamental in making this event a reality.

We encourage all participants to get actively involved in the different sessions and activities of the conference, to share their ideas, and to make the most of this unique opportunity for learning and networking.

We are confident that the experience at CIABiomed 2025 will be enriching, inspiring, and memorable.

Welcome to Seville and CIABiomed 2025!

Sincerely,

The Organizing Committee

Event sponsors

Sponsors of IABiomed

Event organizers and collaborators

CIABIOMED 2025: INFORMATION

This program is provisional. Therefore, it may be modified or altered. **No changes (to sessions or days) can be made to any of the presentations.** Due to the volume of presentations at the conference, the organizers cannot allow changes that may disrupt the program.

Please note that presenting your paper is mandatory. Failure to attend the conference will be considered a non-presentation and the paper will be removed from the proceedings. In such cases, no refund of the registration fee will be issued.

In the event of any (potentially minor) updates to the program, the organizers will inform participants via email. It is strongly recommended that you ensure that the authors' email addresses are up to date to avoid communication problems.

Regarding information about oral presentations:

- Oral presentations of **regular papers** will have a maximum duration of 12 minutes (presentation) + 5 minutes (questions and answers). It is recommended that presentations aim to be slightly shorter than the maximum time allowed.

- Oral presentations of **short papers** will have a maximum duration of 7 minutes (presentation) + 5 minutes (questions and answers). It is recommended that presentations aim to be slightly shorter than the maximum time allowed.

- Oral presentations of **breakthroughs papers** will have a maximum duration of 5 minutes (presentation) + 5 minutes (questions and answers). It is recommended that presentations aim to be slightly shorter than the maximum time allowed.

- The **session chairs** will ensure strict adherence to the schedule to keep the sessions running on time.

- To **submit slides for your oral presentation**, please visit the following web link.

In the **details of this program, you will see the type of article associated with your presentation (regular, short, advance).** Remember that **accepted regular and short documents** will be included with their own DOI in **Lecture Notes in Bioinformatics (LNBI)** from **Springer**. Accepted **advance papers** will be published in the society's own proceedings, available on the official IABiomed website.

Information about the venue (how to get there, room locations) is available here.

CIABIOMED 2025: CALENDAR

Thursday, October 23, 2025		
8.15h – 9.00h	**Registration** *(will be open throughout the conference)*	
9.00h – 9.30h	**Session P.0. Opening**	
9.30h – 10.10h	Coffee break	
10.10h – 11.10h	**Session P.1. Keynote lecture** Antonio J. Pérez Pulido, Ph.D. *Andalusian Centre for Developmental Biology (CABD) and Pablo de Olavide University in Seville.*	
11.10h – 12.40h	**Session A.1.** Explainable and interpretable AI in clinical and biomedical contexts	**Session B.1.** Ethics, privacy and security in AI applications in the healthcare
12.40h – 13.10h	**Session I.1. Industrial lecture** Helena Gónzález, Javier Dúctor - *MSD Spain*	
13.10h – 15.10h	Lunch break	
15.10h – 16.40h	**Session A.2.** AI-based clinical decision support systems	**Session B.2.** Biomedical signal processing
16.40h – 18.10h	**Session A.3.** Natural language processing (NLP) in biomedicine	**Session B.3.** Medical image processing and computer vision in clinical environments (Part I)
18.10h – 18.50h	**Session A.4.** Prediction of protein structures and molecular interactions with AI techniques	**Session B.4.** Medical image processing and computer vision in clinical environments (Part II)
18.50h – 20.45h	Social activities and free time	
20.45h	**Gala dinner** Muelle 21 Restaurant *Muelle de las delicias, Sevilla* *(get directions)*	

Friday, October 24, 2025		
8.15h – 9.00h	**Registration** *(will be open throughout the conference)*	
9.00h – 10.00h	**Session P.2. Keynote lecture** Juan Mora Delgado, Ph.D. *Specialist Physician in Internal Medicine. Internal Medicine and Palliative Care Clinical Unit. University Hospital of Jerez de la Frontera.*	
10.00h – 10.30h	Coffee break	
10.30h – 12.00h	**Session A.5.** AI for multi-omic integration and analysis of heterogeneous biomedical data (Part I)	**Session B.5.** Predictive modelling and personalised medicine using artificial intelligence (Part I)
12.00h – 12.30h	**Session I.2. Industrial lecture** *Juan Manuel Martínez, Andrés Carretero - MINSAIT*	
12.30h – 14.00h	**Session A.6.** AI for multi-omic integration and analysis of heterogeneous biomedical data (Part II)	**Session B.6.** Predictive modelling and personalised medicine using artificial intelligence (Part II)
14.00h – 14.30h	**Session P.3. Closing ceremony**	
14.30h – 16.00h	Lunch break	

Location information for conference activities:

- Sessions **A, S and P** will be held in the **Salón de Grados** of the Higher Technical School of Computer Engineering at the University of Seville.
- **Session B** will be held in the **Salón multiusos** of the Higher Technical School of Computer Engineering at the University of Seville.
- **Coffee breaks and lunch breaks** will take place in **the main lobby on the first floor**.
- **Participant registration** will take place in **the main lobby on the ground floor.**

CIABIOMED 2025: PROGRAM

Thursday, October 23, 2025

08.15h – 9.00h Registration – Day 1

Registration for the conference will take place in the main lobby (ground floor), located near the faculty reception desk. Please follow the directions provided on the CIABIOMED 2025 website to reach the event venue.

LOCATION: Main lobby (ground floor).

09.00h – 09.30h Session P.0. Opening

The CIABIOMED 2025 opening ceremony will mark the official start of the conference, welcoming all participants to Seville, presenting the objectives and detailing the highlights of the event.

LOCATION: Salón de grados.

09.30h – 10.10h Coffee break ☕

The coffee break will take place in the **main lobby** on the first floor, near the conference registration area.

LOCATION: Main lobby (first floor).

10.10h – 11.10h Session P.1. Keynote lecture

Speaker: Antonio J. Pérez Pulido, Ph.D.

Title of the lecture:
AI applied to pangenomics to explore the constant war between viruses and bacteria

Biography:
Antonio J. Pérez Pulido holds a degree in Biology from the University of Jaén and a PhD in Bioinformatics from the University of Malaga. He completed his postdoctoral studies at the National Institute of Bioinformatics, and since 2007 he has been a professor at Pablo de Olavide University and a researcher at the Andalusian Centre for Developmental Biology, where he leads a computational biology group. Since his thesis, he has specialised in the development of computational tools for the functional annotation of proteins, and since 2017 he has specialised in the analysis of bacterial pangenomes, with a particular interest in CRISPR-Cas systems and other defence systems against phages.

LOCATION: Salón de grados.

11.10h – 12.40h	**Session A.1. Explainable and interpretable AI in clinical and biomedical contexts**

Chair: *Belén Vega-Márquez*

11.20h **An Iterative Random Forest Framework for Statistical Feature Selection in High-Dimensional Biomedical Data: A Case Study on Alzheimer's Diagnosis** (id: 43) (tipo: regular)
Pablo Zubasti, Miguel A. Patricio, Antonio Berlanga, and José M. Molina

11.40h **Towards an Explainability Agent: Leveraging LLMs to Interpret LIME Outputs** (id: 26) (tipo: regular)
Belén Vega-Márquez, Cristina Rubio-Escudero, and Beatriz Pontes-Balanza

12.00h **Uncovering cardiac risk patterns: visualization and interpretation via probabilistic topographic mapping** (id: 53) (tipo: regular)
Martha Ivon Cardenas, Pedro Jesús Copado, and Caroline König

12.20h **Explainable Deep Learning Techniques for Medical Image Analysis: A Systematic Review of Diabetic Foot Ulcers, Breast Cancer, and COVID-19** (id: 62) (tipo: corto)
Zinah Mohsin Arkah, Beatriz Pontes, and Cristina Rubio.

LOCATION: Salón de grados.

11.10h – 12.40h	**Session B.1. Ethics, privacy and security in AI applications in the healthcare**

Chair: *José Alberto Benítez-Andrades*

11.20h **Fairness-Aware Machine Learning for Biomedical Prediction: Evaluating and Correcting Bias in Gallstone Diagnosis Models** (id: 55) (tipo: regular)
Caroline König, Martha Ivon Cardenas, Pedro Jesús Copado, and Alfredo Vellido

11.40h **An Agentic Architecture for Scalable and Reproducible Data Standardization to OMOP CDM using Declarative Modeling** (id: 63) (tipo: regular)
Alberto Labarga

12.00h **The Assessment of AI-Based Digital Health Technologies From The Perspective of HTA Bodies. The Case Of AQuAS' AI Assessment Guide.: AQuAS' AI Assessment Guide** (id: 29) (tipo: corto)
Carolina Moltó Puigmartí, Susanna Aussó Trias, Maria Bretones Vallejo, Didier Domínguez Herrera, and Rosa Maria Vivanco-Hidalgo

12.15h **Enhancing Privacy and Interoperability in Biomedical Research: A SOLID-Based Architecture with LLM Integration** (id: 18) (tipo: corto)
Hugo Lebredo, Jorge Álvarez-Fidalgo, Rubén del Rey Álvarez, and Jose Emilio Labra-Gayo.

LOCATION: Salón multiusos.

12.40h – 13.10h Session I.1. Industrial lecture

Speaker:
- Helena González: Medical Innovation & Data Analytics Assoc. Director , MSD Spain.
- Javier Dúctor: Technology Partnership Assoc. Director, MSD Spain.

Title of presentation: AI at MSD: vision and strategy from the biopharmaceutical sector.

Summary: In this session, we will review how artificial intelligence is transforming research and development in the pharmaceutical industry, from drug discovery to clinical trials and patient access. We will share representative use cases, identify challenges and opportunities, and propose avenues for collaboration to accelerate the impact of AI in biomedicine.

LOCATION: Salón de grados.

13.10h – 15.10h Lunch break

The lunch break will take place in the **main lobby** on the first floor, near the conference registration area.

LOCATION: Main lobby (first floor).

15.10h – 16.40h Session A.2. AI-based clinical decision support systems

Chair: *Mónica López Lacort*

15.10h **Application of Machine Learning Techniques to the Prediction of Hospital Mortality: Beyond Conventional Clinical Models** (id: 27) (tipo: regular)
Pedro López Ruz, Belén Vega-Márquez, and Beatriz Pontes-Balanza

15.27h **Evaluation and prediction of the musculoskeletal risks in microsurgery** (id: 32) (tipo: regular)
Daniel Caballero, Manuel J. Pérez-Salazar, Juan A. Sánchez-Margallo, Laura C. Pires-Louça, and Francisco M. Sánchez-Margallo

15.44h **Implementation of an AI-Assisted Telemedicine System in Nursing Homes: Protocol and Preliminary Results** (id: 25) (tipo: corto)
José Luis Ávila-Jiménez, Nuria Luque Reigal, Manuel Rich-Ruiz, Vanesa Cantón-Habas, and Sebastián Ventura

16.01h **Improving Liver Graft Decision-Making Through AI: Validation with Internal and National Datasets** (id: 59) (tipo: regular)
Miguel Cuende, Beatriz Pontes, Juan M. Castillo Tuñón, Daniel Mateos García, Luis M. Marín Gómez, José C. Riquelme Santos, and Gloria de la Rosa Rodríguez

16.18h **Context-Aware AI Agents for Clinical Dialogue Assistance through Large Language Models** (id: 39) (tipo: corto)
Rodrigo Naranjo Pozas, Pablo Doblado Mendoza, and Belén Vega Márquez.

LOCATION: Salón de grados.

15.10h – 16.40h Session B.2. Biomedical signal processing

Chair: *Fernando Moncada Martins*

15.10h **Analysis of Gamma Rhythm in the Detection of Photoparoxysmal Responses in Photosensitive Patients** (id: 28) (tipo: regular)
Fernando Moncada Martins, Víctor M. González, Antonio Gil-Nagel, Adrián Valls Carbó, María Antonia Gutiérrez, and Pablo Calvo Calleja

15.27h **Application of machine learning and deep learning methods on ECG sensor data to predict stress levels in minimally invasive surgery** (id: 33) (tipo: regular)
Daniel Caballero, Manuel J. Pérez-Salazar, Juan A. Sánchez-Margallo, Ismael Diaz-Romero, and Francisco M. Sánchez-Margallo

15.44h **Can In-Context Learning enable Large Vision Language Models to detect ECG abnormalities?** (id: 13) (tipo: regular)
Samuel Camba, Abraham Otero, Daniel García, Luciano Sánchez, and Nahuel Costa

16.01h **Novel automated tool for functional substrate assessment of the left atrium in patients with persistent AF using machine learning** (id: 4) (tipo: regular)
Saman Golmaryami, Etel Silva Garcia, and Juan Fernandez Armenta

16.18h **A quantum machine learning approach to cardiopulmonary sound classification: QML for Cardiopulmonary Sound Classification** (id: 48) (tipo: corto)
Sandra Ranilla-Cortina, Antonio J. Muñoz-Montoro, Elías F. Combarro, Sebastián García-Galán, and José Ranilla

LOCATION: Salón multiusos.

16.40h – 18.10h Session A.3. Natural language processing (NLP) in biomedicine

Chair: *Raquel Leirós-Rodríguez*

16.40h **A comparative analysis of message-level and user-level natural language processing approaches for early depression detection on social media** (id: 12) (tipo: regular)
Carmen Rodríguez Jiménez, Miguel Rujas, Beatriz Merino-Barbancho, Maria Teresa Arredondo, Maria Fernanda Cabrera-Umpierrez, Kinda Khalaf, and Giuseppe Fico

16.57h **A Weak Supervision Approach for Monitoring Recreational Drug Use Effects in Social Media** (id: 50) (tipo: regular)
Lucía Prieto-Santamaría, Alba Cortés Iglesias, Claudio Vidal Giné, Fermín Fernández Calderón, Óscar M. Lozano, and Alejandro Rodríguez-González

17.14h **Automated Classification of Ischemic Stroke Subtypes from Electronic Health Records Using Large Language Models** (id: 37) (tipo: regular)
Alejandro Vásquez, Cristina Rubio-Escudero, and Germán Antonio Escobar-Rodríguez

17.31h **Concept Normalization in Psychiatry: Comparing Embedding and Lexical Methods for Spanish Clinical Text** (id: 31) (tipo: regular)
Sergio Rubio-Martín, Arturo Crespo-Álvaro, María Teresa García-Ordás, Antonio Serrano-García, Clara Margarita Franch-Pato, and José Alberto Benítez-Andrades

16.48h **Integrating Language Models and Network Embeddings to Uncover Hidden Relationships in Neuromuscular Diseases** (id: 60) (tipo: corto)
Federico García-Criado, Jesús Pérez-García, Elena Rojano, Juan AG Ranea, and Pedro Seoane-Zonjic

LOCATION: Salón de grados.

16.40h – 18.10h	Session B.3. Medical image processing and computer vision in clinical environments (Part I)

Chair: *Rafael Martínez Tomás*

16.40h **3D MTransINR: a 3D Modality Translation model based on Implicit Neural Representations** (id: 41) (tipo: regular)
Maria Ysern and Veronica Vilaplana

16.57h **Encoding the Spatio-Temporal Features of Rey-Osterrieth Complex Figure Strokes for Use in Deep Graph Networks** (id: 30) (tipo: regular)
Pedro José Mulas Cámara, José Manuel Cuadra Troncoso, and Mariano Rincón Zamorano

17.14h **Hybrid Morphology-Based Tumor Detection from Breast MRI Segmentation Masks** (id: 65) (tipo: regular)
Sergio Botana, Paula Puerta González, Pablo García Marcos, Sara Fernández Arias, Rebeca Oliveira Suárez, Guillermo Lorenzo, Héctor Gómez, Covadonga del Camino, Víctor M. González, and Angel Rio-Alvarez

17.31h **Multimodal Posterior Sampling-based Uncertainty in PD-L1 Segmentation from H&E Images** (id: 17) (tipo: corto)
Roman Kinakh, Gonzalo R. Rios-Muñoz, and Arrate Muñoz-Barrutia

17.43h **Integrating Radiomics and Deep Learning for Breast Lesion Classification** (id: 16) (tipo: avance)
Eduardo Almeda Luna, José María Luna, Rosa Sicila, Valerio Guarrasi, Paolo Soda, and Sebastián Ventura

LOCATION: Salón multiusos.

18.10h – 18.50h	Session A.4. Prediction of protein structures and molecular interactions with AI techniques

Chair: *Paloma Tejera-Nevado*

18.10h **Molecular Machine Learning Using Euler Characteristic Transforms** (id: 2) (tipo: regular)
Victor Toscano-Duran, Florian Rottach, and Bastian Rieck

18.30h **Sharing Patterns Between Proteins and Exploring Possible Drug Interactions** (id: 20) (tipo: regular)
Paloma Tejera-Nevado and Alejandro Rodríguez-González

LOCATION: Salón de grados.

18.10h – 18.50h	Session B.4. Medical image processing and computer vision in clinical environments (Part II)

Chair: *Lucía Prieto-Santamaría*

18.10h **Machine Learning for MRI-Based Classification of Treatment Response in Diffuse Gliomas** (id: 45) (tipo: regular)
María Yanshuang Martín Moreira, Ana María Pérez Martín1, José-Javier Serrano-Olmedo, Ángel Luis Álvarez and Oscar Casanova-Carvajal

18.30h **Segmentation of Arabidopsis Apical Stem Cells via a Dual Deep Learning Approach**
(id: 15) (tipo: regular)
Guillermo Rey-Paniagua, Dariusz Lachowski, and Arrate Muñoz-Barrutia

LOCATION: Salón multiusos.

19.30h – 20.30h Social activities and free time

Join the CIABiomed 2025 social event on the afternoon of Thursday, 23 October. This event will offer attendees a unique opportunity to relax, network, and enjoy the cultural and social atmosphere of Seville.

LOCATION: Plaza de España (get directions).

20.45h Gala dinner

Join us for the CIABiomed 2025 Gala Dinner, a memorable evening to celebrate the conference with colleagues, speakers, and organisers in a relaxed and elegant setting. For more details, please visit the conference website.

LOCATION: Muelle 21 Restaurant (get directions).

Friday, October 24, 2025

08.15h – 9.00h Registration – Day 2

Registration for the conference will take place in the main lobby (ground floor), located near the faculty reception desk. Please follow the directions provided on the CIABIOMED 2025 website to reach the event venue.

LOCATION: Main lobby (ground floor).

09.00h – 10.00h Session P.2. Keynote lecture

Speaker: Juan Mora Delgado, Ph.D.

Title of the lecture:
If you research like you did in 2010, AI will write your scientific obituary.

Biography:
Juan Mora Delgado is a specialist in Internal Medicine and holds a PhD in Health Sciences. He combines his clinical work with research and training in artificial intelligence applied to health. He has created more than 50 AI co-pilots for clinical research, founded "La MembresIA" (a micro-training community in AI for healthcare professionals) and is the author of the programme "Antiexperto en IA en Salud" (Anti-expert in AI in Health). With more than 15,000 followers on LinkedIn, he promotes the digital transformation of healthcare and biomedical professionals through research, clinical practice and collaboration with the pharmaceutical industry.

LOCATION: Salón de grados.

10.00h – 10.30h Coffee break ☕

The coffee break will take place in the **main lobby** on the first floor, near the conference registration area.

LOCATION: Main lobby (first floor).

10.30h – 12.00h Session A.5. AI for multi-omic integration and analysis of heterogeneous biomedical data (Part I)

Chair: *Cristina Rubio Escudero*

10.30h **A Framework for Evaluating the Stability of Learned Representations in Biologically-Constrained Models in Single-Cell: Evaluating the Stability of Biologically-Informed Models** (id: 58) (tipo: regular)
Sara Fernandez-Malvido, Alberto Esteban-Medina, Pelin Gundogdu, Joaquin Dopazo, Isabel A. Nepomuceno-Chamorro, and Carlos Loucera

10.47h **An Interpretable Graph Neural Network for Multi-Omics Data Integration and Biomarker Discovery** (id: 56) (tipo: regular)
Alberto Labarga

11.04h **Evaluation of Deep Clustering methods on high dimensional tabular biomedical data** (id: 22) (tipo: regular)
Ruben E. Munoz-Cabrera, Manuel Campos, and Jose M. Juarez

11.21h **Integrative analysis of breast cancer using multi-omics latent representations** (id: 34) (tipo: regular)
Yasmine Lakouifat Darkaoui, Beatriz Pontes, and Belén Vega Márquez

11.38h **Optimization of Denoising Autoencoders with Progressive Learning Strategies for scRNA-seq Data** (id: 40) (tipo: corto)
Francisco Javier Franco-Ruiz, Sara Fernandez-Malvido, Belen Vega-Marquez, and Isabel A. Nepomuceno-Chamorro

LOCATION: Salón de grados.

10.30h – 12.00h	**Session B.5. Predictive modelling and personalised medicine using artificial intelligence (Part I)**

Chair: *Andrés M. Alonso*

10.30h **Characterising Continuous Glucose Monitoring Using Topological Data Analysis** (id: 23) (tipo: regular)
Ana Lopez-Caballero, Miguel A. Meroño, and Jose M. Juarez

10.47h **Exploratory Computational Phenotyping of Hyposalivation Etiologies in Women** (id: 44) (tipo: regular)
Kristina Lacasta, María J. Rus, Angela de la Cruz Gándara Alvarez, Cristiane Cantiga-Silva, Virginia Moreira Navarrete, Carmen Dominguez Quesada, Jose Javier Perez Venegas, Juan Antonio Ortega, and Aurea Simon-Soro

11.04h **Predictive Modeling with Machine Learning in Patients with Locally Advanced Rectal Adenocarcinoma Undergoing Neoadjuvant Treatment** (id: 10) (tipo: regular)
Miguel Pagés García, Inmaculada Rincón Pérez, Juan Antonio Ortega Ramírez, José Luis López-Guerra, and Francisco Antonio Gomez Vela

11.21h **Reduction of a Neuropsychological Test Battery Using Machine Learning Methods** (id: 24) (tipo: regular)
Alba Gómez-Valadés, Rafael Martínez Tomás, and Mariano Rincón

11.38h **Accurate Fall Risk Prediction in Older Adults: Integrating Sensor and Clinical Data Through Machine Learning** (id: 21) (tipo: corto)
Ana González Castro, José Alberto Benítez-Andrades, and Raquel Leirós-Rodríguez

LOCATION: Salón multiusos.

12.00h – 12.30h Session I.2. Industrial lecture

Speakers:
- Juan Manuel Martínez Pérez, Director of Health Operations, MINSAIT.
- Andrés Carretero Sosa, CLAI Product Manager, MINSAIT.

Title of presentation: Onesait Healthcare CLAI: Health Co-pilot for doctors and patients: RAG and GraphRAG on interoperable history, help sources, and living science.

Summary: Conversational co-pilot designed to assist doctors and patients in their daily tasks using multi-channel access. Using a RAG and GraphRAG approach, the system combines semantic retrieval (graph) and vector retrieval (notes, guides, SOPs), orchestrated by agents that execute clinical tools (FHIR queries on medical records, bibliographic search, smart forms) and return responses with verifiable citations, explainability, and quantification of uncertainty.

LOCATION: Salón de grados.

12.30h – 14.00h Session A.6. AI for multi-omic integration and analysis of heterogeneous biomedical data (Part II)

Chair: *Raquel Leirós-Rodríguez*

12.30h **Integrative Analysis of Gene Co-Expression Networks and Biclustering for Cancer Biomarker Discovery** (id: 3) (tipo: regular)
Marc Ríos Cadenas, Aurelio López-Fernández, Iván Segura-Carmona, Juan A. Ortega, and Francisco A. Gómez-Vela

12.47h **Metabopathia: Enhancing disease mechanism understanding through mechanistic integration of transcriptomic and metabolic data** (id: 38) (tipo: regular)
Kinza Rian, Isabel A. Nepomuceno-Chamorro, Joaquin Dopazo, and Daniel López-López

13.04h **Predicting obesity-related phenotypes from the human gut microbiome using machine learning** (id: 42) (tipo: regular)
Ivon-Teresa Sánchez-Cárdenas and Martha-Ivon Cárdenas

13.21h **Triclustering-Based Analysis of Circadian Gene Expression Patterns** (id: 64) (tipo: regular)
Javier Hiruelo-Pérez, José M. García-Heredia, David Gutiérrez-Avilés, and María Martínez-Ballesteros

13.38h **Disease Understanding and Visualization of Drug Repurposing Hypotheses** (id: 57) (tipo: avance)
Lucía Prieto-Santamaría, Belén Otero-Carrasco, Andrea Álvarez-Pérez, David Juste Urraca, and Alejandro Rodríguez-González

LOCATION: Salón de grados.

12.30h – 14.00h **Session B.6. Predictive modelling and personalised medicine using artificial intelligence (Part II)**

Chair: *Christian Mata Miquel*

12.30h **Time Series Models: Application to RespiCast (ECDC Respiratory Diseases Forecasting Hub)** (id: 61) (tipo: regular)
Lucía Maza, Andrés M. Alonso, and Carolina García-Martos

12.47h **Synthetic Disease Trajectories for Predicting Chronic Kidney Disease Post-Diabetes Onset** (id: 14) (tipo: corto)
Víctor M. de la Oliva Roque, David P. Kreil, Joaquín Dopazo, Francisco Ortuño, and Carlos Loucera

13.04h **Precision Prediction of Hepatitis C Using Population Health Data and Machine Learning** (id: 52) (tipo: avance)
Alberto Esteban Medina, Isidoro Gutiérrez-Álvarez, Víctor Manuel de la Oliva Roque, Laura Alejos, Dolores Muñoyerro-Muñiz, Román Villegas, Joaquin Dopazo, and Carlos Loucera

13.16h **Predicting Frailty in Older Adults Using Analytical Biomarkers and Machine Learning** (id: 46) (tipo: avance)
Leasly Garcia Arana

13.26h **Early Risk Assessment for Ovarian Cancer Using Large-Scale Real-World Health Data** (id: 19) (tipo: avance)
Víctor de la Oliva, Isidoro Gutiérrez-Álvarez, Alberto Esteban-Medina, Laura Alejos, Dolores Muñoyerro-Muñiz, Román Villegas, Joaquín Dopazo, and Carlos Loucera

LOCATION: Salón multiusos.

14.00h – 15.45h **Lunch break**

The lunch break will take place in the **main lobby** on the first floor, near the conference registration area.

LOCATION: Main lobby (first floor).

15.45h – 16.15h **Session P.3. Ceremonia de clausura**

The closing ceremony of CIABiomed 2025 will be presented by the main conference organisers. During the session, the **David Riaño Awards 2025** will be announced and presented.

LOCATION: Salón de grados.