

CURRICULUM VITAE

Name: **Antonio Vidal-Puig**
Address: University of Cambridge Metabolic Research Laboratories
Wellcome Trust-MRC Institute of Metabolic Science
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Current Appointment **Professor of Molecular Nutrition and Metabolism**

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<https://twitter.com/tvplab>
https://en.wikipedia.org/wiki/Antonio_Vidal-Puig

Education

1986 **M.D. degree.** Valencia University School of Medicine, Valencia, Spain. Magna Cum Laude
1992 **Ph.D. degree.** Granada University School of Medicine, Granada, Spain.
1992 **Endocrinology, Metabolism, Nutrition Specialist,** Spanish Ministry of Health
2008 **Fellow Royal College of Physicians (FRCP)**
2015 **Executive Master Business Administration (EMBA).** Judge Institute Business School. University of Cambridge

Professional History

October 2009-
Present Professor of Molecular Nutrition and Metabolism.
Associate Director MRC MDU.
Honorary Consultant Metabolic Medicine.
Scientific Director Cambridge Phenomics Centre.
Associate Faculty Wellcome Trust Sanger Institute.
Associate Research Scientist at Cambridge University Nanjing Centre of Technology and Innovation (CUNJC) Nanjing.

Honorary Professor University of Nanjing.
Principal Investigator at Principe Felipe Research Center (CIPF), Valencia.

- 2006- 2009** Reader in Metabolism and Biochemistry.
Honorary Consultant Metabolic Medicine.
Director of the Wellcome Trust Integrative Physiology Mouse Program.
Deputy Director CORD-MRL (Center for Obesity and Related Disorders).
Scientific Director Cambridge Phenomics Centre.
- 2003-2006** Lecturer in Clinical Biochemistry and Metabolic Medicine. Cambridge U.
Honorary Consultant Clinical Biochemistry and Metabolic Medicine.
Director of the Wellcome Trust Integrative Physiology Mouse Program.
- 1999-2002** Senior Research Associate. Departments of Clinical Biochemistry and Medicine.
Cambridge U. Honorary SpR Metabolic Medicine, Addenbrooke's Hospital.
- 1997-1999** Instructor. Department of Medicine, Beth Israel Deaconess Medical Center.
Harvard Medical School. Boston, MA USA (Boston Obesity Nutrition Career
Development Award).
- 1993-1997** Research Associate, Department of Medicine, Beth Israel Deaconess Medical
Centre. Harvard Medical School, Boston, MA. USA (Paul Dudley White
Fellowship Award from the American Heart Association).
- 1992-1993** Postdoctoral Fellow, Department of Medicine, Massachusetts General Hospital.
Harvard Medical School. Boston, MA. USA Post Doctoral Fellowship from the
Spanish Ministry of Health.
- 1988-1991** Intern and Resident in Endocrinology and Metabolism, Granada University
Hospital, Granada, Spain.

Professional Qualifications

GMC Full registration as a Medical Practitioner- Principal List n: 4660750, 23 Sept 1999.
GMC Specialist Register Endocrinology and Diabetes Mellitus n: 4660750 23 Sep 1999.

Management Courses

**MIT management executive education. Artificial Intelligence: Implications for Business
Strategy. 2019.** Issuing authority MIT Sloan School of Management

Courses

1. Fast strategy, intrapreneurship and business instinct (I, II) EMBA Judge Institute 2018
2. Savannah to Boardroom. EMBA Judge Business School, 2016
3. Leading Effective Project. EMBA Judge Business School, 2016
4. Philosophy of Business. EMBA Judge Business School, 2018
5. Strategic Change & Renewal, Judge Institute EMBA Business School, 2017
6. The EMBO Leadership and Management Course MRC sponsored
7. Deep Dive Into Fourth Industrial Revolution: How it will trigger the emergence of New Business Models. EMBA 2019 Judge Business School.
8. Managing big data analysis. EMBA 2019 Judge Business School.
9. Strategy in Ecosystems. EMBA (65) 2020 Judge Business School
10. Behaviour finance: Psychological insights into financial markets and organisations EMBA (71) 2020 Judge Business School
11. Increasing Executive Presence EMBA 2021 Judge Business School. **Host:** iOpener Institute
12. Exploring the difference between confidence, arrogance and making a difference. EMBA 2021 Judge Business School. iOpener Institute

Personal Fellowships and Awards

- 1992 Spanish Ministry of Health Fellowship
- 1995 Paul Dudley White Fellowship Award from the American Heart Association
- 1998 Boston Obesity Nutrition Career Development Award
- 2007 Fellow Royal College of Physicians (FRCP)
- 2013 Pat Usher memorial lecturer. Beth Israel Endocrine Grand Rounds. Harvard Medical School
- 2013 Fellowship Award Executive MBA Judge Institute at University of Cambridge
- 2014 Fellow Academy of Medical Sciences (FMedSci)
- 2015 Hippocrates International award for Nutrition Research (Royal Academy of Medicine Pricipado Asturias)
- 2015 FEBS National Lecturer 2015
- 2015 Career Distinguished Award Lilly Fundacion.
- 2016 VI Maimonides Lecture Award “Managing for competitive advantage in biomedical research”
- 2017 British Endocrine Society Society Medal SfE BES 2017, 6-8 November in

- 2018 Harrogate.
- 2018 Visiting Professor University of Nanjing
- 2018 Honorary Collaborator at Universidad Rey Juan Carlos
- 2019 Awarded the Sir Philip Randle Lecture, Biochemical Society
- 2019 International Research Affiliate at the Centre on AI Technology for Humankind at the National University of Singapore.
<https://bschool.nus.edu.sg/aith/people/international-research-affiliate/>

Personal fellowship from the University of Cambridge to study EMBA at the Judge Institute Business School. 2013-2015 (£42,000)

External Professional Activities

Evidence of international standing

- MRC College of experts (1/10/2004-30/09/2008).
- MRC Physiological Systems and Clinical Sciences Board (1/10/2004-30/09/08).
- MRC Funding Schemes: Survey panel (2003-2004).
- International scientific advisor Spanish Research Council, Metabolism and Nutrition Node (2003-2008).
- Member of the Editorial Board of PLoS Biology, Diabetes, Biochemical Journal and Trends Endocrinology and Metabolism.
- Member of PLoS Biology Advisory Board (2010-)
- EAS 2010 Scientific Committee
- EAS Election Committee Member
- Member of the Diabetes UK Research Committee
- International Scientific Committee of CIBERDEM
- FP7 FLORINASH Scientific Advisory Board
- Committee for Severo Ochoa Research Excellence Awards of Spanish Ministry of Innovation.
- IDIBAPS Scientific Advisory Board (2012-)
- INCLIVA Scientific Advisory Board (2013-)
- EASO Scientific Advisory Board (2013-)
- Member of Wellcome Trust Strategic Award [Biological determinants of ageing and late-life health, and their pharmacological manipulation] Scientific Advisory Board (2013-)
- Scientific Advisory Board of Institut d'Investigacions Biomèdiques de Girona (IDIBGI) (2013-)
- ERC award panel LS4 2017
- Jaime I International award panel 2017/18 for Clinical Medicine.
- International Scientific Advisory Board Danish Academy of Diabetes (2018-)
- Chair ERC Physiology and Endocrinology award Panel (2018-2021).
- DDA International Advisory Board (2019-)

- External Advisory Board: Rodent Metabolic Phenotyping Platform of the Novo Nordisk Foundation Center for Basic Metabolic Research, University of Copenhagen (2022-)

EDITORIAL ACTIVITY

- **Editorial Advisory Board:** *PLoS Biol* (2009-2017)
- **Editorial Board Memberships:** *PLoS Biology* (2007-2017), *Biochemical Journal* (2008-2012), *Diabetes* (2012-) *Trends Endocrinology and Metabolism* (2008-), *Biochim Biophys Acta*. (2012-2018). Guest Editor (with RH Unger) of *Special issue on lipotoxicity. Biochim Biophys Acta*. 2010 Mar;1801(3):207-8.

Current and past grant Support

- 1) NUHS – Cambridge Seed Grant Funding (Mar 2019 CALL) “Metabolic determinants of heart failure: elucidation of the link between non-alcoholic fatty liver disease and heart failure”** SGD 30,000 PI Roger Foo and Antonio Vidal-Puig 2019-20
- 2) Cambridge University Nanjing Centre of Technology and Innovation (CUNJC),** Municipality of Nanjing. “Obesity-associated metabolic complications: pathogenic mechanisms, diagnostic, biomarkers and therapeutic targets”. January 2020-December 2021. £1,200,000
- 3) BHF** “Targeting macrophage lipid metabolism to dissociate obesity from cardiovascular risk”. RG/18/7/33636. June 2018 to May 2023. £1,245,413
- 4) MRC MDU Programme Grant.** “Adipose tissue dysfunction and Lipotoxicity”. **2019-2023.** £2,500,000
- 5) NIH** "Search for obesity-associated genes with protective effects on metabolic health"- Genes for healthy obesity. R01DK107786. 20 September 2017 - 30 June 2021. \$415,896.05
- 6) FP7 IMI Litmus** “Liver Investigation: Testing Marker Utility in Steatohepatitis” (15M euro investment of EU and >15M by EFPIA). 2017-2021. £650,000
- 7) Horizon 2020** “Elucidating Pathways of Steatohepatitis (EPoS)”. **2013-2017.** £500,000
- 8) European Research Council (ERC) Senior Investigator award** “New players in human BAT differentiation and activation: a human PSC-derived BAT approach combined with state of the art genome engineering and –omics-based methodologies (StemBAT)”. **2015-2020.** €2,500,000.
- 9) Evelyn Trust** “Liver Biopsy in Non-alcoholic Fatty Liver Disease”. **2013-2015.** £13,000.
- 10) FP7 – IMI EMIF Joint Undertaking.** PI: **Dr Vidal-Puig.** **2013-2017.** £500,000.
- 11) MRC MDU Programme Grant.** PO 4050281695 “Lipotoxicity and the Metabolic Syndrome”. **2013-2018.** £2,000,000
- 12) Cambridge-NUHS Seed Fund** “Study of FIT FAT (Families with Inherited Traits for Functional Adipose Tissue): A step towards translating the concept of lipotoxicity into clinical practice to prevent type 2 diabetes”. **2013-2015.** \$35,000
- 13) BHF Programme Grant no. RG/12/13/29853.** “Adipose tissue macrophage polarisation and lipotoxicity”. **2013-2017.** £933,182.00
- 14) BHF Project Grant.** “Brown fat and atherosclerosis”. **2013-2015.** £223,000.0

- 15) **FP7 – EU grant. FP7-HEALTH 277713.** BETA BAT. **2011-2015.** £600,000
- 16) **BBSRC “Bmp8b & energy balance”.** **2012-2014.** £575,727
- 17) **BBSRC. “Role of fatty acid chain length on energy balance and adaptive thermogenesis. Background”.** **2009- 2012.** £520000
- 18) **MRC Program Grant. “Lipotoxicity and Metabolic Syndrome”.** **Dr Vidal-Puig. 2009-2013.** £1,000 000
- 19) **MRC. Translational Research Initiative Metabolic and Cardiovascular Disease - request to expand the facility into developing mouse models. Leading applicant: Dr Vidal-Puig. 2008-2010.** £665546
- 20) **FP7- EU grant. EtherPaths, Plasmalogens and Metabolic Syndrome. Work Package coordinator Dr Vidal-Puig. 2009- 2013.** £650000
- 21) **FP7 EU grant MITIN. Mitochondria and Insulin resistance. Work Package coordinator Dr Vidal-Puig. 2009- 2012.** £450000
- 22) **FP6 – EU grant. HEPADIP. “Systems biology approach to study Metabolic Syndrome” Work Package coordinator: Dr Vidal-Puig. 2005- 2010.** £468000
- 23) **BHF Project Grant no. PG/08/003/24286.** Plasmalogen lipids: role in obesity, insulin resistance and atherosclerosis. Leading applicant: **Dr Vidal-Puig. 2008- 2010.** £145520
- 24) **BBSRC. Wnt signalling and adipogenesis. Leading applicant: Dr Vidal-Puig. 2007- 2010.** £430000
- 25) **GSK Collaboration grant. Predictor factor of weight loss in response to diet. 2008- 2009.** £45000
- 26) **MRC Career establishment award. “Lipotoxicity, a common pathogenic mechanism of the Metabolic Syndrome”. Leading applicant: Dr Vidal-Puig. 2005- 2008.** £385000
- 27) **Wellcome Trust Program Grant. “Molecular mechanisms in human insulin resistance”. Leading Applicant Prof O’Rahilly. Co-Applicant Dr Vidal-Puig. 2006- 2010.** £1500000
- 28) **Diabetes UK. Adipose tissue expandability and the Metabolic Syndrome. Leading applicant Dr Vidal-Puig. 2006- 2008.** £142000
- 29) **Astra Zeneca. “Mechanisms of mitochondrial biogenesis, PGC1 α ”. Leading applicant, Dr Vidal-Puig. 2007-2009.** £ 70000
- 30) **British Heart Foundation PG/05/081. “Defining the influence of Peroxisome proliferator-activated receptors (PPARs) on the metabolome of the mouse heart”. Leading applicant Jules Griffin; Co-applicant Dr Vidal-Puig. 2005– 2008** £212000
- 31) **Wellcome Trust project grant. Role of BMP8b in thermogenesis. Leading applicant Dr Vidal-Puig. 2006-2007.** £183000
- 32) **MRC project grant. “Role of imprinted XL α S in postnatal physiology” Leading applicant Gavin Kesley; Co-applicant Dr Vidal-Puig. 2005-2008.** £232000
- 33) **British Heart Foundation. “Functional characterization of PGC1bKO using genetically modified mouse models”. Leading Applicant Dr Vidal-Puig; Co-applicant Dr Chris Huang. 2004- 2006.** £173000
- 34) **Diabetes UK RD04/0002814. “Metabolic characteristics of PPAR α dominant-negative mouse model”. Leading applicant Dr Vidal-Puig; Co-applicant Prof O’Rahilly. 2004- 2006**
- 35) **European Foundation Study of Diabetes (EFSD). “Role of SREBP1c in lipotoxicity” Leading Applicant Dr Vidal-Puig. 2003- 2005.** £ 66000

- 36) Astra Zeneca.** “Mechanisms of mitochondrial biogenesis, PGC1 α ”. Leading applicant **Dr Vidal-Puig. 2004-2005**
- 37) Diabetes Research Wellness Foundation Award** “Cardiovascular studies on PGC1 α KO mice”. Leading Applicant **Dr Vidal-Puig. 2005**
- 38) Wellcome Trust Integrative Physiology Grant.** “Study of common metabolic diseases” Leading applicant Prof O’Rahilly, Co-Applicant **Dr Vidal-Puig. 2002- 2007**
- 39) Wellcome Trust Program Grant** “Molecular mechanisms in human insulin resistance”. Leading Applicant Prof O’Rahilly. Co-Applicant **Dr Vidal-Puig. 2001– 2006**

Experience of research training and management provision: The TVPLab has been very successful at attracting and training very talented PhD students (n=12) supported by the MRC, Wellcome Trust, BHF and BBSRC, and 23 postdoctoral fellows from around the world supported by competitive fellowships (including Marie Curie fellowships, BHF, MRC, and other international fellowship schemes from Canada, Germany, Italy, Japan, Mexico, Spain and Switzerland).

The TVPLab periodically organises the *Course Cardiometabolic Phenotyping* in Rodents, sponsored by *European Atherosclerosis Society Advanced* and *BHF*. This is a 3-day course that combines *the state of the art* facilities and expertise within the Disease Model Core at the Institute of Metabolic Science and the BHF Cardiovascular Centre and a further 1-day workshop at the Sanger/EBI. Vidal-Puig is interested in developing strategies and innovative approaches to management in academic research-intensive institutions and identifying the best practices to manage talent. Vidal-Puig recently graduated from an Executive MBA at the Judge Business School of the University of Cambridge and aimed to translate some of the knowledge already available in other areas into academic management. Vidal-Puig’s mentoring commitments include scientific guidance, career advice, networking opportunities. For more details, please go to our web (<http://tvp.mrl.ims.cam.ac.uk/training-mentoring>).

Fellowships and PhD studentships

- 1) Marie Curie Post Doctoral Fellowship 2003-2005, Miguel Lopez**
- 2) MRC PhD Studentship 2004-2008, Sam Virtue**
- 3) MRC Physiology building capacity. 2005-2007, Rachel Hagen**
- 4) BBSRC Physiology building capacity PhD Studentship 2006-2010, Andy Whittle**
- 5) Marie Curie Post Doctoral Fellowship 2007-2009, Claire Lagathu**
- 6) Marie Curie International Fellowship 2007-2009, Alberto Camacho**
- 7) Fellowship Swiss Science Foundation, 2007-2008, Stefania Carobbio**
- 8) Marie Curie Post Doctoral Fellowship, 2007-2009, Sergio Rodriguez-Cuenca**
- 9) Marie Curie Post Doctoral Fellowship, 2008-2010, Stefania Carobbio**
- 10) Mexican Post Doctoral Fellowship, 2009-2010, Alberto Camacho**
- 11) MRC PhD Studentship, 2009-2012, Crystal Mok**
- 12) Wellcome Trust PhD Studentship, 2009-2012 Iris Schmitt**
- 13) Wellcome Trust Clinical PhD Studentship, 2009-2012, Chong Yew Tan**
- 14) Wellcome Trust PhD Studentship, 2012-2015, Vivian Pierce**
- 15) MRC Post Doctoral Fellowship, 2013-2015, Vanessa Pellegrinelli**

- 16) BHF Post Doctoral Fellowship, 2013-2015, Guillaume Bidault
- 17) Wellcome Trust PhD Studentship, 2014-2017, Kasparas Petkevicius
- 18) Wellcome Trust PhD Studentship, 2016-2019, Isabella Samuelson
- 19) Clinical Lecturer, 2016-2020, Isabel Huang-Doran
- 20) Clinical Lecturer, 2016-2020, Vian Azzu
- 21) Henning and Johan Throne-Holsts foundation for promoting scientific research postdoctoral scholarship, 2017-2019, John Grunberg,
- 22) Kaohsiung Chang Gung Memorial Hospital PhD Studentship, 2017-2021, Eu-Young Lee
- 23) BBSRC DTP European Cambridge trust, PhD Studentship, 2018-2022, Rita Dias
- 24) British Heart Foundation 1+3 Doctoral Training Programmed scheme, PhD Studentship, 2017-2021, Jennie Leggat
- 25) MRC 4 year program PhD Studentship, 2017-2021, Giannis Kamzolas
- 26) Kaohsiung Chang Gung Memorial Hospital PhD Studentship, 2017-2021, Adrian Yu-Hung Lin
- 27) Wellcome 4-year PhD Programme in Metabolic and Cardiovascular Disease PhD Studentship, 2015-2019, Isabella Samuelson.
- 28) Wellcome Trust MRes+Phd program in Metabolic and Cardiovascular disease, Wellcome Cambridge Trust scholarship, Cambridge Trust, 2019-2023, Elizabeth Figueroa-Juarez
- 29) Fundacion Ramon Areces fellowship for postdoctoral studies. 2021-2023, Sonia Rodriguez-Fernandez
- 30) Sir Henry Wellcome fellowship, Wellcome Trust, 2022 –2025, Sonia Rodriguez-Fernandez
- 31) Addenbrooke’s Charitable Trust fellowship, 2021-2022, Renata Risi
- 32) Development and Promotion of Science and Technology Talents Project, Royal Thai Government (DPST) scholarship, 2021-2024, Posswee Prasertsuk
- 33) PhD Studentship, 2021-2024, Ruoqi Du

Patent

Hart KA, Montague CT, **Vidal-Puig A.** Human and rat PGC-3, PPAR-gamma coactivations and splice variants. **United States Patent-** 7306922.

Research focus: Vidal-Puig’s (TVPLab, <http://tvp.mrl.ims.cam.ac.uk/>) research focuses on elucidating the molecular *mechanisms linking obesity with insulin resistance, diabetes and cardiometabolic complications and on the development of related therapeutic strategies*. His research strategies include a combination of hypothesis-driven and non-biased systems approaches that make extensive use of animal models, stem cell biology, human biological samples (including induced pluripotent stem cells), sophisticated omics technologies and bioinformatics integration.

Vidal-Puig’s lab creativity is reflected in the “*adipose tissue expandability hypothesis*” and the concept of “*lipotoxicity*” to explain the association between obesity and cardiometabolic complications. His specific scientific contributions to four lines of research are: **1)** defining the adipose tissue expandability and lipotoxicity hypothesis (Vidal-Puig, *JCI* 1996 (Cit 513), 1997 (Cit 766); *PLoS Genetics* 2007 (Cit 211); **2)** proposing the use of energy dissipating strategies to

reverse lipotoxicity by promoting mitochondrial biogenesis (*PLoS Biol* et al 2006, Cit 198), mitochondrial uncoupling (*BBRC 1997*, Cit 710, *JBC 2000* Cit 639)) and brown fat differentiation and activation (*Cell* 2012, Cit 160); 3) establishing the relevance of hypothalamic lipid metabolism in controlling energy homeostasis (*Cell Metab* 2008, Cit 277)) and thyroid hormone (*Nature Medicine*, 2010, Cit 266) and BMP8b controlling brown fat activation (*Cell* 2012); and 4) the pioneering use of systems biology and stem cell approaches to elucidate the role of specific lipids and networks in the development the cardiometabolic metabolic syndrome.

List of Publications (Selected publications) h index 98 citations 34559**

Originals

1. Bidault G, Virtue S, Petkevicius K, Jolin H, Dugourd A, Guénantin AC, Leggat J, Mahler-Araujo B, Lam BY, Marcella K, Ma Dale M, Carobbio S, Kaser A, Fallon PG, Saez-Rodriguez J, McKenzie ANJ and **Vidal-Puig A**. SREBP1-induced fatty acid synthesis depletes macrophages antioxidant defenses to promote their alternative activation. *Nat Metab*. 2021 Sep;3(9):1150-1162. doi: 10.1038/s42255-021-00440-5. Epub 2021 Sep 16. PMID: 34531575
2. Cimino I, Rimmington D, Tung YCL, Lawler K, Larraufie P, Kay RG, Virtue S, Lam BYH, Fagnocchi L, Ma MKL, Saudek V, Zvetkova I, **Vidal-Puig A**, Yeo GSH, Farooqi IS, Pospisilik JA, Gribble FM, Reimann F, O'Rahilly S, Coll AP. Murine neuronatin deficiency is associated with a hypervariable food intake and bimodal obesity. *Sci Rep*. 2021 Sep 2;11(1):17571. doi: 10.1038/s41598-021-96278-8. PMID: 34475432
3. Rodriguez-Cuenca S, Lelliot CJ, Campbell M, Peddinti G, Martinez-Uña M, Ingvorsen C, Dias AR, Relat J, Mora S, Hyötyläinen T, Zorzano A, Oresic M, Bjursell M, Bohlooly-Y M, Lindén D and Vidal-Puig, A: Allostatic hypermetabolic response in PGC1 α/β heterozygote mouse despite mitochondrial defects. *FASEB J*. 2021 Sep;35(9):e21752. doi: 10.1096/fj.202100262RR. PMID: 34369602
4. Tang P, Virtue S, Goie JYG, Png CW, Guo J, Li Y, Jiao H, Chua YL, Campbell M, Moreno-Navarrete JM, Shabbir A, Fernández-Real JM, Gasser S, Kemeny DM, Yang H, **Vidal-Puig A**, Zhang Y. Regulation of adipogenic differentiation and adipose tissue inflammation by interferon regulatory factor 3. *Cell Death Differ*. 2021 Jun 5. doi: 10.1038/s41418-021-00798-9. PMID: 34091599
5. Furse S, Williams HEL, Watkins AJ, Virtue S, **Vidal-Puig A**, Amarsi R, Charalambous M, Koulman A. A pipeline for making 31P NMR accessible for small- and large-scale lipidomics studies. *Analytical and Bioanalytical Chemistry* <https://doi.org/10.1007/s00216-021-03430-4>
6. Mózes FE, Lee JA, Selvaraj EA, Jayaswal ANA, Trauner M, Boursier J, Fournier C, Stauffer K, Stauber RE, Bugianesi E, Younes R, Gaia S, Lupşor-Platon M, Petta S, Shima T, Okanoue T, Mahadeva S, Chan WK, Eddowes PJ, Newsome PN, Wong VW, de Ledinghen V, Fan J, Shen F,

Cobbold JF, Sumida Y, Okajima A, Schattenberg JM, Labenz C, Kim W, Lee MS, Wiegand J, Karlas T, Yilmaz Y, Aithal GP, Palaniyappan N, Cassinotto C, Aggarwal S, Garg H, Ooi GJ, Nakajima A, Yoneda M, Ziol M, Barget N, Geier A, Tuthill T, Brosnan MJ, Anstee QM, Neubauer S, Harrison SA, Bossuyt PM, Pavlides M; **LITMUS Investigators**. Diagnostic accuracy of non-invasive tests for advanced fibrosis in patients with NAFLD: an individual patient data meta-analysis. *Gut*. 2021 May 17:gutjnl-2021-324243. doi: 10.1136/gutjnl-2021-324243. PMID: 34001645

7. Selvaraj EA, Mózes FE, Ajmer Jayaswal AN, Zafarmand MH, Vali Y, Lee JA, Levick CK, Joseph Young LA, Palaniyappan N, Liu CH, Aithal GP, Romero-Gómez M, Brosnan MJ, Tuthill TA, Anstee QM, Neubauer S, Harrison SA, Bossuyt PM, Pavlides M; **LITMUS Investigators**. Diagnostic accuracy of elastography and magnetic resonance imaging in patients with NAFLD: a systematic review and meta-analysis. *J Hepatol*. 2021 May 12:S0168-8278(21)00309-3. doi: 10.1016/j.jhep.2021.04.044. PMID: 33991635

8. Sanchez-Delgado G, Martinez-Tellez B, Acosta FM, Virtue S, **Vidal-Puig A**, Gil A, Llamas-Elvira JM, Ruiz JR. Brown Adipose Tissue Volume and Fat Content are Positively Associated with Whole-Body Adiposity in Young Men, Not in Women. *Diabetes*. 2021 Apr 15:db210011. doi: 10.2337/db21-0011. PMID: 33858825

9. Sandovici I, Hammerle CM, Virtue S, Vivas-Garcia Y, Izquierdo-Lahuerta A, Ozanne SE, **Vidal-Puig A**, Medina-Gómez G, Constância M. Autocrine IGF2 programmes β -cell plasticity under conditions of increased metabolic demand. *Sci Rep*. 2021 Apr 8;11(1):7717. doi: 10.1038/s41598-021-87292-x. PMID: 33833312. PMCID: PMC8032793

10. Whitehead A, Krause FN, Moran A, MacCannell ADV, Scragg JL, McNally BD, Boateng E, Murfitt SA, Virtue S, Wright J, Garnham J, Davies GR, Dodgson J, Schneider JE, Murray AJ, Church C, **Vidal-Puig A**, Witte KK, Griffin JL, Roberts L. Brown and beige adipose tissue regulate systemic metabolism through a metabolite interorgan signalling axis. *Nature Com* 12:1-21, 2021. PMID:33772024

11. Petkevicius K, Bidault G, Virtue S, Newland SA, Dale M, Dugourd A, Saez-Rodriguez J, Mallat Z, **Vidal-Puig A**. Macrophage beta2-adrenergic receptor is dispensable for the adipose tissue inflammation and function. *Mol Metab* 1012-20. 2021. PMID:22774223

12. Azzu V, Vacca M, Kamzolas I, Hall Z, Leslie J, Carobbio S, Virtue S, Davies SE, Lukasik A, Dale M, Bohlooly-Y M, Acharjee A, Lindén D, Bidault G, Petsalaki E, Griffin JL, Oakley F, Allison MED, **Vidal-Puig A**. Suppression of insulin-induced gene 1 (INSIG1) function promotes hepatic lipid remodelling and restrains NASH progression. *Mol Metab* 1012-10. 2021. PMID:33722690

13. Huang LO, Rauch A, Mazzaferro E, Preuss M, Carobbio S, Bayrak CS, Chami N, Wang Z, Schick UM, Yang N, Itan Y, **Vidal-Puig A**, den Hoed M, Mandrup S, Kilpeläinen TO, Loos RJF.

Genome-wide discovery of genetic loci that uncouple excess adiposity from its comorbidities. *Nat Metab.* 2021 Feb;3(2):228-243. doi: 10.1038/s42255-021-00346-2. PMID: 33619380

14. Carobbio S, Guenantin AC, Bahri M, Rodriguez-Fdez S, Honig F, Kamzolas I, Samuelson I, Long K, Awad S, Lukovic D, Erceg S, Bassett A, Mendjan S, Vallier L, Rosen BS, Chiarugi D, **Vidal-Puig A.** Unraveling the developmental roadmap toward human brown adipose tissue. *Stem Cell Reports.* 2021 Feb 6:S2213-6711(21)00043-6. doi: 10.1016/j.stemcr.2021.01.013. PMID: 33606988

15. Li J, Zhang Y, Ye Y, Li D, Liu Y, Lee E, Zhang M, Dai X, Zhang X, Wang S, Zhang J, Jia W, Zen K, **Vidal-Puig A,** Jiang X, Zhang CY. Pancreatic β cells control glucose homeostasis via the secretion of exosomal miR-29 family. *J Extracell Vesicles* 2021 Jan;10(3):e12055. doi: 10.1002/jev2.12055. PMID:33520119; PMCID:PMC7820156

16. Petkevicius K, Bidault G, Virtue S, Jenkins B, van Dierendonck XAMH, Dugourd A, Saez-Rodriguez J, Stienstra R, Koulman A, **Vidal-Puig A.** Norepinephrine promotes triglyceride storage in macrophages via beta2-adrenergic receptor activation. *FASEB J.* 2021 Feb;35(2):e21266.doi: 10.1096/fj.202001101R. PMID:33484195

17. Govaere O, Cockell S, Tiniakos D, Queen R, Younes R, Vacca M, Alexander L, Ravaioli F, Palmer J, Petta S, Boursier J, Rosso C, Johnson K, Wonders K, Day CP, Ekstedt M, Orešič M, Darlay R, Cordell HJ, Marra F, **Vidal-Puig A,** Bedossa P, Schattenberg JM, Clément K, Allison M, Bugianesi E, Ratzu V, Daly AK, Anstee QM. Transcriptomic profiling across the nonalcoholic fatty liver disease spectrum reveals gene signatures for steatohepatitis and fibrosis. *Sci Transl Med.* 2020 Dec 2;12(572):eaba4448.doi:10.1126/scitranslmed.aba4448. PMID: 33268509

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Reviews and Editorials

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- 2.** Carobbio, S, Pellegrinelli V, **Vidal-Puig A.** Adipose tissue function and expandability as determinants of lipotoxicity and metabolic syndrome in *Obesity and lipotoxicity*. January 2017, pp 161-196 DOI 10.1007/978-3-319
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Organisation of conferences and meetings

- 1. Istanbul, Turkey. 13th-16th May 2023.** 25th European Congress of Endocrinology (ECE 2023)
- 2. Colorado, USA. 6th-10th February 2022.** Keystone Symposia on Inter Organ Crosstalk in Non-Alcoholic Steatohepatitis (NASH)/ Adipose Tissue and Metabolic Health.
- 3. Cambridge (virtual), United Kingdom. 6th July 2021.** Innovations for phenotyping for Obesity, Diabetes and Co-morbidities (supported by GemPharmatech Co.,Ltd).

- 4. Valencia, Spain. 17th – 18th October 2019** LITMUS general assembly meeting LITMUS 3rd General Assembly.
- 5. Cambridge, United Kingdom. 5th July 2019** Joint work shop by Cambridge University Nanjing Centre of Technology and Innovation, Institute Metabolic Science, University of Cambridge, Model Animals Research Centre (MARC), University of Nanjing.
- 6. Cambridge, United Kingdom. 2nd -4th July 2019** EAS Advanced Course in Cardiometabolic Phenotyping.
- 7. Cambridge, United Kingdom. 20th-22nd September 2017.** Royal Swedish Academy of Sciences, Journal of Internal Medicine - Key Symposium "Metabolic complications of obesity".
- 8. Cambridge, United Kingdom. 3rd-4th July 2017.** Cambridge Metabolic Network/Danish Diabetes Association Course for PhD Students.
- 9. Cambridge, United Kingdom. 30th June – 2nd July 2015.** EAS Advanced Course in Cardiometabolic Phenotyping in Rodents.
- 10. Boston, USA. 5th – 9th June 2015.** ADA Scientific Sessions Insulin Action/Molecular Metabolism.
- 11. Colorado, USA. 9th – 13th February 2015.** Keystone Symposia – Systems Biology of Lipid Metabolism.
- 12. Madrid, Spain. 7th – 8th November 2014.** CNIC Conference "Energy homeostasis and metabolic disease".
- 13. Madrid, Spain. 7th-8th November 2014.** Energy homeostasis and metabolic disease. CNIC.
- 14. Cambridge, UK. 30th September 2014.** 14th Annual Cambridge Immunology Forum Meeting.
- 15. Cambridge, United Kingdom. 10th-11th December 2013.** Brown fat and beta cells: examining inter-organ crosstalk and cellular dysfunction in metabolic disease.
- 16. Copenhagen, Denmark. 27th April – 1st May 2013.** 15th European Congress of Endocrinology.
- 17. Alpbach, Austria. 3rd – 8th April 2013.** Keystone Symposia – Nuclear Receptors and Friends: Roles in Energy Homeostasis and Metabolic Dysfunction.

- 18. London, United Kingdom. 11th – 13th December 2012.** The Physiological Society – Metabolism & Endocrinology Themed Meeting.
- 19. Cambridge, United Kingdom. 11th – 14th July 2012.** The European Atherosclerosis Society Advanced Course IV: Murine Genetics and Cardiometabolic Phenotyping.

Invited lectures at international meetings 2003-21 (Selected Lectures)

- 1. Indiana, USA (virtual). 13th December 2021.** Seminar at the Center for Diabetes and Metabolic Diseases, Medical Faculty, Indiana University.
- 2. China (virtual). 12th-14th November 2021.** China Medical University Conference - “The First International Conference on the Comprehensive Life Course Prevention and Treatment of Obesity and Related Chronic Diseases”
- 3. Iowa, USA (Virtual). 4th October 2021.** Seminar at The Diabetes Research Center, University of Iowa
- 4. Ebberup, Denmark. 30th August – 2nd September 2021.** Danish Diabetes Academy Summer School
- 5. Virtual Symposium, 29th September 2021.** "What's the matter with adipose tissue and insulin resistance?" EASD virtual meeting.
- 6. Belgium. Virtual BMP lecture series. 4th November 2020.** BMP signally in cancer session.
- 7. Vienna, Austria. 21st -22nd September 2020.** 4th meeting of Danish Advisory board.
- 8. Gothenburg, Sweden. 8th -10th October 2020.** 3rd Annual Internal Clinical Science Symposium.
- 9. Korea. 3rd-5th September 2020.** Symposium special lecture at ICOMES (scientific committee of KSSO (Korean Society for the Study of Obesity)).
- 10. Brussels, Belgium. 13th February 2020.** European Research Council -2019-STG - LS4
- 11. Doha, Qatar. 4th-6th December 2019** Anti-Doping Laboratory Qatar for the 7th Junior Symposium
- 12. Amsterdam, Netherlands. 5th-6th November 2019.** Maternal obesity and pre-eclampsia

- 13. Bavarian Alps, Germany. 25th-27th September 2019.** AMPro Summer School for PhD Students & Postdocs. Aging and Metabolic Programming.
- 14. Brussels, Belgium. 18th- 21st June 2019.** European Research Council -2019-STG - LS4, Step 2.
- 15. Nanjing, China. 19th-25th May 2019.** The Sino-UK Cardiovascular disease symposium.
- 16. Colorado, USA. 31st March – 5th April 2019.** Keystone Symposia on Lipidomics and Functional Metabolic Pathways in Disease.
- 17. Mexico. 13th-14th February 2019.** Nutrition Forum 2019 Danone Institute of Mexico.
- 18. Gothenburg, Sweden. 5th October 2018.** Wallenberg Lab 30th Anniversary Symposium.
- 19. Basel, Switzerland. 11th-14th September 2018.** EMBO at Basel Life.
- 20. Örebro/Sweden. 26th-28th August 2018.** Nordic Metabolomics Conference.
- 21. Boston, USA. 11th May 2018.** "Adventures in Metabolism" Symposium at Harvard Medical School.
- 22. Naples, Italy. 28th May 2018.** Seminar at The Institute of Genetics and Biophysics "Adriano Buzzati-Traverso" of the National Research Council (CNR).
- 23. Paris, France. 11th-15th April 2018.** EASL International Liver Congress.
- 24. Vienna, Austria. 2nd February 2018.** Seminar at Vienna Biocenter.
- 25. Geneva, Switzerland. 23rd January 2018.** Symposium: Neuroendocrine regulation of metabolism and dysfunctions in obesity/type 2 diabetes
- 26. Bangalore, India. 13th November 2017.** Seminar at National Centre for Biological Sciences in Bangalore.
- 27. Dusseldorf, Germany. 10th October 2017.** Universitäts Klinikum Lecture Series - CRC1116 "master switches after myocardial infarction"
- 28. Lisbon, Portugal. 11th-15th September 2017.** 53rd EASD Annual Meeting.
- 29. Nanjing, China. 8th May 2017.** Lecture at Nanjing Biomedical Research Institute.
- 30. Lisbon, Portugal. 21st-23rd May 2017.** Aegerion ECE Symposium.

- 31. Toulouse, France. 28th April 2017.** Seminar at INSERM.
- 32. Colorado, USA. 22nd – 27th January 2017.** Keystone Symposia on Diabetes/Obesity and Adipose Tissue Biology.
- 33. Vienna, Austria. 15th-19th October 2016.** UEG Week.
- 34. Tsukuba, Japan. 17th-19th September 2016.** Tsukuba Global Science Week.
- 35. New Orleans, USA. 10th – 14th June 2016.** American Diabetes Association's Scientific Session's 76th Scientific Sessions.
- 36. Heidelberg, Germany. 12th May 2016.** Seminar at German Cancer Research Center (DKFZ)
- 37. Vancouver, Canada. 1st – 4th May 2016.** 13th International Congress on Obesity.
- 38. Edmonton, Canada. 2nd May 2016.** Distinguished Speaker Lecture, University of Alberta.
- 39. Turku, Finland. 28th January 2016.** Frontiers of Science Seminar Series at Biocity Turku
- 40. Heidelberg, Germany. 16th – 17th October 2015.** International Symposium On Diabetic Complications
- 41. Boston, USA. 5th – 9th June 2015.** ADA Scientific Sessions Insulin Action/Molecular Metabolism.
- 42. Suzhou, China. 1st – 5th June 2015.** Cold Spring Harbor Asia (CSHA) Conference on Lipid Metabolism and Metabolic Disorders
- 43. Japan, 2015. 21st-24th May 2015.** 58th Annual Meeting of the Japan Diabetes Society: Evolution and Deepening of Diabetology.
- 44. Utah, USA. 17th – 22nd April 2015.** Keystone Symposium – Beige and Brown Fat: Basic Biology and Novel Therapeutics.
- 45. Colorado, USA. 9th-13th February 2015.** Keystone Symposium – Systems Biology of Lipid Metabolism.
- 46. Antalya, Turkey. 23rd-26th October 2014.** Endobridge.

- 47. Stockholm, Sweden. 28th June – 2nd July 2014.** International Society for the Study of Fatty Acids and Lipids.
- 48. San Francisco, USA. 13th-17th June 2014.** ADA's 74th Scientific Sessions.
- 49. Sofia, Bulgaria. 28th – 31st May 2014.** European Congress on Obesity.
- 50. Wroclaw, Poland. 3rd – 7th May 2014.** European Congress of Endocrinology.
- 51. Vancouver, Canada. 12th – 17th January 2014.** Keystone Symposium on Obesity: A Multisystems Perspective.
- 52. Alabama, USA. 19th November 2013.** University of Alabama at Birmingham, Nutrition Obesity Research Center - NORC's Noon Seminar Series.
- 53. Tokyo, Japan. 18th July 2013.** Special lecture at Toho University Medical Center.
- 54. Tokyo, Japan. 19th July 2013.** Japan Atherosclerosis Society Meeting
- 55. San Francisco, USA. 15th – 18th June 2013.** Endocrine Society Meeting "Growth Factors in the BAT-tle against Obesity"
- 56. Copenhagen, Denmark. 27th April – 1st May 2013.** European Congress of Endocrinology.
- 57. Alpbach, Austria. 3rd – 8th April 2013.** Keystone Symposia – Nuclear Receptors and Friends: Roles in Energy Homeostasis and Metabolic Dysfunction.
- 58. Hamburg, Germany. 22nd – 23rd February 2013.** Cluster of Excellence Symposium "Inflammation at Interfaces".
- 59. Clermont-Ferrand, France. 8th-9th March 2013.** 2nd International Congress on Translational Research in Human Nutrition.
- 60. Boston, USA. 18th January 2013.** 22nd Pat Usher Memorial Lecture.
- 61. Zurich, Switzerland. 6th November 2012.** Presenting Seminar at Zurich Center for Integrative Human Physiology.
- 62. Prague, Czech Republic. 12th – 14th October 2012.** 10th Annual STOCK Conference "Harnessing the Beneficial Properties of Adipogenic Microbes for Improving Human Health".
- 63. Korea, 25th – 27th September 2012.** Infrafrontier / IMPC Korea Meeting.

- 64. Heidelberg, Germany. 13th – 16th September 2012.** EMBO | EMBL SYMPOSIUM: Diabetes and Obesity.
- 65. Copenhagen, Denmark. 27th – 30th August 2012.** The Alfred Benzon Symposium.
- 66. Singapore. 2nd August 2012.** Seminar at National University of Singapore.
- 67. Florence, Italy. 5th – 9th May 2012.** ICE-ECE Symposium.
- 68. Lausanne, Switzerland. 6th December 2011.** Nestle Institute Health Research “Adipose tissue expandability, lipotoxicity and the Metabolic Syndrome”.
- 69. Sicily, Italy. 21st – 26th October 2011.** The Obese Species Workshop.
- 70. Colorado, USA. 7th – 11th September 2011.** 15th Grover Conference on Obesity and Pulmonary Hypertension.
- 71. Istanbul, Turkey. 25th -28th May 2011.** European Congress on Obesity.
- 72. Killarney, Ireland. 15th - 20th May 2011.** Keystone Symposium on Lipid Biology and Lipotoxicity.
- 73. Waningen, Netherlands. 13th - 15th April 2011.** Bioactive Food Components, Mitochondrial Function and Health (Mitofood).
- 74. Paris, France. 18th February 2011.** Present to Necker Medical School, “PPAR γ , adipose tissue expandability and the metabolic syndrome”
- 75. Colorado, USA. 12th-17th January 2011.** Keystone Symposium on Obesity.
- 76. Lausanne, Switzerland. 18th – 20th October 2010.** Hepadip 2010. Liver & adipose tissue in the metabolic syndrome.
- 77. Lille, France. 13th October 2010.** 1st EGIC Symposium.
- 78. Stockholm, Sweden. 12-13th July 2010.** International Congress on Obesity. Review session and presentation. “*Adipose tissue & liver*”
- 79. Amsterdam, Netherlands. 1st July. 3rd** NUGO Workshop on “Nutritional Metabolomics”.
- 80. Gothenburg, Sweden. 29th June 2010.** FEBS Congress 2010. “An allostatic perspective to the Metabolic Syndrome”.

- 81. Hamburg, Germany. 19th- 22nd June 2010.** EAS. Hosting workshop & presenting at Satellite Symposium.
- 82. Coimbra, Portugal. 11-14th May 2010.** International Courses on Toxicology, at the Center for Neurosciences and Cell Biology, University of Coimbra.
- 83. Kyoto, Japan. 26th -30th March 2010.** ICE2010. *“Adipotoxicity and metabolic syndrome”*.
- 84. Stockholm Sweden, 5th March 2010.** Symposium on Molecular and Physiological Aspects of Type 2 Diabetes and Obesity. Nobel Forum, Karolinska Institute.
- 85. Hilden, Dusseldorf. 24th February 2010.** Presenting seminar at Qiagen headquarters.
- 86. Nice, France. 5th February 2010.** INSERM-CNRS Federated Research Institute – 50 symposium.
- 87. Les Ulis, France. 18th January 2010.** GLAXOSMITHKLINE laboratories talk.
- 88. Monterrey, Nuevo Leon, Mexico. 3rd- 6th November 2009.** XLIX Congress.
- 89. Paris, France. 13th November 2009.** Annual Scientific Meeting of the Foundation.
- 90. Graz, Austria. 18th- 21st October 2009.** 7th Euro Fed Lipid Congress.
- 91. Rotterdam, the Netherlands. 8th October 2009.** Presenting a lecture at Erasmus MC lecture series.
- 92. Southern Furen, Denmark. 3rd - 4th September 2009.** Speaker at PhD Graduate School of Metabolism.
- 93. Sweden. 10th – 13th May 2009.** Frontier Lipidology; Lipidomics in Health and Disease in Gothenburg.
- 94. Vienna, Austria. 27th February- 1st March 2009.** Joint EASL-AASLD Conference: Nuclear Receptors and Liver Disease. *“PPARg & LXRs”*
- 95. Paris. 6th November 2008.** Presenting seminar to Institut Cochin. *“Adipose tissue expandability and metabolic syndrome”*.
- 96. Amsterdam. 7th November 2008.** Presentation at the University of Amsterdam.

- 97. Los Angeles, USA. 23rd- 26th September 2008.** *6th Annual World Congress on the Insulin Resistance Syndrome: "Targeting metabolic insulin resistance: Developing drugs to prevent cardiovascular disease"*.
- 98. Boston, USA. 4th- 7th September 2008.** *4th Metabolomics Society Annual Conference: "Lipotoxicity, adipose tissue expandability & insulin resistance"*.
- 99. Maastricht, Netherlands. 25th- 29th August 2008.** *Lipidology: from basic science to Clinical Pathology: "Inflammation, lipids and metabolic disorders"*.
- 100. Lausanne, Switzerland. 4th June 2008.** *Symposium on Metabolism and cancer: "Adipose tissue expandability, lipotoxicity and the metabolic syndrome"*.
- 101. Geneva, Switzerland. 14th- 15th May 2008.** *ECO 2008 Symposium Speaker: Precongress satellite symposium. "Adipose tissue expandability and the Metabolic Syndrome"*.
- 102. Istanbul, Turkey, April 26-29 2008** *77th EAS European Atherosclerosis Society. "PPAR γ , adipose tissue expandability and the Metabolic Syndrome"*.
- 103. Graz, Austria. 13th- 15th March 2008.** *2nd International Graz Symposium on Lipid & Membrane Biology: Focus on Lipotoxicity: "Adipose tissue expandability and Lipotoxicity"*.
- 104. Gothenburg, Sweden. 5th October 2007.** *Gothenburg Medical School research seminars invited speaker: "PPAR γ , lipotoxicity and the Metabolic Syndrome"*.
- 105. Hamburg, Germany. 16th- 19th September 2007.** *Annual meeting of the German Biochemical Society, Molecular Life Sciences: "Adipose tissue expandability and the Metabolic Syndrome"*.
- 106. Chicago, USA. 25th June 2007.** *American Diabetes Association: "Adipose tissue expandability Lipotoxicity and the Metabolic Syndrome"*.
- 107. Nice, France. 11th June 2007.** *University of Nice Seminar Lecture: "PGC1 β and metabolic Complications"*.
- 108. Washington, USA. 1st- 6th May 2007.** *American Society for Biochemistry and Molecular Biology ASBMB Annual Meeting: Bioscience "PGC1 β and metabolic"*.
- 109. Budapest, Hungary. 22nd- 25th April 2007.** *15th European Congress on Obesity: "Adipose tissue and expandability and lipotoxicity"*.

- 110. Budapest, Hungary. 21st April 2007.** *Budapest Conference on Early Nutrition Programming & Health Outcomes in Later Life: "PGC1 β and mitochondrial physiology"*.
- 111. Switzerland. 30th March 2007.** *3rd CardioMet Symposium on the Metabolic Syndrome: "Adipose tissue expandability and the Metabolic Syndrome"*.
- 112. Marseille, France. 20th- 21st March 2007.** *Alfediam SFE 2007: "Nuclear Receptor and physiopathology of insulin resistance"*.
- 113. Mexico. 16th-17th November 2006.** *VI Conferencia Nestle de Nutricion: "Adipose tissue expandability, lipotoxicity and the Metabolic Syndrome"*.
- 114. Geneva, Switzerland. 30th August 2006.** *University of Geneva Research seminars invited speaker: "PPAR γ 2 and the metabolic syndrome"*.
- 115. Gothenburg, Sweden. 7th August 2006.** *134th Nobel Symposium The adipocyte the Multifunctional Cell: "Adipose tissue expandability and the Metabolic Syndrome"*.
- 116. North Carolina, USA. 27th October 2006.** *GSK, Research Triangle Park, North Carolina: "A systems biology approach to identify mediators of lipotoxicity and the Metabolic Syndrome"*.
- 117. Prague, Czech Republic. 26th May 2004.** *XIII European Congress of Obesity. Prague, ECO 2004: "Mouse models and the metabolic syndrome"*.
- 118. Fribourg, Switzerland. 3rd October 2003.** *2nd Fribourg Obesity Research Conference, FORC 2003: "Molecular mechanisms underlying ectopic fat storage"*.
- 119. Helsinki, Finland. 29th May 2003- 1st June 2003.** *XII European Congress of Obesity, Helsinki, Finland ECO 2003: "Cross talk between adipose tissue and skeletal muscle"*.

Other invited lectures and research seminars at national (UK/Spain) 2003-21

- 1. Madrid, Spain . 11th November 2021.** MOIR2 III Symposium.
- 2. Virtual Meeting. 7th-10th June 2021.** British Cardiovascular Society Annual Conference.
- 3. Malaga, Spain. 10th-13th May 2021.** EASO's 28th Annual European Congress on Obesity (virtual meeting)
- 4. Cambridge, UK. 29th April 2021.** Cambridge Cardiovascular Annual Research Symposium 2020 Moller.

5. **Murcia, Spain. 30th November 2020.** Seminar at Faculty of Social Health Sciences, University of Murcia.
6. **Madrid, Spain. 9th-11th September 2020.** Spanish National Congress of Obesity (XVI Congreso Nacional de la Sociedad Española para el estudio de la obesidad), Sociedad Española para el Estudio de la Obesidad (SEEDO). Translational News in the Obesity Week: Advancing the metabolic fatty liver disease agenda
7. **Seville, Spain. 18th June 2020.** Seminar at Institute of Biomedicine of Seville.
8. **London, UK. 10th -11th February 2020.** 3rd Global nonalcoholic steatohepatitis (NASH) Congress and co-located 1st Metabolic Syndrome, Diabetes and nonalcoholic fatty liver disease (NAFLD) Congress London.
9. **Valencia, Spain. 28th-29th November 2019.** Instituto de Investigación Sanitaria (INCLIVA)
10. **Barcelona, Spain. 27th November 2019.** External Scientific Council meeting, Institut D'investigacions Biomèdiques Agust PI Sunyer (IDIBAPS)
11. **Madrid, Spain. 20th-21 November 2019** Scientific meeting of the Centro de Investigación Biomédica en Red de Fisiopatología de la Obesidad y Nutrición (CIBEROBN)
12. **Valencia, Spain. 13th-15th November 2019** *Spain Minisymposium Centro de Investigación Príncipe Felipe (CIPF). Longevity world forum, "Preclinical Models in Ageing and Metabolism Research"*
13. **London, UK. 13th November 2019.** Medical Research Council Leaders Conference 2019
14. **Valencia, Spain. 17th – 18th October 2019.** **Liver** Investigation: Testing Marker Utility in Steatohepatitis (litmus) 3rd General Assembly.
15. **Barcelona, Spain. 05th -07th June 2019.** Cardiovascular and Metabolic diseases Expert Selection Committee – La Caixa Foundation
16. **Madrid, Spain. 31st May 2019.** 6th Symposium on Biomedical Research "Advances & Perspectives in Molecular Endocrinology"
17. **Cádiz, Spain. 8th-11th April 2019.** EMBO "Organ Crosstalk in Energy Balance and Metabolic Disease".
18. **Oxford, UK. 18th January 2019.** Seminar in Department of Physiology, Anatomy & Genetics.

- 19. Madrid, Spain. 22nd November 2018.** CIBEROBN Annual Symposium.
- 20. Granada, Spain. 23rd November 2018.** Symposium: "Role of brown adipose tissue in human health".
- 21. Bradford, UK. 1st December 2018.** SRUK Seminar (Society of Spanish Researchers in the UK).
- 22. London, UK. 30th October 2018.** California Walnut Commission Scientific & Health Research Meeting.
- 23. Sheffield, UK. 10th-11th September 2018.** The British Society for Cardiovascular Research Autumn Meeting 'Inflammation and repair'.
- 24. Bilbao, Spain. 8th June 2018.** Seminar at Biogune.
- 25. Barcelona, Spain. 24th-25th November 2017.** AstraZeneca - Diabetter: The implications of the adipocyte in T2D
- 26. Cambridge, United Kingdom. 2nd November 2017.** Cardio-metabolic meeting for Early Career Researchers.
- 27. Harrogate, United Kingdom. 6th-8th November 2017.** Society for Endocrinology BES Conference.
- 28. Majorca, Spain. 16th October 2017.** Seminar at Illes Balears Institute for Health Research.
- 29. Cambridge, United Kingdom. 20th-22nd September 2017.** Royal Swedish Academy of Sciences, Journal of Internal Medicine - Key Symposium "Metabolic complications of obesity"
- 30. Majorca, Spain. 26th June 2017.** Seminar at Illes Balears Institute for Health Research.
- 31. Cambridge, United Kingdom. 3rd-4th July 2017.** Cambridge Metabolic Network/Danish Diabetes Association Course for PhD Students.
- 32. Barcelona, Spain. 24th-27th May 2017.** EMBO workshop meeting on BAT.
- 33. Madrid, Spain. 3rd-6th June 2017.** 54th ERA-EDTA Congress.
- 34. Bilbao, Spain. 1st March 2017.** Seminar at Biofisika, Basque Centre for Biophysics.

- 35. Malaga, Spain. 20th-23rd March 2017.** Danish Diabetes Academy Postdoc Winter School.
- 36. London, UK. 11th January 2017.** Seminar at the MRC Clinical Sciences Centre, Imperial College London.
- 37. Malaga, Spain. 19th – 21st October 2016.** Congress of the Spanish Society of Endocrinology.
- 38. Barcelona, Spain. 8th October 2016.** CIBERDEM-MSD Symposium.
- 39. Cambridge, UK. 11th April 2016.** British Heart Foundation Cardiovascular Research Excellence Annual Event.
- 40. Madrid, Spain. 1st – 2nd December 2015.** Scientific Symposium: “Last in Obesity”
- 41. Malaga, Spain. 25th – 27th November 2015. 12th National Congress of the Spanish Society for the Study of Obesity.**
- 42. Cambridge, UK. 10th September 2015.** British Atherosclerosis Society Meeting: ‘Atherosclerosis: crossroads of metabolism and inflammation’.
- 43. Valencia, Spain. 16th – 18th September 2015.** 36 Congreso Sociedad Española de Farmacología.
- 44. Madrid, Spain. 9th-11th July 2015.** URJC Summer University Programme: Obesity, Insulin Resistance, and Metabolic Syndrome.
- 45. London, UK. 24th April 2015.** Royal Society of Medicine Symposium. Obesity: Epidemiology, complications and management.
- 46. Cambridge, UK. 13th April 2015.** BHF Centre of Research Annual Symposium.
- 47. London, UK. 11th March 2015.** Diabetes UK for the Adipose Plenary Conference.
- 48. London, UK. 9th December 2014.** Royal Society of Medicine Seminar Series “Obesity: Epidemiology, Complications and Management”
- 49. Madrid, Spain. 7th – 8th November 2014.** CNIC Conference "Energy homeostatis and metabolic disease".
- 50. Reading, UK. 3rd November 2014.** Seminar the University of Reading, Institute for Cardiovascular and Metabolic Research Seminar Series.

- 51. Cambridge, UK. 30th September 2014.** 14th Annual Cambridge Immunology Forum Meeting.
- 52. Cambridge, UK. 10th – 11th December 2013.** *“Brown fat and beta cells: examining inter-organ crosstalk and cellular dysfunction in metabolic disease”* Symposium.
- 53. Las Palmas, Spain. 1st – 3rd November 2013.** Endocrine Conference.
- 54. Barcelona, Spain. 7th – 9th November 2013.** International Symposium on Insulin Receptor and Insulin Action.
- 55. Histon, UK. 9th October 2013.** Presenting lecture at GW Pharmaceuticals – Metabolic Seminar Series.
- 56. London, UK. 25th September 2013.** Lecture at MRC Clinical Sciences Centre.
- 57. Madrid, Spain. 5th October 2013.** Curso de MEDICINA CARDIOVASCULAR.
- 58. Manchester, UK. 7th – 9th July 2013.** British Society of Neuroendocrinology Meeting.
- 59. Granada, Spain. 15th – 17th May 2013.** 55 Congreso de la Sociedad Española de Endocrinología y Nutrición
- 60. London, United Kingdom. 24th April 2013.** University College London – Consortium for Mitochondrial Research Seminar Series.
- 61. Madrid, Spain. 4th – 6th February 2013.** Phenotypic Flexibility Symposium.
- 62. London, UK. 11th – 13th December 2012.** The Physiological Society – Metabolism & Endocrinology Themed Meeting.
- 63. Bath, UK. 17th December 2012.** 39th Adipose Tissue Discussion Group Meeting.
- 64. Barcelona, Spain. 29th November 2012.** Symposium: From whole body metabolism to cell dysfunction in diabetes.
- 65. Leeds, UK. 18th October 2012.** Presenting Seminar at the University of Leeds.
- 66. Dundee, UK. 29th October.** Presenting Seminar at University of Dundee.
- 67. Cordoba, Spain. 18th May 2012.** Lecture to IMIBIC, University of Cordoba.

- 68. Madrid, Spain. 10th – 11th May 2012.** Expo-Congreso Nutrición desde la Farmacia.
- 69. Liverpool, UK. 13th March 2012.** PhySoc Seminar at the Department of Cellular and Molecular Physiology, Institute of Translational Medicine, University of Liverpool.
- 70. Bilbao, Spain. 1st-2nd March 2012.** CIC bioGUNE in partnership with the British Council FBBVA – “Age Related Diseases”
- 71. Edinburgh, UK 10th January 2012.** University of Edinburgh, Cardiovascular Sciences Seminar Series.
- 72. Madrid, Spain. 24th – 25th November 2011.** 20th Scientific Symposium – Obesity Today.
- 73. Valencia, Spain, 10th Nov 2011,** Incliva “Comparison between anglosaxon and continental Europe approaches to research”
- 74. Cambridge, UK. 28th June 2011.** Joint meeting of the Bone Research Society and British Orthopedic Research Society. “Obesity, Energy Metabolism and Bone”.
- 75. London, UK 17th June 2011.** Symposium on Genetics and Genomics of Cardiovascular Biology and Disease, Imperial College, London.
- 76. Southampton, UK 7th June 2011.** Institute of Developmental Sciences, Southampton General Hospital. Diabetes & Endocrine Seminar Series.
- 77. Oxford, UK, 3rd May 2011.** Presenting “Adipose tissue expandability, lipotoxicity and the metabolic syndrome” to the Medical Research Council, Harwell.
- 78. Barcelona, Spain. 28th April 2011.** Present to Diabetes and Obesity Laboratory at *IDIBAPS-Hospital Clinic de Barcelona*.
- 79. Nottingham, UK. 9th February 2011.** School of Biosciences, University of Nottingham. Regular Research Seminar Series, Animal and Nutritional Sciences.
- 80. Madrid, Spain, 22nd November 2010.** CNIC Seminar Series.
- 81. Valencia, Spain. 18th November 2010.** International workshop on metabolism, “Metabolic pathways in health and disease: a proteomic and metabolomic perspective”.
- 82. Madrid, Spain. 23rd- 24th September 2010.** Symposium- Receptors, signaling networks & disease.

- 83. Cardiff, Wales. 27th April 2010.** Present to the Genetics Research Group. University of Cardiff School of Biosciences.
- 84. Cordoba, Spain. 10th April 2010.** VI CURSO DE ACTUALIZACION EN EL SINDROME DE RESISTENCIA A LA INSULINA.
- 85. Manchester, UK. 18th March 2010.** Society for Endocrinology BES 2010.
- 86. Madrid, Spain. 23rd January 2010.** Cardiovascular Best Topics. *“Obesity and Cardiovascular risk”*.
- 87. Oxford, UK. 7th September 2009.** British Society for Cardiovascular Research meeting, Myocardial energetics and redox in health and disease. *“PPARs in cardiac physiology and disease”*
- 88. London, UK. 2nd June 2009.** Speaking at the BAS session at the BCS Annual Scientific Sessions, excel centre London. *“What is the role of adipose tissue in atherogenesis?”*
- 89. Santiago, Spain. 20th- 21st April 2009.** Teaching at the Universidade de Santiago de Compostela.
- 90. Santiago, Spain. 3rd- 4th October 2008.** *International Symposium: “Diagnosing and treating DIABESITY”*. *“Targeting fat to treat Diabetes”*.
- 91. Cordoba, Spain. 10th- 11th October 2008.** *Therapeutic approaches to the Metabolic Syndrome*. *“Targeting fat in Diabetes”*.
- 92. Cambridge, UK. 11th- 12th September 2008.** *British Atherosclerosis Society. Nuclear Receptors and Atherosclerosis Meeting: “Cardiovascular phenotypes of nuclear hormone receptor deficient mice”*.
- 93. Stevenage, UK. 9th September 2008.** *GlaxoSmithKline seminar*. *“Adipose tissue expandability, lipotoxicity and the Metabolic Syndrome”*.
- 94. London, UK. 19th June 2008.** *University College London Seminar Lecture*. *“Adipose tissue expandability, lipotoxicity and the Metabolic Syndrome”*.
- 95. London, UK. 10th September 2007.** *Seminar Lecture, Kings College: “Lipotoxicity, a common pathogenic mechanism of the Metabolic Syndrome”*.
- 96. Birmingham, UK. 29th June 2007.** *School of Sport and Exercise Seminar Lecture: “PPAR γ , adipose tissue expandability and the metabolic syndrome”*.

97. **Aberdeen, UK. 30th May 2007.** *ACERO Symposium: "PPAR γ , adipose tissue expandability and the metabolic syndrome"*.
98. **Valencia, Spain. 26th- 29th May 2007.** *XX Congreso Nacional de la Sociedad Española de Arteriosclerosis: "Obesity as a protective mechanisms against the Metabolic Syndrome"*.
99. **Cordoba, Spain. 31st January 2007- 1st February 2007.** *II Reunión de Diabetes y Obesidad: "El papel del tejido adipose en el síndrome metabólico DM tipo 2"*.
100. **30th- 31st October 2006.** *Wellcome Trust Frontiers meeting "Phenotyping metabolism"*.
101. **Palma de Mallorca, Spain. 5th-7th October 2006.** *International Symposium on Morbid Obesity: "Adipose tissue and the Metabolic Syndrome"*.
102. **Oxford, UK. 12th- 15th September 2006.** *European Network of Excellence in Nutrigenomics: "PPAR γ 2, adipose tissue expandability and the Metabolic Syndrome"*.
103. **Cambridge, UK. 11th- 14th July 2006.** *Education Resource from the Society for Endocrinology. "The phenotypic approach (1) Creation and characterization of homologous knock in mouse models"*.
104. **Cordoba, Spain. 12th May 2006.** *Cordoba University Post Graduate Course. "Pathogenic mechanisms of the Metabolic Syndrome Course". "Role of Lipotoxicity in the Metabolic Syndrome"*.
105. **Almería, Spain. 26th November 2005.** *XXX SAEN (Sociedad Andaluza de Endocrinología y Nutrición): "PPAR γ : nuevas perspectivas"*.
106. **Palma de Mallorca, Spain. 2nd- 4th November 2005.** *The European Nutrigenomics Organisation's (NuGO) Personalised Nutrition Conference: "PPARs and Energy Balance"*.
107. **Girona, Spain. 28th September 2005.** *27 Meeting of the Spanish Pharmacology Society: "New peripheral targets for obesity treatment"*.
108. **Glasgow, UK. 20th July 2005.** *Biosciences 2005 from Genes to Systems: "An adipocyte perspective of the Metabolic Syndrome"*.
109. **Valencia, Spain. 30th May 2005.** *Valencia Medical School. Curso de Formacion en Metabolismo y Nutricion, Instituto de Biomedicina de Valencia, CSIC Valencia: "The metabolic Syndrome from the adipocyte perspective, role of PPAR γ 2"*.

- 110. Cordoba, Spain. 28th March 2005.** *Cordoba University Post Graduate Course: Pathogenic mechanisms of the Metabolic Syndrome Course.* “Role of Lipotoxicity in the Metabolic Syndrome”.
- 111. London, UK. 23rd February 2005.** *Imperial, Hammersmith Hospital Research seminars* invited speaker: “PPAR γ and the metabolic Syndrome”.
- 112. Warwick, UK. 6th December 2004.** *UK Adipose tissue Discussion Group (UK ATDG) Warwick,* “The Metabolic Syndrome: An adipocyte perspective”.
- 113. Nottingham, UK. 26th July 2004.** *WCPN & University of Nottingham MDRU. Cellular mechanisms of energy balance and regulation:* “Role of adipose tissue and muscle in regulation of energy balance”.
- 114. Madrid, Spain. 28th May 2004.** *COST, EU Frame work Programme. Insulin resistance, Obesity and Diabetes: Molecular basis and New therapeutic approaches.* “Human Metabolic Syndrome and PPAR γ ”.
- 115. Valencia, Spain. 10th May 2004.** *XVII Congress of the Spanish Diabetes Society:* “Diabetes Mellitus, Intervention on the adipocyte”.
- 116. Cambridge, UK. 23rd January 2004.** *Wellcome Trust Sanger Center:* “Adipose tissue and the Metabolic Syndrome, Characterisation of the PPAR γ mouse model”.

Accepted conferences and lectures

- 1. Toronto, Canada (Virtual). 25th January 2022.** University of Toronto - Adipose Biology Seminar Series
- 2. Colorado, USA. 6th-10th February 2022.** Keystone Symposia on Inter Organ Crosstalk in Non-Alcoholic Steatohepatitis (NASH)/ Adipose Tissue and Metabolic Health
- 3. Cambridge, UK. 7th-8th April 2022.** European Consortium of Lipodystrophies VIII Symposium (ECLip2022)
- 4. London, UK. 9th April 2022.** EASL International Liver Congress (chairing meeting the Experts Session)
- 5. Cambridge, UK. 28th April 2022.** Cambridge BHF Centre Annual Research Symposium
- 6. Kobe, Japan. 12th-14th May 2022.** 65th Japanese Diabetes Meeting

7. **Copenhagen, Denmark. 31st May – 2nd June 2022.** 3rd International CPH BAT Conference: “The heterogeneity and plasticity of adipose tissue”
8. **Stockholm, Sweden. 19th-23rd September 2022.** 58th EASD Annual Meeting
9. **Helsinki, Finland. 13th January 2023.** Inflammation of the pathogenesis of cardiometabolic diseases, Novo Nordisk Finland Symposium