

Final Programme



Auditorium de l'ENSEGID
Allée Geoffroy Saint-Hilaire
33600 PESSAC

Registration is free but mandatory by email at:

catgie@bordeaux-inp.fr ; fmilagro@unav.es ; arnaud.courtois@u-bordeaux.fr

News and updates available at CTPIOD website: <https://obesitydiabetesinctp.weebly.com/>

Special issue of the 20th CTPIOD meeting will be published in *J Physiol Biochem*

MONDAY, 16th OCTOBER

14h30-14h45: Opening of the meeting and welcoming participants.

Atgié Claude, Courtois Arnaud, Krisa Stéphanie, Milagro Fermin, Carpéné Christian, Caceres Isaura, Faure Chrystel

14h45-15h30. Introductory lecture: What's new in diabetology and nutrition?

Pr. Vincent Rigalleau

CHU Bordeaux, Hôpital Haut-Lévêque, Département d'Endocrinologie, Diabétologie et Nutrition, Pessac, France.
Université de Bordeaux, UFR des Sciences médicales, Bordeaux, France.

Email: vincent.rigalleau@chu-bordeaux.fr

Session 1. Bioactive compounds in obesity and diabetes (1).

Chair: Milagro Fermin and Carpéné Christian

15h30-15h50. Effects of *Opuntia* extracts in rats fed with an obesogenic diet.

Gómez García I¹, Trepiana J^{1,2}, Fernández-Quintela A^{1,2}, Portillo MP^{1,2}.

1 Nutrition and Obesity group, Department of Pharmacy and Food Sciences, Faculty of Pharmacy, University of the Basque Country and Lucio Lascaray Research Centre, Vitoria-Gasteiz, Spain.

2 CIBER Physiopathology of Obesity and Nutrition, Institute of Health Carlos III, Spain.

Email: iker.gomez@ehu.eus

15h50-16h10. Novel *Lactiplantibacillus plantarum* and *Lactobacillus alimentarius* strains reduce fat accumulation and improve health markers on a *C. elegans* model.

Goyache I^{1,2}; Milagro FI^{1,2,4,5}; Virto R³; Valdés L³; Yavorov-Dayliev D^{1, 2}; Aranaz P^{1,2,4}.

1. University of Navarra, Faculty of Pharmacy and Nutrition, Department of Nutrition, Food Science and Physiology, Pamplona, Spain.

2. University of Navarra, Center for Nutrition Research, c/Irunlarrea 1, 31008 Pamplona, Spain.

3. CNTA, Ctra. NA-134 Km.53, 31570, San Adrián, Navarra, Spain.

4. Navarra Institute for Health Research, Pamplona, Spain.

5. Centro de Investigación Biomédica en Red de la Fisiopatología de la Obesidad y Nutrición, Instituto de Salud Carlos III, Madrid, Spain.

Email: igoyahce@unav.es

16h10-16h30. Effects of *Gracilaria vermiculophylla* dietary supplementation on hepatic steatosis in obese Zucker rats.

González-Arceo M¹, Aguirre L^{1,2,3}, Portillo MP^{1,2,3}, Gómez-Zorita S^{1,2,3}.

1 Nutrition and Obesity Group, Department of Pharmacy and Food Science, Faculty of Pharmacy and Lucio Lascaray Research Center, University of the Basque Country, Vitoria-Gasteiz, Spain.

2 Bioaraba Health Research Institute, Vitoria-Gasteiz, Spain.

3 CIBER Physiopathology of Obesity and Nutrition, Institute of Health Carlos III, Spain.

Email: maitane.gonzalez@ehu.eus

16h30-17h00. Coffee break.

17h00-17h20. Comparative effects of the administration of viable and heat-inactivated *Lactobacillus rhamnosus* GG in the prevention of diet-induced hepatic steatosis in rats.

Arellano-García L¹, Milton-Laskibar I^{1,2,3}, Martínez JA^{2,4}, Portillo MP^{1,2,3}.

1 Nutrition and Obesity Group, Department of Pharmacy and Food Sciences, Faculty of Pharmacy, University of the Basque Country, Vitoria-Gasteiz, Spain.

2 CIBER Physiopathology of Obesity and Nutrition, Institute of Health Carlos III, Spain.

3 BIOARABA Institute of Health.

4 Precision Nutrition and Cardiometabolic Health, IMDEA-Food Institute (Madrid Institute for Advanced Studies).

Email: auraisabel.arellano@ehu.eus

17h20-17h40. Interactions between grapevine stilbenes and their antioxidant and their anti-inflammatory activities.

Sy B, Krisa S, Richard T, Courtois A.

Univ. Bordeaux, Bordeaux Sci. Agro, Bordeaux INP, INRAE, OENO, UMR 1366, ISVV, Villenave d'Ornon, France.

Email: biranty.sy@u-bordeaux.fr

17h40-18h00. *Gracilaria vermiculophylla* on the treatment of obesity and insulin resistance.

Carr-Ugarte H¹, Eseberri I^{1,2,3}, Aguirre L^{1,2,3}, Portillo MP^{1,2,3}.

1 Nutrition and Obesity Group. Department of Pharmacy and Food Science, University of the Basque Country and Lucio Lascaray Research Institute, Vitoria-Gasteiz, Spain.

2 BIOARABA Health Research Institute, Vitoria-Gasteiz, Spain.

3 CIBERObn Physiopathology of Obesity and Nutrition, Institute of Health Carlos III, Vitoria-Gasteiz, Spain.

Email: helen.carr@ehu.eus

18h00-18h20. Identification of browning-inducing polyphenols in human adipocytes.

Pomares-Bri I, Micol V, Herranz-López M.

Design and Development of Bioactive Molecules Group, Institute of Research, Development, and Innovation in Healthcare Biotechnology in Elche, Miguel Hernández University, Alicante, Spain

Email: ipomares@umh.es

18h20-18h40. Antidiabetic, anti-obesity, and lifespan improving properties of *Morus nigra* L. fruit extract in a *C. elegans* obese model.

Núñez S^{a*}, Millán A^a, Valero MS^{b,c}, Les F, Gómez-Rincón C^{a,c}, López V^{a,c}.

^a Department of Pharmacy, Faculty of Health Sciences, Universidad San Jorge, Villanueva de Gállego, Zaragoza.

^b Department of Pharmacology and Physiology, Universidad de Zaragoza.

^c Instituto Agroalimentario de Aragón, IA2, Universidad de Zaragoza-CITA.

*Email: snunez@usj.es

18h40-19h00. Long term co-culture of human adipocytes and dermal fibroblasts: a new predictive system for modelling hypodermis-dermis interactions and for screening compounds on the skin biology

Linh-Trang Nguyen¹, Léopold Devineaux^{1,2,3}, Marion Bourdens¹, Mayoura Kéophiphath¹

1 D.I.V.A. Expertise, Centre Pierre Potier, 1 place Pierre Potier, 31106 Toulouse Cedex 1, France

2 INSERM U1048, Institut des Maladies Métaboliques et Cardiovasculaires, Toulouse, France

3 Université Paul Sabatier III, Toulouse, France.

Email: linh-trang.nguyen@diva-expertise.com

20h30. Dinner.

TUESDAY, 17th OCTOBER

Session 2. Obesity and diabetes: From clinical diagnosis and comprehension of metabolic disorders to the treatment.

Chair: Atgié Claude and Roche Enrique

9h15-9h35. Circulating MiRNAs as potential predictor biomarkers for NAFLD assessment.

Tobaruela-Resola AL¹, Milagro FI^{1,2,3}, Elorz M^{2,4}, Benito-Boillos A^{2,4}, Herrero JI^{2,5,6}, Monreal JI^{2,7}, Mogna-Peláez P¹, Tur JA^{3,8}, Martinez JA^{3,9}, Abete I^{1,2,3}, Zulet MA^{1,2,3}.

1 Department of Nutrition, Food Sciences and Physiology and Centre for Nutrition Research, Faculty of Pharmacy and Nutrition, University of Navarra, Pamplona, Spain.

2. Navarra Institute for Health Research, Pamplona, Spain.

3. Biomedical Research Centre Network in Physiopathology of Obesity and Nutrition, Instituto de Salud Carlos III, Madrid, Spain.

4. Department of Radiology, Clínica Universidad de Navarra, Pamplona, Spain.

5. Liver Unit, Clínica Universidad de Navarra, Pamplona, Spain.

6. Biomedical Research Centre Network in Hepatic and Digestive Diseases, Madrid, Spain.

7. Clinical Chemistry Department, Clínica Universidad de Navarra, Pamplona, Spain.

8. Research Group on Community Nutrition and Oxidative Stress, University of Balearic Islands, Palma, Spain

9. Cardiometabolics Precision Nutrition Program, IMDEA-Food Institute (Madrid Institute for Advanced Studies), Madrid, Spain.

Email: atobaruela@unav.es and mazulet@unav.es

9h35-9h55. Genetic diagnosis of non-syndromic monogenic obesity at Bordeaux University Hospital: clinical and scientific impact.

Lebreton L¹, Naudion S², Thibault H³, Grenier A³, Pupier E⁴, Monsaingeon M⁴, Michelet M⁴, Barbet-Massin A⁴, Cherifi B⁴, Lacombe D², Barat P³.

1-Service de biochimie, CHU de Bordeaux, Bordeaux, France.

2-Service de génétique médicale, CHU de Bordeaux, Bordeaux, France.

3-Centre spécialisé de l'obésité pédiatrique, CHU de Bordeaux, Bordeaux, France.

4-Centre spécialisé de l'obésité adultes, CHU de Bordeaux, Bordeaux, France.

Email: louis.lebreton@chu-bordeaux.fr

9h55-10h15. Impact of obesity on the tumour microenvironment and its influence on epithelial-mesenchymal transition and the therapeutic potential of marine compounds.

De Juan-Maciá P*; Losada-Echeberría M, Barraón-Catalán E, Micol V, Herranz-López M.

Universidad Miguel Hernández, Instituto de investigación, desarrollo e innovación en biotecnología sanitaria de elche, Spain.

Email: p-juan@umh.es

10h15-10h35. Dietary polyphenols for appetite and satiety regulation in obese subjects.

Martínez-Godfrey J¹, Roche E^{1,2}, Micol V^{1,2}, Herranz-López M¹.

1 Instituto de Biología Molecular y Celular, Universidad Miguel Hernández de Elche, Alicante, Spain.

2 CIBER, Fisiopatología de la Obesidad y la Nutrición, CIBERobn, Instituto de Salud Carlos III, Spain.

Email: jesica.martinezg@umh.es

10h35-11h00. Coffee break.

11h00-11h20. Obesity is associated with the severity of periodontitis linked to an increase of the diversity of the periodontal microbiota.

Lê S^{1,2,3}, Laurencin-Dalichieux S^{1,2}, Canceill T^{1,2,3}, Minty M^{1,2,3}, Yanat N^{2,3}, Loubieres P^{1,2,3}, Azalbert V^{1,2}, Burcelin R^{1,2}, Blasco-Baqué V^{1,2,3}, Thomas C^{1,2,3}

1 INSERM U1048, Institut des Maladies Métaboliques et Cardiovasculaires, Toulouse, France.

2 Université Paul Sabatier III, Toulouse, France.

3 CHU Toulouse, Service d'Odontologie Toulouse, France.

Email: thy.sylvie.le@gmail.com

11h20-11h50. Colocalization of Angptl8 and LPL in the adipose tissue of obese patients and its possible regulation by metformin.

Hernández-González D, Carretero-Hernández M, López-Albadalejo JA; Izquierdo A, Catalano-Iniesta L, Carretero J, García Barrado MJ.

Neuroendocrinology and Obesity Team, Faculty of Medicine, INCyL and IBSAL, University of Salamanca, Spain.

E-mail: davidhznz@usal.es

11h50-12h10. Microfluidic muscle-islet-on-chip for functional investigations in diabetology.

Chapeau D¹, Monchablon M^{1,2}, Papasavva E¹, Bouvet F¹, Milochau A¹, Pirog A¹, Scotti P¹, Lang J¹, Renaud S², Bouter A¹, Raoux M¹.

¹Univ. Bordeaux, CNRS, Bordeaux INP, CBMN, UMR 5248, Pessac, France

²Univ. Bordeaux, CNRS, Bordeaux INP, IMS, UMR 5218, Talence, France

Email: matthieu.raoux@u-bordeaux.fr

Session 3. Bioactive compounds in obesity and diabetes (2).

Chair: Courtois Arnaud and Despeaux Mathieu

12h10-12h30. Anti-obesity effect of *Opuntia stricta* var. *dillenii*'s extracts in 3T3-L1 mature adipocytes.

Gomez-Lopez I^{1,2,3}, Cano MP¹, Portillo MP^{2,3,4}.

1 Laboratory of Phytochemistry and Plant Food Functionality, Biotechnology and Food Microbiology Department, Institute of Food Science Research, Madrid, Spain.

2 Nutrition and Obesity Group, Department of Nutrition and Food Science, University of the Basque Country, Vitoria-Gasteiz, Spain.

3 CIBERobn Physiopathology of Obesity and Nutrition, Institute of Health Carlos II, Vitoria-Gasteiz, Spain

4 BIOARABA Institute of Health, 01006 Vitoria-Gasteiz, Spain.

Email: ivan.gomez@ehu.eus

12h30-12h50. Effect of *Opuntia stricta* var. *dillenii* extracts in the prevention of triglyceride accumulation in human HepG2 hepatocytes.

Besné-Eseverri I¹, Trepiana J^{1, 2, 3}, Cano MP⁴, Portillo MP^{1, 2, 3}.

1 Nutrition and Obesity Group, Department of Nutrition and Food Sciences, Faculty of Pharmacy, University of the Basque Country and Lucio Lascaray Research Institute, Vitoria-Gasteiz, Spain.

2 BIOARABA Health Research Institute, Vitoria-Gasteiz, Spain.

3 CIBERobn Physiopathology of Obesity and Nutrition, Institute of Health Carlos III, Vitoria-Gasteiz, Spain.

4 Laboratory of Phytochemistry and Plant Food Functionality, Biotechnology and Food Microbiology Department, Institute of Food Science Research, Madrid, Spain.

Email: irene.besne@ehu.eus

12h50-14h30. Lunch break.

Session 4. Metabolism and opening toward others roles of polyphenols.

Chair: *Caceres Isaura and Krisa Stéphanie*

14h40-15h00. *In vitro* study: hepatic glucuronidation of (+)-catechin and (-)-epicatechin in humans and rats.

Texier L^{1,2}, Pourtau L², Moras B², Courtois A¹, Richard T¹, Vignault A², Krisa S¹.

1 Univ. Bordeaux, Bordeaux INP, INRAE, OENO, UMR 1366, ISVV, Villenave d'Ornon, France.

2 Activ'Inside, Beychac et Caillau, France.

Email: lisa.texier@u-bordeaux.fr

15h00-15h20. Metabolic and muscular impact of supplementation with camelina oil in elderly mice.

Rigaudière JP¹, Montaurier C¹, Rambeau M¹, Jouve C¹, Soullier J², Bertrand-Michel J², Mutch DM³, Capel F¹.

1 Unité de Nutrition Humaine, INRAE-UCA, 63000 Clermont-Ferrand.

2 MetaToul-Lipidomique Core Facility, Inserm 1297, Toulouse, France.

3 Department of Human Health and Nutritional Sciences, University of Guelph, Canada.

Email: frederic.capel@inrae.fr

15h20-15h40. Plant polyphenols as aflatoxin B1 inhibitors: an alternative to chemicals in agriculture?

Bailly JD¹, Cadenillas L¹, Hernandez C¹, Caceres I², Durrieu V¹.

1 Laboratoire de Chimie Agro-industrielle, Université de Toulouse, INRAE, INPT, Toulouse, France.

2 Institut de Chimie et de Biologie des Membranes et des Nano-objets, Université de Bordeaux, CNRS, Bordeaux INP, Pessac, France.

Email: jean-denis.bailly@envt.fr

15h40-16h00. Awards for the best oral presentation and concluding remarks.