



Precision nutrition and nutriomics

10.Mar - 12. Mar, 2025

Monday, March 10, 2024 (IMDEA Nutrition)

IMDEA + online IMDEA



- 15:00-15:25 **Current methods and applications of HPLC mass metabolomics in precision nutrition.**
Alberto Valdés. Institute of Food Science Research – Spanish National Research Council (CIAL-CSIC).
- 15:25-15:50 **Current methods and applications of NMR metabolomics in precision nutrition.**
Nuria Amigó. Biosfer Testlab.
- 15:50-16:00 QUESTIONS
- 16:00-16:25 **Current methods and applications of exome analyses in precision nutrition.**
Ricardo Ramos. IMDEA Nutrition.
- 16:25-16:50 **Current methods and applications of nutrigenetics in precision nutrition.**
Marta Alonso. ADNTRO Genetics.
- 16:50-17:00 QUESTIONS
- 17:00-17:25 **Research in pediatric obesity.**
Begoña de Cuevillas. IMDEA Nutrition.
- 17:25-17:50 **Current methods and applications of cell cultures in precision nutrition.**
Alberto Díaz-Ruíz and IZASA. IMDEA Nutrition/IZASA.
- 17:50-18:00 QUESTIONS
- 18:00-18:30 **BREAK**
- 18:30-18:55 **Current methods and applications of the metagenomics in precision nutrition (I).**
Laura J. Marcos. IMDEA Nutrition.
- 18:55-19:20 **Current methods and applications of artificial intelligence in precision nutrition.**
Mario Astigarraga. IMDEA Nutrition.
- 19:20-19:30 QUESTIONS
- 19:30-19:55 **Multionics screening.**
Metehan Cifdaloz. Novogene Europe.
- 19:55-20:20 **Epigenetic signatures methodologies.**
Felipe Javier Chaves Martínez. SeqPlexing S.L.
- 20:20-20:30 QUESTIONS



Tuesday, March 11, 2024 (morning)

IMDEA + online IMDEA

- 09:00-09:20 **Inmunomics in nutrition.**
Moisés Laparra. IMDEA Nutrition/Universidad Internavional de Valencia (VIU).
- 09:20-09:40 **Current methods and applications of Seahorse technology in precision nutrition.**
María Ikonomopoulou. IMDEA Nutrition.
- 09:40-10:00 **Breath as a Source of Non-Invasive Biomarkers for Precision Medicine.**
Ben Constant. Owlstone Medical Ltd.

10:00-10:30 **BREAK**



Online UIK

ORAL COMMUNICATIONS

- 10:30-10:40 **Post transcriptional control of metabolism.**
Cristina Ramírez. IMDEA Nutrition.
- 10:40-10:50 **Polyphenol metabotypes.**
Cristiana Mignogna. University of Parma.
- 10:50-11:00 **Folic acid recommendations with genetics.**
Victor de la O. IMDEA Nutrition.
- 11:00-11:10 **Cancer and nutrigenetics.**
Camilla Horn Soares/Thais Steemburgo. Federal University of Rio Grande do Sul, Brazil.
- 11:10-11:20 **Nutritional scores and metabolic diseases.**
Anael Mellado Negrete. Tec de Monterrey, Mexico.
- 11:20-11:30 **Food intake and gestational weight gain considering FTO polymorphisms in Brazilian pregnant women.**
Katherine Bittencourt. Federal University of the State of Rio de Janeiro, Brazil.
- 11:30-11:40 **Phthalate exposure is associated with subclinical coronary atherosclerosis: The Aragon Workers' Health Study (AWHS).**
Diana Mérida Paredes. Universidad Autónoma de Madrid, Spain.
- 11:40-11:50 **Dietary patterns in Brazil – CUME Study.**
Jessica Bevenuto Mattar. Brazil.
- 11:50-12:00 **Gut microbiota shifts after a weight loss program in adults with obesity: the WLM3P study.**
Vanessa Pereira. NOVA Medical School/Farmodiética, Lisboa.
- 12:00-12:10 **Adecuación de macronutrientes de la dieta del Expedicionario del Antártida en relación con la ingesta recomendada por la OMS.**
Milagros Elena Arguedas Lagos. Universidad Femenina del Sagrado Corazón (UNIFE), Perú.

- 12:10-12:20 **Capacidad antioxidante y contenido de polifenoles de la chalarina (Casimiroa edulis).**
Gabriela Mercedes Vera Sánchez. Universidad Femenina del Sagrado Corazón (UNIFE), Perú.
- 12:20-12:30 **Genetic and sex differences in NAFDL.**
Melissa de Jesús Vega Burgeño. Universidad Autónoma de Sinaloa, México.
- 12:30-12:40 **Is the Dieta de la Milpa an alternative dietary pattern for end-stage renal disease patients on hemodialysis?**
Carolina Gabriela Plazas Guerrero. Universidad Autónoma de Sinaloa, México.
- 12:40-12:50 **Dyslipidemia and Lifestyle: A Nutrigenetic Approach.**
Itzel Zamudio Felix. Universidad de Guadalajara, México.
- 12:50-13:00 **Telomere length in patients with systemic lupus erythematosus in different nutritional statuses.**
Beatriz García de Carballo. USP Brazil.
- 13:00-13:10 **Hipovitaminosis D in autoimmune diseases.**
Bertha Campos López. Universidad de Guadalajara, México.
- 13:10-13:20 **Can dietary antioxidants and TNF- α genetic variants help control insulin in obesity?**
Erika Sierra. Universidad de Guadalajara, México.
- 13:20-13:30 **Achieving Normoglycemia through Nutriomics.**
Anusha Sunder. Xcode, Life Sciences Pvt. Ltd, India.
- 13:30-13:40 **Effects of Opuntia cacti extracts in obesity prevention. A comparison between epididymal and subcutaneous adipose tissues.**
Iker Gómez García. University of the Basque Country (UPV/EHU), Vitoria-Gasteiz, Spain.
- 13:40-13:50 **Frequency of nutrigenetic variants predisposing to Cardiovascular diseases in the Bulgarian population.**
Olga Antonova. Medical University-Sofia, Bulgaria.
- 13:50-14:00 **Artificial sweeteners and cardiovascular disease: Systematic review and meta-analysis.**
Sofía Gimeno-Ruiz. Universidad Autónoma de Madrid, Spain.
- 14:00-14:10 **High Serum Phosphate Is Associated with Cardiovascular Mortality and Subclinical Coronary Atherosclerosis: Systematic Review and Meta-Analysis.**
Carolina Torrijo-Belanche. Universidad Autónoma de Madrid, Spain.
- 14:10-15:00 **BREAK**
-  **Online UIK**
- 15:00-15:25 **Epigenetic clocks and dietary lifestyle.**
Rosita Gabbianelli. Università degli Studi di Camerino, Italy (ISNN).
- 15:25-15:50 **Precision nutrition in obesity: the role of metabolotypes.**
Ellen Blaak. Maastricht University, Netherlands (ISNN).
- 15:50-16:00 **QUESTIONS**

- 16:00-16:25 **Chrononutrition for precision feeding.**
Bárbara Vizmanos. University of Guadalajara, Mexico (RINN22).
- 16:25-16:50 **Precision nutrition for women's health.**
Karina dos Santos. Federal University of the State of Rio de Janeiro, Brazil (RINN22).
- 16:50-17:00 QUESTIONS
- 17:00-17:25 **Implications of epigenetics for human obesity.**
Oscar Omar Ramos. Autonomous University of Baja California, Mexico (RINN22).
- 17:25-17:50 **Maternal nutrition programming of the offspring.**
Ana Laura de la Garza. Autonomous University of Nuevo León, Mexico (RINN22).
- 17:50-18:00 QUESTIONS
- 18:00-18:30 **BREAK**
- 18:30-18:55 **Handling the complexity of (poly)phenol metabolism to improve cardiometabolic health.**
Pedro Mena. University of Parma, Italy.
- 18:55-19:20 **Personalized nutrition in severe hypertriglyceridemia.**
José L. Santos. Pontifical Catholic University of Chile, Chile (RINN22).
- 19:20-19:30 QUESTIONS
- 19:30-19:55 **Current methods and applications of the metagenomics in precision nutrition (II).**
Amanda Cuevas. IMDEA Nutrition.
- 19:55-20:20 **Plant microRNAs as regulators of gene expression.**
Silvia Lorente Cebrián. University of Zaragoza, Spain (RINN22 + CTPIOD).
- 20:20-20:30 QUESTIONS



Wednesday, March 12, 2024 (morning)

Carlos Santamaría Building + Online UIK

- 09:00-09:30 **The history of a resveratrol dimer, namely ϵ -viniferin: From the plant to its biological activities useful for human health.**
Arnaud Courtois. University of Bordeaux, France (CTPIOD).
- 09:30-10:40 **Session 1. Natural extracts and bioactive compounds.**
Chair: *Arnaud Courtois*
- Apple residues for the extraction of polyphenols with applications for metabolic disorders.** *Javier Cano-Lou, Víctor López. Universidad San Jorge, Spain.*
- Effects of Opuntia extracts on inflammation murine model diet-induced obesity and liver steatosis.** *Iker Gómez García, María Puy Portillo. University of the Basque Country, Spain.*
- Effect of Opuntia ficus-indica var. colorada pulp and Opuntia stricta var. dillenii peel extracts in the hepatic lipid metabolism of diet-induced MAFLD in rats.** *Irene Besné Eseverri, María Puy Portillo. University of the Basque Country, Spain.*

African traditional medicinal plants used in the Republic of Benin for the treatment of diabetes: in vitro validation and potential mechanisms. *Gemma Casado, Víctor López.* Universidad San Jorge, Spain.

10:40-11:15 **Session 2. Bioactive peptides and proteins.**

Chair: *Victor López*

Functional evaluation of pea and fava bean protein hydrolysates in *Caenorhabditis elegans* model. *Maialen Uriz-Martínez, Diana Ansorena, Iciar Astiasaran, Paula Aranaz.* University of Navarra, Spain.

Alternative protein sources on intestinal health. *Oria Soler Boronat, Montse Pinent.* Rovira I Virgili University, Spain.

11:15-11:40 **COFFEE BREAK**

11:40-12:15 **Session 3. Dietary strategies.**

Chair: *Anne Bouloumié*

Modulation of body fat mass by a light ketogenic diet supplemented with L-carnitine. *Inmaculada Sansano-Hidalgo, Diego Fernández-Lázaro, Enrique Roche.* Miguel Hernández University, Spain.

Mediterranean Diet Benefits in MAFLD. *Sayed Hesamoddin, Jesús De la Osada.* University of Zaragoza, Spain.

12:15-13:25 **Session 4. Obesity: models and mechanisms.**

Chair: *María Puy Portillo*

Adaptation to nutritional state according to sex and hormonal status in mice. *Juline Marjollet, Anne Bouloumié.* INSERM, Toulouse, France.

GDF15 Dynamics Following Metabolic Surgery: Implications for Weight Loss and Liver Function. *Victor Yassuda, Ana Luísa Coelho, Andrés Méndez-Lucas.* University of Algarve, Portugal / University of Barcelona, IDIBELL, Spain.

3D Model of human adipose lobule revealing the supporting role of progenitors on adipocyte functionality in addition to adipogenesis. *Leopold Devineaux, Anne Bouloumié.* INSERM, Toulouse, France.

Integrating Metagenomics and Metabolomics to Uncover Microbial-Metabolic Interactions in Human Metabolic Health: Insights from the Obekit Intervention Study. *Jaime Alonso-Allende, Fermin Milagro, Paula Aranaz.* University of Navarra, Spain.

13:25-13:55 **Polyphenols intake implications on health: role of biological rhythms.**

Anna Arola. University Rovira y Virgili, Spain (CTPIOD).

14:00-14:15 **Concluding remarks and CTPIOD awards.**

14:15-15:00 **BREAK**



Carlos Santamaría Building + Online UIK

- 15:00-15:25 **Fatty Acid Desaturases and Omega-3 Synthesis: Insights into the Functional Impacts of Genetic Variants.**
David M. Mutch. University of Guelph, Canada (ISNN).
- 15:25-15:50 **Genetic epidemiology.**
Louis Pérusse. Laval University, Canada (ISNN).
- 15:50-16:00 QUESTIONS
- 16:00-16:25 **Lipidomic changes induced by arthritis and the effects of omega-3.**
Frederic Capel. University of Clermont-Auvergne, France (CTPIOD).
- 16:25-16:50 **Nutrigenetics of cardiovascular disease/miRNomics in cardiovascular disease.**
Maria Elizabeth Tejero. National Institute of Genomic Medicine, Mexico (ISNN + CTPIOD).
- 16:50-17:00 QUESTIONS
- 17:00-17:25 **Omics exploration of postprandial metabolism and cardiometabolic risk.**
Sergio Polakof. University of Clermont-Auvergne, France (NUGO).
- 17:25-17:50 **Novel study designs and modeling approaches in human precision nutrition research.**
Baukje De Roos. University of Aberdeen, Scotland (NUGO).
- 17:50-18:00 QUESTIONS
- 18:00-18:30 **BREAK**
- 18:30-18:55 **Transcriptomics applications in precision nutrition.**
Alberto Dávalos. IMDEA Nutrition, Spain (RINN22 + CIBEROBN).
- 18:55-19:20 **Epigenetic applications in precision nutrition.**
Lidia Daimiel. IMDEA Nutrition, Spain (CIBEROBN).
- 19:20-19:30 QUESTIONS
- 19:30-19:55 **Epigenetic Benefits and Mechanisms of Regular Physical Activity in Metabolic Disease Management.**
Elisa María Barrón. Universidad Autónoma de Sinaloa.
- 19:55-20:20 **The interaction between genetic polymorphisms in FTO, MC4R, CLOCK, GHSR, GHRL, LEP, LEPR, RETN, and ADIPOQ genes with meal frequency on anthropometric, metabolic and hormonal indicators: a randomized nutrigenetic trial with obese women.**
Eliane Lopes Rosado. Federal University of Rio de Janeiro
- 20:20-20:30 QUESTIONS

