Diabetes in the Knowledge Frontier
7 de octubre, Madrid
Ateneo Científico y Literario de Madrid
Calle del Prado, 21

LA DIABETES
A DEBATE 2017

Ciberdem
Centro de Investigación Biomédica en Red
Diabetes y Enfermedades Metabólicas Asociadas

MSD
AGENDA

10:30-11:00  Welcome coffee

11:00-11:15  WELCOME
  Dr. Eduard Montanya  
  Scientific Director, CIBERDEM.  
  Endocrinology & Nutrition Service, Hospital de Bellvitge, Barcelona.

11:15-13:00  AGING & DIABETES
  CHAIR: Dr. Eduard Montanya

  AGING AND SKELETAL MUSCLE
  Dr. Antonio Zorzano  
  CIBERDEM Investigator.  
  Coordinator of the Molecular Medicine Programme, IRB, Barcelona.

  AGING AND BETA-CELL
  Dr. Yuval Dor  
  Hebrew University of Jerusalem, School of Medicine,  
  Department of Developmental Biology and Cancer Research, Israel.

  FRAILTY AND AGING IN THE DIABETIC PATIENT: CLINICAL ASPECTS
  Dr. Leocadio Rodríguez-Mañas  
  CIBERFES Director.  
  Head of the Department of Geriatrics, Hospital Universitario de Getafe, Madrid.
13:00-14:00  **LUNCH**

14:00-14:45  **MSD & DIABETES**
**CHAIR:** Dr. Ramon Gomis
*CIBERDEM Investigator.*
*Endocrinology & Nutrition Service, Hospital Universitari Clínic, Barcelona.*

**ORIGINS AND POSSIBLE FUTURE IMPACT OF THE DPP4I THERAPEUTIC CLASS IN THE TREATMENT OF TYPE 2 DIABETES**

**Dr. Richard Carr**
*Regional Director Medical Affairs Europe & Canada MSD.*

14:45-16:00  **NASH IN DIABETES CONTEXT**
**CHAIR:** Dr. Rafael Simó
*CIBERDEM Investigator.*
*Endocrinology & Nutrition Service, Hospital Universitario Vall d’Hebron, Barcelona.*

**MECHANISMS INVOLVED IN THE DEVELOPMENT OF NASH IN DIABETES**

**Dra. Ángela María Martínez-Valverde**
*CIBERDEM Investigator.*
*Instituto de Investigaciones Biomédicas Alberto Sols, Madrid.*

**DIAGNOSIS AND THERAPEUTIC MANAGEMENT OF NASH**

**Dr. Juan Caballeria**
*CIBEREHD Investigator.*
*Hepatology Service, Hospital Universitari Clínic, Barcelona.*

16:00-16:15  **WRAP UP**

**Dr. Eduard Montanya**
Eduard Montanya, MD, PhD

Professor at the Faculty of Medicine of the University of Barcelona, Chief of the Diabetes Section at the University Hospital of Bellvitge, and coordinator of the Diabetes & Metabolism research group at IDIBELL (Instituto de Investigación Biomédica de Bellvitge). His research interest is focused on pancreatic islet cells, particularly in the function and regeneration of insulin producing β cells, cell therapy of diabetes including islet cell transplantation and new pharmacologic treatments for diabetes. Prof. Montanya has authored over 150 scientific articles and book chapters, and has collaborated as scientific advisor of several key leader research institutions at national and international level such as the Juvenile Diabetes Research Foundation and the European Foundation for the Study of Diabetes. Moreover, he has served as reviewer for the most important scientific societies and journals in the field of diabetes. Prof. Montanya was granted a Fulbright Fellowship to perform his postdoctoral at Harvard, has received the Mary Jane Kugel Award, and has been distinguished with the E. Lilly research award and more recently the VI Alberto Sols Award of senior basic research by SED (Sociedad Española de Diabetes) foundation. Simultaneously, he has been coordinator of the pancreatic islets group of the SED and president of the Asociació Catalana de Diabetis. He is currently secretary of the pancreatic islets group of the EASD, president of the diabetes advisory board of Catalonia and scientific director of CIBERDEM (Centro de Investigación Biomédica en Red de Diabetes y Enfermedades Metabólicas Asociadas).

Ramon Gomis, MD, PhD

Director of IDIBAPS (Institut d’Investigacions Biomèdiques August Pi i Sunyer), university professor of endocrinology at the University of Barcelona, senior advisor at the Clínic Hospital in Barcelona and fellow of the Academy of Europe. He has also been director of the Fundació Clínic per la Recerca Biomèdica and scientific director of CIBERDEM. Prof. Gomis has focused his clinical and fundamental research in diabetes and obesity, leading his own group at IDIBAPS-Hospital Clínic. Moreover, he has been principal investigator of research projects funded by national and international public and private entities since the very beginning of his professional career. As a result of his research work, he has published more than 300 original articles in the most prestigious scientific journals and owns the exploitation rights of 4 patents related to obesity, Alzheimer’s disease, hemostasis and diagnostic methods of type 2 diabetes mellitus. Additionally, he has written 21 book chapters for medical students and has directed over 30 doctoral thesis. Prof. Gomis is also past president of the SED, and member of the EASD council and the European Union of Medical Specialists. He has participated in several government commissions, editorial committees and has also been evaluator of research projects for national and international agencies. Among the many awards he has been granted, the following stand out: the Creu de Sant Jordi, the Narcís Monturiol medal to the scientific and technologic merit and the Premi Nacional de Recerca by the regional government of Catalonia. Finally, he has also been conferred the Clinical Research Award of the Lilly Foundation and the Basic Diabetes Research Award of the SED.

Rafael Simó, MD, PhD

Director of the Diabetes & Metabolism research group at the Instituto de Investigación Hospital Universitario Vall d’Hebron in Barcelona, chief of section in the Endocrinology Service of the university hospital Vall D’Hebron and professor of medicine and endocrinology in the UAB (Universitat Autònoma de Barcelona). His group belongs to two national research networks of excellence: CIBERDEM and RECAVA (Red de Enfermedades Cardiovasculares). Prof. Simó has published more than 15 book chapters and 150 scientific articles related to diabetes in high impact factor journals. He is coordinator of the European projects EUROCONDOR (European Consortium for the Early Treatment of Diabetic Retinopathy) and HEALTH-FP7-278040, and is vice chair of the EASD-eye complications. Thanks to his contribution to the knowledge of diabetic complications pathophysiology (especially regarding diabetic retinopathy), Prof. Simó is considered a widely and internationally recognized opinion leader. Proof of that are the many awards he has received, including the Rodríguez Miñón Prize, the SEEN (Sociedad Española de Endocrinología) Award to the Trajectory of a Group and the Dr. Josep Trueta Award of the Academy of Medical Sciences of Catalonia and Balearics for his work in the advance in biomedical research.
**Yuval Dor, PhD**

Professor at the Department of Developmental Biology and Cancer Research, at The Hebrew University-Hadassah Medical School. He has earned his PhD in molecular vascular biology at the Hebrew University in 2001. He then moved to Harvard University and trained with Doug Melton until 2004, when he returned to Israel to establish his independent group at the Hebrew University. His lab is studying tissue dynamics during postnatal life: the molecular mechanisms by which cell regenerate and die. Much of his work focuses on pancreatic beta cell biology in the context of diabetes, as well as on pancreatic cancer. In recent years he has developed a novel method to study cell death in humans, using methylation signatures of DNA circulating in blood after being released from dying cells. Using this method he was able to monitor in real time cell death in multiple pathologies, opening the way to both early diagnosis and monitoring of disease progression and response to therapy. Professor Dor discovered with his research team that adult beta-cell mass expansion is driven by beta-cell replication, and it is not the result of activation of resident stem cells. His research group has uncovered how aging and senescence affect beta-cell replication and function, and how metabolic load drives beta cell regeneration and failure, including the observation that beta cells in diabetes suffer from double stranded DNA breaks. Professor Dor has received several awards due to his research, including the Krill (Wolf) Prize for junior faculty, from Wolf foundation (2008), the Wolfson prize, from Israel Diabetes Association (2008), the Grodsky award for outstanding contributions to diabetes research, from Juvenile Diabetes Research Foundation (JDRF) in 2010, the Bruno award, from Yad Hanadiv (2012), the Abisch-Frenkel award (2013), the Teva founders research award (2014) and the Kaye Innovation award, from Hebrew University in 2017. He has more than 80 articles published in peer-review journals (more than 13,500 citations), with key discoveries published in leading journals, and an h-index of 48 (Google Scholar).

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**Antonio Zorzano, PhD**

Full professor of Biochemistry and Molecular Biology at the University of Barcelona, Coordinator of the Molecular Medicine Programme at the IRB Barcelona, and Programme Coordinator at CIBERDEM. Professor Zorzano received his PhD in Biology at the University of Barcelona, and did postdoctoral studies with Emilio Herrera (Hospital Ramon y Cajal, Madrid), Neil Ruderman (Boston University Medical Center), and Paul Pilch (Boston University Medical School). He was Visiting Professor at Boston University Medical School (1992). Professor Zorzano received the Boehringer Award from the Spanish Biochemical Society in 1991, the Young Investigator Lilly Award of the Spanish Society of Diabetes in 1992, and the Research Award from the Autonomous Government of Catalonia (Generalitat de Catalunya) in 2001. Other awards received by professor Zorzano are: UB Award to Special Dedication to Research (2008-10), Alberto Sols Senior Investigator Award for Basic Sciences of the Spanish Society of Diabetes (2011), and ICREA Academia Award (2013). Furthermore, he has supervised 35 Ph.D. theses, and has coordinated international consortia funded by different European agencies. Professor Zorzano is co-inventor of 21 patents, and has published over 270 scientific articles (more than 21,300 citations), with key discoveries published in leading journals, and an h-index of 73 (Google Scholar). He has been founder of biotechnological companies in Spain and in UK. Professor Zorzano’s research focuses on the regulation of metabolism and its interplay with insulin resistance, obesity and type 2 diabetes. His current interest links metabolism with mitochondrial dynamics, mitochondrial function, autophagy, and mitochondrial stress. A global goal of his group is to identify and validate molecular targets that permit the prevention or treatment of insulin resistance, type 2 diabetes or obesity by using cell-based systems, genetically modified mice, and translational approaches.
**Leocadio Rodríguez-Mañas, MD, PhD**

Expert in Geriatrics, Head of the Geriatrics Service of the University Hospital of Getafe (Madrid) and professor of Geriatrics at the Faculty of Health Sciences of the European University, in Madrid. He is also coordinator of the CIBER Frailty and Healthy Aging-CIBERFES from Carlos III Health Institute and co-director at Toledo Study on Healthy Aging-ETES (Toledo Study on Healthy Aging-TSHA). Professor Rodríguez-Mañas have the role of principal investigator in several research projects receiving either public and private funding, including European Union-funded projects, all these projects were focused on different aspects of frailty, its diagnosis, prevention and treatment, as well as their link with diabetes. Some examples of these projects are: FOD-CC, aimed to find a clinical definition of frailty; MID-FRAIL to test the efficacy of a multimodal intervention in prefrail/frail older patients with type 2 diabetes; FRAILOMIC with the aim of knowing the usefulness of “omics” in the diagnostic and prognosis of frailty; FRAILCLINIC to assess the effectiveness of a liaison geriatric team in the management of frail older patients admitted to the Hospital out of the Geriatric Department and FRAILTOOLS to assess the performance of the most used diagnostic tools of frailty in different clinical settings. Professor Rodríguez-Mañas has published about 200 articles in peer-review journals and is the author of books and book chapters focused on frailty and diabetes. He has participated and is currently participating in the preparation of technical reports on different aspects of aging, frailty and diabetes in the elderly for regional, national (i.e. Ministry of Health, Scientific Societies, Research Agencies) and international organizations (i.e. WHO, PAHO, DG-SANCO, DG-Research, IAGG).

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**Richard Carr, MD, PhD**

Richard Carr received his Ph.D. from the University of Sheffield; UK in 1979 and 1984 respectively. After 14 years working within drug discovery at Novo Nordisk, rising to the position of Scientific Vice President, Richard moved to MSD (known as Merck Inc in the USA) in May 2007. He is currently the Regional Director of Medical Affairs for Europe and Canada and Director, Clinical Science Liaison within Diabetes and related fields. He is also a honourary senior lecturer at University College, London. Richard’s research interests are in metabolic and cardiovascular disease, with particular interests in rational drug design, and currently focus upon the endocrinology of food intake and the cardiovascular properties of glucagon-like peptide 1. Richard was responsible for the initial proppsal and identification of the DPP4 inhibitor approach to treat type 2 diabetes. Richard has co-authored over 75 original peer-reviewed publications.
Angela María Martínez-Valverde, PhD

Full researcher at Instituto de Investigaciones Biomédicas Alberto Sols of CSIC (Consejo Superior de Investigaciones Científicas) & UAM (Universidad Autónoma de Madrid) and Associate Professor in the Department of Biochemistry and Molecular Biology at Universidad Complutense de Madrid. Professor Martínez-Valverde is a CIBERDEM member since 2008. She earned her PhD in Biochemistry and Molecular Biology, receiving an extraordinary award from the Universidad Complutense de Madrid, in 1991. Her main research areas include insulin resistance and its signaling pathways, type 2 diabetes, inflammation and hepatic damage. Ángela’s research team has recently revealed the therapeutic efficacy of G49 peptide in animal models of hepatic steatosis and non-alcoholic steatohepatitis. The research, published in the journal Hepatology, analyzed the therapeutic effects of peptide G49, a dual agonist of GLP-1 and glucagon receptors, in two models of non-alcoholic fatty liver disease (NAFLD): liver steatosis and non-alcoholic steatohepatitis. Professor Martínez-Valverde has published more than 100 articles in peer-review journals and has directed more than 10 PhD theses in the last 10 years.

Juan Caballeria, MD, PhD

Doctor of Medicine and Surgery, senior consultant of the Hepatology Service of University Hospital Clínic, in Barcelona and Teaching Coordinator at CIBEREHD (Center of Biomedical Research of Liver and Digestive Diseases), from Carlos III Health Institute. All his scientific and clinical activity has been developed in the Hepatology Service at University Hospital Clinic, in Barcelona and has focused on the study of alcoholic liver disease. In recent years, professor Caballeria also have been focusing his research on liver disease by fat deposition. From 1986 to 1987, professor Caballeria held a postdoctoral fellowship at the Alcohol Research and Treatment Center at Bronx VA Medical Center, in New York, associated with the Mount Sinai School of Medicine. His research activity includes basic research, with experimental models, and clinical research, with patients, in order to cover the pathophysiological, clinical and therapeutic aspects of liver disease. Furthermore, professor Caballeria is member of research groups from IDIBAPS (Institut d’Investigacions Biomèdiques August Pi i Sunyer) and CIBEREHD (Center of Biomedical Research of Liver and Digestive Diseases). He has been principal investigator and / or collaborator of competitive projects in the last 25 years. As a result of his intense research and clinical activity, professor Caballeria has published 140 original articles in indexed journals, apart from numerous reviews and book chapters.