



13th ANNUAL MEETING
and
3rd YOUNG INVESTIGATORS SYMPOSIUM

November 9-11, 2022

Hotel Atenea Port
Mataró - BARCELONA

WELCOME LETTER

Dear members of CIBERDEM,

Welcome to the 2022 Annual Meeting of CIBERDEM. In line with previous meetings, we have an exciting scientific program that combines state of the art lectures, oral presentations and poster discussion providing ample opportunities to share and discuss the most relevant and recent data of CIBERDEM research. In 2022, three new PIs have been appointed, Dr. Carlos Guillén, Dra. M^a Angeles Martín Arribas and Dr. Josep Ribalta who have replaced Dr. Manuel Benito, Dra. Carmen Álvarez and Dr. Lluís Masana. I would like to express my gratitude to all three former PIs for their numerous contributions throughout these years to make a better CIBERDEM and to congratulate them for the excellent task leading their respective groups. I have no doubt that the new PIs will play very important role to further increase the quality of CIBERDEM research. As a form of welcome to their new role in CIBERDEM, the new PIs have been invited to give the state of the art lectures of the meeting. The scientific program includes also two invited lectures by external presenters, Dr. Marc Liesa who has recently moved back to our country after many years of very successful research in the US, and Dra Rosina Malagrida that will share her expertise on the area of Responsible Research and Innovation (RRI), a topic that acquired even more relevance for all investigators after its inclusion in the European Commission program Science with and for Society.

I hope that you will find the program attractive and that the meeting fulfils your expectations.

A handwritten signature in black ink, appearing to read 'Eduard', followed by a long horizontal line that tapers to a point on the right side.

Eduard Montanya

Scientific Director, CIBERDEM

INDEX

WELCOME LETTER.....	2
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3 rd YOUNG INVESTIGATORS SYMPOSIUM.....	4
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Organizing Committee:

Diego Balboa
Clara Meana
Eduard Montanya
Angel Nadal
Olga Simó

13 th ANNUAL MEETING.....	6
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THURSDAY November 10 th	6
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FRIDAY November 11 th	10
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Organizing Committee:

Franz Martín
Angela Martínez Valverde
Eduard Montanya
Ángel Nadal
Anna Novials
Isabel Ramis
Antonio Zorzano

YOUNG INVESTIGATORS SYMPOSIUM

Wednesday, November 9th

9:00-9:15 WELCOME

Eduard Montanya
Scientific Director, CIBERDEM
Angel Nadal
Training Program Coordinator, CIBERDEM

9:15-11:15 SESSION 1

Chairs:

Diego Balboa
Centro de Regulación Genómica (CRG), Barcelona
Rebeca Fernández-Ruiz
Instituto de Investigaciones Biomédicas August Pi I Sunyer, Barcelona

9:15 Beta cell mass: a history of mice and men

Alberto Bartolome
Instituto de Investigaciones Biomédicas "Alberto Sols", Madrid

9:45 Long non-coding RNA-regulated pathways in pancreatic beta cells: their role in diabetes pathogenesis

Izortze Santin
Instituto de Investigación Sanitaria de Biocruces, Bizkaia

10:15 LncRNA profiling in PBMCs from individuals with T1DM: A pilot study to identify novel biomarkers

Livia López Noriega
CABIMER, Sevilla

10:45 The Cannabinoid 1 receptor as a novel therapeutical target for the treatment of type 1 diabetes: at the crossroads between beta cells and immune cells

Isabel González-Mariscal
Instituto de Investigación Biomédica de Málaga (IBIMA), Málaga

11:15-11:45 COFFEE BREAK

11:45-13:45 SESSION 2

Chairs:

Mirabai Cuenca-Ardura
Centro de Regulación Genómica (CRG), Barcelona
Luke Noon
Fundación Centro de Investigación Príncipe Felipe, Valencia

11:45 New insights of PCSK9 inhibition on endothelial dysfunction and systemic inflammation

Patrice Marques
Instituto de Investigación Sanitaria INCLIVA. Fundación Hospital Clínico Universitario de Valencia

12:15 ¹NMR-Lipidomics of triglyceride rich lipoproteins in patients with diabetes.

Juan Moreno Vedia
Fundación Institut d'Investigació Sanitaria Pere Virgili

12:45 Lipotoxic extracellular vesicles as mediators of the intra- and extra-hepatic interactome in the progression of non-alcoholic fatty liver disease

Irma García Martínez

Instituto de Investigaciones Biomédicas "Alberto Sols", Madrid

13:15 Beneficial effect of protein phosphatase 1B inhibition against hypothalamic oxidative stress-mediated JNK activation and hepatic metabolic rewiring in mice treated intraperitoneally with olanzapine

Vitor Manuel da Silva Ferreira

Instituto de Investigaciones Biomédicas "Alberto Sols", Madrid

14:00 LUNCH

15:00-17:00 SESSION 3

Chairs:

Alejandro José Laguna

Instituto Universitario de Automática e Informática Industrial, Valencia

Olga Simó

Hospital Vall d'Hebron, Vall d'Hebron Research Institute (VHIR), Barcelona

15:00 Antioxidant effects of DPP-4 inhibitors in early stages of experimental diabetic retinopathy

Hugo Ramos

Fundación Hospital Universitario Vall d'Hebron - Institut de Recerca (VHIR); Hospital Universitario Vall d'Hebron

15:30 New clues to the genesis of hyperglucagonemia: insulin-degrading enzyme

Beatriz Merino

Instituto de Biología y Genética Molecular (IBGM), Valladolid

16:00 Mitochondrial dynamics as a hub in the control of muscle inflammation

Andrea Irazoqui

Universidad de Copenhague, Copenhague, Dinamarca

16:30 Insulin resistance: crosstalk between sarcopenic obesity and cognitive impairment

Andreea Ciudin

Hospital Universitari Vall d'Hebron, Barcelona

17:00 KEYNOTE LECTURE

How does the brain know what you've eaten?

Cristina García Cáceres

Institute for Diabetes and Obesity, Helmholtz Diabetes Center, Helmholtz Zentrum München, German Research Center for Environmental Health (GmbH), Neuherberg, Germany; German Center for Diabetes Research (DZD), Neuherberg, Germany; Medizinische Klinik and Poliklinik IV, Klinikum der Universität, Ludwig-Maximilians-Universität München, Munich, Germany

Chair:

Clara Meana

Instituto de Biología y Genética Molecular, Consejo Superior de Investigaciones Científicas (CSIC), Universidad de Valladolid

17:45 CLOSING REMARKS

Clara Meana

Organizing committee coordinator

COFFEE

ANNUAL MEETING

Thursday, November 10th

9:00 OPENING AND WELCOME

Eduard Montanya
Scientific Director, CIBERDEM

SESSION 1

Chairs:

Francisco Blanco

Instituto de Investigación del Hospital de la Santa Cruz y San Pablo, Barcelona

Elisa Fernández Millán

Instituto de Ciencia y Tecnología de Alimentos y Nutrición (ICTAN), Consejo Superior de Investigaciones Científicas, Madrid

STATE OF THE ART LECTURE

What else can lipoproteins tell us about diabetes and its cardiovascular risk?

Josep Ribalta

Universitat Rovira i Virgili, Reus

ORAL PRESENTATION

9:45 OP1 Lipidomic profile and sex in subjects with diabetes mellitus. M. Barranco ^{1,9,10}, E. Castelblanco ², P. Quifer ^{1,3}, O. Yanes ^{3,4}, Joana Rossell ^{1,3}, Minerva Granado-Casas ^{1,3}, R. Weber ⁵, E. Ortega ^{6,7}, N. Alonso ^{3,8}, D. Mauricio ^{1,3,11}

¹ Sant Pau Biomedical Research Institute (IIB Sant Pau), Hospital de la Santa Creu i Sant Pau, Endocrinology and Nutrition, Barcelona; ² Department of Internal Medicine, Endocrinology, Metabolism and Lipid Research Division, Washington University School of Medicine, St Louis, MO, USA; ³ CIBERDEM, Barcelona; ⁴ Institute of Health Research Pere Virgili (IISPV) & University Pere i Virgili, Metabolomics Platform, Reus; ⁵ Phenome Centre Birmingham and School of Biosciences, University of Birmingham, Bioinformatics, Birmingham, UK; ⁶ Institut d'Investigacions Biomèdiques August Pi i Suñer, Hospital Clinic, Endocrinology and Nutrition, Barcelona; ⁷ CIBEROBN, Madrid; ⁸ Institute for Health Science Research Germans Trias i Pujol (IGTP), University Hospital and Health Research Institute Germans Trias i Pujol, Endocrinology and Nutrition, Badalona; ⁹ B2SLab, Departament d'Enginyeria de Sistemes, Automàtica i Informàtica Industrial, Universitat Politècnica de Catalunya, Barcelona; ¹⁰ CIBER-BBN, Madrid; ¹¹ Faculty of Medicine, University of Vic (UVIC/UCC), Vic, Barcelona

10:00 OP2 Mediation effect of diabetes in the age-related metabolic and lipoprotein changes. Pere Rehues ^{1,2}, Montse Guardiola ^{1,2}, Joan-Carles Vallvé ^{1,2}, Roger Mallol ³, Josep Ribalta ^{1,2}

¹ Research Unit on Lipids and Atherosclerosis, Rovira i Virgili University, IISPV, Reus; ² CIBERDEM, Madrid; ³ La Salle, Ramon Llull University, Barcelona

10:15 OP3 Sex-divergent adaptations to a metabolic challenge in mice. Vicent Ribas ^{1,2}, Samantha Morón Ros ^{1,2}, Helena Marí de Nova ¹, Laura Brugnara ^{1,2}, Anna Novials ^{1,2}, Joan-Marc Servitja ^{1,2}

¹ Pathogenesis and Prevention of Diabetes Research Group, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona; ² CIBERDEM

10:30 OP4 Proinflammatory effects of PCSK9 and lipoprotein-A on polarized macrophages under diabetic conditions. Cristina Espadas ¹, Ghassik Munter ¹, José Tuñón ², Jesús Egido ¹, Óscar Lorenzo ¹

¹ Laboratory of Diabetes and Vascular Pathology. IIS-Fundación Jiménez Díaz, Universidad Autónoma, Madrid; ² Cardiology Departament. Fundación Jiménez Díaz, Universidad Autónoma, Madrid

10:45 OP5 Extra virgin olive oil polyphenols and antioxidant and inflammatory status in pre-diabetic obese patients. The APRIL study: a randomized, controlled, crossover study. Ignacio Ruiz-García ^{1,2}, Silvana-Yanina Romero-Zerbo ^{1,2,3}, Rocío Badía ^{1,2}, Aranzazu García-Borrego ⁴, María García-Fernández ³, Estrella Lara ³, Rodolfo Ortíz-Flores ^{1,2,3}, Isabel González-Mariscal ^{1,2}, Montserrat Gonzalo ^{1,2}, María-José Tapia-Guerrero ^{1,2}, Rajaa El-Bekay ^{1,2}, Sergio Valdés ^{1,2}, María-Isabel Covas ⁵, Gemma Rojo-Martínez ^{1,2}, Gabriel Olveira ^{1,2,3}, Francisco-Javier Bermudez-Silva ^{1,2}

¹ Hospital Regional de Málaga, Málaga; ² Instituto de Investigación Biomédica de Málaga (IBIMA), Málaga; ³ Universidad de Málaga, Málaga; ⁴ Instituto de la Grasa - CSIC, Sevilla; ⁵ Nuproas HB, Stockholm, Sweden

11:15 COFFE BREAK

11:45-14:00 SESSION 2

Chairs:

Diego Balboa

Centro de Regulación Genómica (CRG), Barcelona

Irene Cózar

Instituto de Biología y Genética Molecular (IBGM). Universidad de Valladolid-CSIC

STATE OF THE ART LECTURE

Resveratrol and NAD⁺ modulators as potential treatments in type 2 diabetes mellitus

Carlos Guillén

Universidad Complutense de Madrid

ORAL PRESENTATION

12:15 OP6 Genetic causes of young onset non-obese non-autoimmune diabetes. Sílvia Bonàs-Guarch^{1,2,3}, Claire C Morgan,^{1,2,3} Vahid Elyasigomari³, Santosh S Atanu^{r3}, Diego Balboa¹, Veronica Erconi¹, Jesús Blanco⁴, Marisol Ruiz-Adana⁵, Pal R Njølstad^{6,7}, Ángel Campos-Barros^{8,9}, DecodeDiabetes Consortium, Torben Hansen¹⁰, Rosa Martinez^{11,12}, Cécile Saint-Martin^{13,14}, Luis Castaño^{11,12}, Christine Bellanne-Chantelot^{13,14,15}, Jorge Ferrer^{1,2,3}

¹ Centre for Genomic Regulation, The Barcelona Institute of Science and Technology, Barcelona; ² CIBERDEM; ³ Department of Metabolism, Digestion and Reproduction, Imperial College London, London, UK; ⁴ Diabetes Unit, Endocrinology and Nutrition Department, ICMDM, Hospital Clínic de Barcelona; IDIBAPS, Barcelona; ⁵ Endocrinology and Nutrition Department, Hospital Regional Universitario Carlos Haya, Málaga; ⁶ Department of Clinical Science, Center for Diabetes Research, University of Bergen, Bergen, Norway; ⁷ Division of Mental Health and Addiction, NORMENT, Oslo University Hospital, Oslo, Norway; ⁸ Institute of Medical and Molecular Genetics (INGEMM), IdiPAZ, Hospital Universitario La Paz, UAM, Madrid; ⁹ CIBERER, ISCIII, Madrid; ¹⁰ Novo Nordisk Foundation Center for Basic Metabolic Research, Faculty of Health and Medical Sciences, University of Copenhagen, Copenhagen, Denmark; ¹¹ Biocruces Bizkaia Health Research Institute, Cruces University Hospital, University of the Basque Country UPV/EHU, Leioa, Bizkaia; ¹² CIBERDEM; CIBERER, Instituto de Salud Carlos III, Madrid; ¹³ PRISIS National Reference Center for Rare Diseases of Insulin Secretion and Insulin Sensitivity, Department of Endocrinology, Diabetology and Reproductive Endocrinology, Assistance Publique-Hôpitaux de Paris, Saint-Antoine University Hospital, Paris, France; ¹⁴ Department of Diabetology, Sorbonne Université, AP-HP, Pitié-Salpêtrière Hospital, Paris, France; ¹⁵ Department of Medical Genetics, Sorbonne Université, AP-HP, Pitié-Salpêtrière Hospital, DMU BioGeM, Paris, France

12:30 OP7 LncRNA-encoded micropeptides in pancreatic beta cells: their potential role in T1D pathogenesis. Jon Mentxaka-Salgado^{1,2}, Koldo Garcia-Etxebarria³, Izortze Santin^{1,2,4}

¹ Department of Biochemistry and Molecular Biology, University of the Basque Country, Leioa, Bizkaia; ² Biocruces Bizkaia Health Research Institute, Barakaldo, Bizkaia; ³ Department of Gastrointestinal and Liver Diseases, Biodonostia Health Research Institute, San Sebastian; ⁴ CIBERDEM, Madrid

12:45 OP8 Insulin-degrading enzyme role on paracrine signaling in the islets of Langerhans. Beatriz Merino, Elena Casanueva-Alvarez, Alba Sanz-González, Jesús Balsinde, Germán Perdomo, Irene Cozar-Castellano.

Instituto de Biología y Genética Molecular (IBGM). Universidad de Valladolid-CSIC

13:00 OP9 Loss of β -cell identity and endoplasmic reticulum stress in human islets treated with glibenclamide. Claudia. Fernández^{1,2,3}, Noelia. Téllez^{5,6}, Kevin Rivera^{1,2}, Montserrat. Nacher^{1,2,4}, Eduard. Montanya^{1,2,3,4}

¹ CIBERDEM; ² Bellvitge Biomedical Research Institute, IDIBELL; ³ University of Barcelona; ⁴ Endocrine Unit, Hospital Universitari Bellvitge, Barcelona; ⁵ Faculty of Medicine, UVic-UCC; ⁶ Institute of health research and innovation (IRIS-CC)

13:15 OP10 Protective effects of a flavonoids-enriched diet against β -cell damage in an animal model of Type 2 Diabetes. Tamara Fernández-Marcelo ¹, Elisa Fernández-Millán ^{1,2}, Laura Barajas-Mascaraque ², Fernando Escrivá ^{1,2}, Carmen Álvarez ^{1,2}, Sonia Ramos ^{1,3}, María Ángeles Martín ^{1,3}

¹ CIBERDEM, ISCIII, Madrid; ² Department of Biochemistry and Molecular Biology, Faculty of Pharmacy, Complutense University of Madrid, Madrid; ³ Department of Metabolism and Nutrition, Institute of Food Science, Technology and Nutrition (ICTAN), Consejo Superior de Investigaciones Científicas (CSIC), Madrid

13:30 OP11 Gene therapy for maturity-onset diabetes of the young type 3 (MODY3). Estefania Casaña, V Jimenez, M Garcia, A Casellas, M Morró, A Pujol, T Ferré, V Sacristan, C Jambrina, M Perea, X León, L Vila, S Franckhauser and F Bosch. Center of Animal Biotechnology and Gene Therapy (CBATEG), Department of Biochemistry and Molecular Biology, Universitat Autònoma de Barcelona, Bellaterra; CIBERDEM, Madrid

14:00 LUNCH

15:00–16:00 POSTER SESSION

16:00-18:00 SESSION 3

INVITED LECTURE

The actions of the mitochondrial biliverdin transporter ABCB10 on beta-cell redox promote insulin resistance

Marc Liesa

Molecular Biology Institute of Barcelona- Spanish National Research Council (IBMB-CSIC), Department of Cell Biology, Barcelona Science Park

Chairs:

Joan Marc Servitja

Instituto de Investigaciones Biomédicas August Pi i Sunyer, Barcelona

Antonio Zorzano

Fundación privada Instituto de Recerca Biomédica (IRB-Barcelona)

ORAL PRESENTATION

16:45 OP12 Pharmacological inhibition of the ATP-citrate lyase alters mitochondrial function and gluco-regulation. Alejandro Sola-García ¹, María Ángeles Cáliz-Molina ¹, Isabel Espadas-Villanueva ¹, Daniel González-Morán ¹, Inmaculada Pino-Pérez ¹, Franz Martin ^{1,2}, Vivian Capilla-González ¹, Alejandro Martín-Montalvo ²

¹ Andalusian Center for Molecular Biology and Regenerative Medicine-CABIMER, Junta de Andalucía-University of Pablo de Olavide-University of Seville-CSIC, Seville; ² CIBERDEM, Madrid

17:00 OP13 Role of mitochondrial dynamics and mitophagy in the adaptive thermogenesis in BATIGFIRKO mice. Beatriz Jiménez; García G.; Marqués P.; González C.; Burillo J; Guillén C. and Benito M

Diabetes and Obesity Group, Biochemistry and Molecular Biology Department; Pharmacy School, UCM

17:15 OP14 FTY720 a sphingosine phosphate derivative increases the mitochondrial function. Juan Pablo Muñoz ^{1,4}, Elena María Goretti Diarte ¹, Antonio Zorzano ^{2,3,4}, Francisco Blanco ^{1,4}, Josep Julve ^{1,4}

¹ Institut d'Investigacions Biomèdiques (IIB) Sant Pau, Barcelona; ² Institute for Research in Biomedicine (IRB Barcelona), Barcelona;

³ Departament de Bioquímica i Biologia Molecular, Facultat de Biologia, Universitat de Barcelona, Barcelona; ⁴ CIBERDEM, Instituto de Salud Carlos III

17:30 OP15 Activation of muscle autophagy prevents sarcopenia and promotes metabolic health during aging. David Sebastián^{1,2,3*}, Andrea Irazoki^{1,3,4}, David Sala^{1,3,4}, Pilar Aparicio⁵, Cecilia Aris⁶, Esmail Alibakhshi^{7,8,9}, Maria Rubio-Valera^{10,11}, Manuel Palacín^{1,3,12}, Juan Castellanos⁵, Luis Lores⁷, Antonio Zorzano^{1,3,4*}

¹ Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, Barcelona; ² Departament de Bioquímica i Fisiologia, Facultat de Farmàcia i Ciències de l'Alimentació, Universitat de Barcelona; ³ CIBERDEM, Instituto de Salud Carlos III, Madrid; ⁴ Departament de Bioquímica i Biomedicina Molecular, Facultat de Biologia, Universitat de Barcelona; ⁵ Department of Orthopedic Surgery and Traumatology, Hospital de Sant Boi Sant Joan de Déu, Sant Boi de Llobregat, Barcelona; ⁶ Department of Family and Community Medicine, Hospital de Sant Boi Sant Joan de Déu, Sant Boi de Llobregat, Barcelona; ⁷ Pneumology Department, Hospital de Sant Boi Sant Joan de Déu, Sant Boi de Llobregat, Barcelona; ⁸ Physical Medicine and Rehabilitation Department, Clinical Research Development Unit, Baqiyatallah Hospital, Faculty of Medicine, Baqiyatallah University of Medical Science, Tehran, Iran; ⁹ Quantitative MR Imaging and Spectroscopy Group, Research Center for Molecular and Cellular Imaging, Advanced Medical Technologies and Equipment Institute, Tehran University of Medical Science, Tehran, Iran; ¹⁰ Quality and Patient Safety Unit, Hospital de Sant Boi Sant Joan de Déu, Sant Boi de Llobregat, Barcelona; ¹¹ CIBERESP, Instituto de Salud Carlos III, Madrid; ¹² CIBERER, Instituto de Salud Carlos III, Madrid

18:00 POSTER SESSION & REFRESHMENTS

19:00 PIs MEETING

21:00 DINNER

9:00 INVITED LECTURE

How can a “Responsible Research and Innovation” approach help to increase the impact of our research?

Rosina Malagrida

Head of the Living Lab for Health at IrsiCaixa, co-coordinator of the Barcelona CaixaResearch Living Lab, Badalona

Chair:

Eduard Montanya

Scientific Director, CIBERDEM

9:45 SESSION 4

ORAL PRESENTATION

Chairs:

Maria Isabel Hernández Alvarez

Fundación privada Instituto de Recerca Biomédica (IRB-Barcelona), Universidad de Barcelona, Barcelona

Franz Martin

Universidad Pablo de Olavide, Sevilla

9:45 OP16 Transcriptomic analysis reveals that retinal neuromodulation is the main underlying mechanism of the neuroprotective effect of sitagliptin in diabetic retina. Hugo Ramos^{1,2}, Patricia Bogdanov^{1,2}, Jordi Huerta¹, Anna Deàs-Just¹, Cristina Hernández^{1,2,3}, Rafael Simó^{1,2,3}

¹ Diabetes and Metabolism Research Unit, Vall d'Hebron Research Institute (VHIR), Barcelona; ² CIBERDEM, Instituto de Salud Carlos III (ICSIII), Madrid; ³ Department of Medicine, Universitat Autònoma de Barcelona, Barcelona

10:00 OP17 Characterization of glycaemic patterns in type 1 diabetes without insulin and meal data: towards new analytical and predictive tools for CGM users. Juan David Hoyos Giraldo¹, Alfonso Renato Carpintero Soares¹, Alejandro José Laguna Sanz^{1,2}, José Luis Díez Ruano^{1,2}, Jorge Bondia Company^{1,2}.

¹ Instituto de Automática e Informática Industrial, Universitat Politècnica de València; ² CIBERDEM, Instituto de Salud Carlos III

10:15 OP18 The VISIONING project: the perfect tool for the assessment of COVID19 prognostic of diabetic patients. Núria Amigó^{1,2,3,4}, Lydia Cabau^{1,4}, Neus Rodríguez^{1,2,4}, Daniel Rodríguez⁴, Carla Merino^{1,4}, Sara Samino^{1,3,4}, Anna Martí^{1,6}, Joaquim Peraire^{1,2,5,6}, Anna Rull^{1,2,5,6}, Francesc Vidal^{1,2,5,6}, Teresa Auguet^{1,2,6}, Núria Alonso⁷, Maria Doladé⁸, Eduarne Pedrosa⁹, Manel Puig^{7,9}, Julia G. Prado^{5,9,10}, Xavier Correig^{1,2,3}

¹ Institut Investigació Sanitària Pere Virgili (IISPV), Tarragona; ² Universitat Rovira i Virgili, Tarragona; ³ CIBERDEM, Instituto de Salud Carlos III (ICSIII), Madrid; ⁴ Biosfer Teslab, S.L. Reus; ⁵ CIBERINFEC, Instituto de Salud Carlos III (ICSIII), Madrid; ⁶ Hospital Universitari de Tarragona Joan XXIII, Tarragona; ⁷ Servei d'Endocrinologia i Nutrició, Hospital Germans Trias i Pujol, Badalona; ⁸ Servei d'Anàlisis Clínics i Bioquímica, Laboratori Clínic de la Metropolitana Nord, Hospital Germans Trias i Pujol, Badalona; ⁹ Institut d'Investigació Germans Trias i Pujol (IGTP), Badalona; ¹⁰ AIDS Research Institute IrsiCaixa, Badalona

10:30 OP19 Validation of circulating microRNAs in polycystic ovary syndrome (PCOS) diagnosis. María Insenser, Alejandra Quintero, Sara de Lope, Francisco Álvarez-Blasco, M. Ángeles Martínez-García, Manuel Luque-Ramírez, and Héctor F. Escobar-Morreale

Diabetes Obesity and Human Reproduction Research Group, Department of Endocrinology & Nutrition, Hospital Universitario Ramón y Cajal; Universidad de Alcalá, Instituto Ramón y Cajal de Investigación Sanitaria (IRYCIS); CIBERDEM, Madrid

10:45 OP20 Molecular disarrangements in Parkinson's disease-related nigrostriatal neurons induced by diabetes in mice. Paula Pereira, Mario Vallejo

Instituto de Investigaciones Biomédicas Alberto Sols, CSIC/Universidad Autónoma de Madrid; CIBERDEM

11:00-11:30 COFFE BREAK

11:30-13:15 SESSION 5

Chairs:

Irma García

Instituto de Investigaciones Biomédicas "Alberto Sols", Madrid

Joan Vendrell

Fundación Instituto de Investigación Sanitaria Pere Virgili, Tarragona

STATE OF THE ART LECTURE

Dietary flavonoids as multitarget agents in the management of type 2 diabetes and its associated complications

M^a Angeles Martín Arribas

Department of Metabolism and Nutrition, Institute of Food Science and Technology and Nutrition (ICTAN), Consejo Superior de Investigaciones Científicas (CSIC), Madrid

ORAL PRESENTATION

12:00 OP21 GDF15 regulates hepatic gluconeogenesis and AMPK activation. Javier Jurado Aguilar^{1,2,3}, Maribel Bernard^{1,2,3}, Emma Barroso^{1,2,3}, Patricia Rada^{2,4}, Ángela M. Valverde^{2,4}, Xavier Palomer^{1,2,3}, Manuel Vázquez-Carrera^{1,2,3}.

¹ Department of Pharmacology, Toxicology and Therapeutic Chemistry, Faculty of Pharmacy and Food Sciences and Institute of Biomedicine of the University of Barcelona (IBUB), University of Barcelona, Barcelona; ² CIBERDEM-Instituto de Salud Carlos III, Madrid;

³ Pediatric Research Institute-Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona; ⁴ Instituto de Investigaciones Biomédicas Alberto Sols (CSIC/UAM), Madrid

12:15 OP22 Targeting the IRS2/FGF7-axis to promote fibrosis regression and hepatic wound healing? María José Arámbul-Anthony¹, Alicia Armero Catalá¹, Amparo Galan Albiñana^{1,3}, Arantxa Leal Tassias¹, Marcos Agustina Hernández¹, Angela M. Valverde^{2,3}, Deborah J. Burks^{1,3}, Luke A. Noon^{1,3}

¹ Centro de Investigación Príncipe Felipe (CIPF), Valencia; ² Instituto de investigaciones Biomédicas Alberto Sols (CSIC-UAM), Madrid; ³ CIBERDEM

12:30 OP23 Sucnr1 deficiency alleviates fibrosis but worsens hepatic steatosis and glycogen storage in diet-induced NASH. Anna Marsal-Beltran^{1,2}, Ceperuelo-Mallafré V^{1,2,3}, Rodríguez-Castellano A¹, Calvo E^{1,2}, Madeira A^{1,2}, Núñez-Roa C^{1,2}, Rodríguez-Peña MM^{1,2}, Astiarraga B^{1,3}, Rada P^{2,4}, Pardo A¹, Valverde A^{2,4}, Vendrell J^{1,2,3}, Fernández-Veledo S^{1,2}

¹ Research Unit. University Hospital of Tarragona Joan XXIII, Pere Virgili Health Research Institute (IISPV), Tarragona; Gastroenterology Department, University Hospital Joan XXIII, Tarragona; ² CIBERDEM, Instituto de Salud Carlos III, Madrid; ³ Rovira i Virgili University, Tarragona; ⁴ Alberto Sols Biomedical Research Institute (CSIC/UAM), Madrid.

12:45 OP24 Intrahepatic Expression of Fatty Acid Translocase CD36 Is Increased in Obstructive Sleep Apnea. Esther Rey¹, Elvira del Pozo-Maroto¹, Patricia Marañón¹, Carmelo García-Monzón¹, Isaac Almendros², Águeda González-Rodríguez³

¹ Unidad de Investigación, Hospital Universitario Santa Cristina, Instituto de Investigación Sanitaria Hospital Universitario de La Princesa, Madrid; ² Unitat de Biofísica i Bioenginyeria, Facultat de Medicina i Ciències de la Salut, Universitat de Barcelona, CIBERES, IDIBAPS, Barcelona; ³ Instituto de Investigaciones Biomédicas "Alberto Sols" (CSIC-UAM), CIBERDEM, Madrid

13:00-13:15 POSTER AWARDS

Chair:

Águeda González

Instituto de Investigaciones Biomédicas "Alberto Sols" (CSIC-UAM), Madrid

13:15 CLOSING REMARKS

LUNCH

