C U R R I C U L U M V I T A E

Name: **Antonio Vidal-Puig**
Address: University of Cambridge Metabolic Research Laboratories
Wellcome Trust-MRC Institute of Metabolic Science
Box 289, Level 4
Addenbrooke's Hospital, Hills Road
Cambridge, CB2 0QQ

Current Appointment **Professor of Molecular Nutrition and Metabolism**

Phone: +44 (0)1223 762790
Fax: +44 (0)1223 330598
e-mail: ajv22@medschl.cam.ac.uk
web **https://www.tvplab-cambridge.com/**
http://www.mrl.ims.cam.ac.uk/research/principal-investigators/antonio-vidal-puig/
https://uk.linkedin.com/in/toni-vidal-puig-md-phd-frcp-fmedsci-emba-43804113/es
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

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□". 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 XLαS 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□ 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□". Leading applicant **Dr Vidal-Puig. 2004-2005**
37) **Diabetes Research Wellness Foundation Award** "Cardiovascular studies on PGC1□ 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.

<u>List of Publications (Selected publications) h index 98 citations 34559</u>**

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 PGC1α/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, Staufer K, Stauber RE, Bugianesi E, Younes R, Gaia S, Lupșor-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, Yılmaz 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, Ratziu 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

18. Prins D, Park HJ, Watcham S, Li J, Vacca M, Bastos HP, Gerbaulet A, **Vidal-Puig A**, Göttgens B, Green AR. The stem/progenitor landscape is reshaped in a mouse model of essential thrombocythemia and causes excess megakaryocyte production. ***Sci Adv***. 2020 Nov 25;6(48):eabd3139. doi: 10.1126/sciadv.abd3139. Print 2020 Nov. PMID: 33239297; PMCID:PMC7688335

19. Hammerle CM, Sandovici I, Brierley GV, Smith NM, Zimmer WE, Zvetkova I, Prosser HM, Sekita Y, Lam BYH, Ma M, Cooper WN, Vidal-Puig A, Ozanne SE, Medina-Gómez G, Constância M. Mesenchyme-derived IGF2 is a major paracrine regulator of pancreatic growth and function. ***PLoS Genet***. 2020 Oct 15;16(10):e1009069. doi: 10.1371/journal.pgen.1009069. eCollection 2020 Oct.PMID: 33057429; PMCID:PMC7678979

20. Vacca M, Leslie J, Virtue S, Lam BYH, Govaere O, Tiniakos D, Snow S, Davies S, Petkevicius K, Tong Z, Peirce V, Nielsen MJ, Ament Z, Li W, Kostrzewski T, Leeming DJ, Ratziu V, Allison MED, Anstee QM, Griffin JL, Oakley F, **Vidal-Puig A.** Bone Morphogenetic Protein 8b Promotes The Progression Of Non-Alcoholic Steatohepatitis ***Nature Metabolism.*** 2020 Jun;2(6):514-531. doi: 10.1038/s42255-020-0214-9. PMID: 32694734

21. Yeo CR, Agrawal M, Hoon S, Shabbir A, Shrivastava MK, Huang S, Khoo CM, Chhay V, Shabeer M, Shyong Tai E, **Vidal-Puig A**, Toh SA. Reply to: 'Browning capabilities of human primary adipose-derived stromal cells compared to SGBS cells' ***Sci Rep***. 2020 Jun 15;10(1):9634. doi: 10.1038/s41598-020-64706-w.PMID: 32541770; PMCID:PMC7295789

22. Kwok A, Zvetkova I, Virtue S, Luijten I, Huang-Doran I, Tomlinson P, Bulger DA, West J, Murfitt S, Griffin J, Alam R, Hart D, Knox R, Voshol P, **Vidal-Puig A**, Jensen J, O'Rahilly S, Semple RK. Truncation of Pik3r1 causes severe insulin resistance uncoupled from obesity and dyslipidaemia by increased energy expenditure. ***Mol Metab.*** 2020 Oct;40:101020. doi: 10.1016/j.molmet.2020.101020. Epub 2020 May 19.PMID: 32439336; PMCID:PMC7385515

23. Hall Z, Chiarugi D, Charidemou E, Leslie J, Scott E, Pellegrinet L, Allison M, Mocciaro G, Anstee QM, Evan GI, Hoare M, **Vidal-Puig A**, Oakley F, Vacca M, Griffin JL. Lipid remodelling in hepatocyte proliferation and hepatocellular carcinoma. ***Hepatology*** 2020 May 27. doi: 10.1002/hep.31391. PMID: 32460431

24. Araiz C, Yan A, Bettedi L, Samuelson I, Virtue S, McGavigan AK, Dani C, **Vidal-Puig A**, Foukas LC. Publisher Correction: Enhanced β-adrenergic signalling underlies an age-dependent beneficial metabolic effect of PI3K p110α inactivation in adipose tissue. ***Nat Commun*** 2020 Feb 21;11(1):1078. doi: 10.1038/s41467-020-14939-0. PubMed PMID: 32081871; PubMed Central PMCID: PMC7035318

25. Coll AP, Chen M, Taskar P, Rimmington D, Patel S, Tadross JA, Cimino I, Yang M, Welsh P, Virtue S, Goldspink DA, Miedzybrodzka EL, Konopka AR, Esponda RR, Huang JT, Tung YCL, Rodriguez-Cuenca S, Tomaz RA, Harding HP, Melvin A, Yeo GSH, Preiss D, **Vidal-Puig A**, Vallier L, Nair KS, Wareham NJ, Ron D, Gribble FM, Reimann F, Sattar N, Savage DB, Allan BB, O'Rahilly S. Publisher Correction: GDF15 mediates the effects of metformin on body weight and energy balance. ***Nature.*** 2020 Feb;578(7796):E24. doi: 10.1038/s41586-020-2031-4. PubMed PMID: 32051582

26. Baig S, Shabeer M, Parvaresh Rizi E, Agarwal M, Lee MH, Ooi DSQ, Chia C, Aung N, Ng G, Teo Y, Chhay V, Magkos F, **Vidal-Puig A**, Seet RCS, Toh SA. Heredity of type 2 diabetes confers increased susceptibility to oxidative stress and inflammation. ***BMJ Open Diabetes Res Care***. 2020 Jan;8(1). pii: e000945. doi:10.1136/bmjdrc-2019-000945. PubMed PMID: 32049633.

27. Badenes M, Amin A, González-García I, Félix I, Burbridge E, Cavadas M, Ortega FJ, de Carvalho É, Faísca P, Carobbio S, Seixas E, Pedroso D, Neves-Costa A, Moita LF, Fernández-Real JM, **Vidal-Puig A**, Domingos A, López M, Adrain C. Deletion of iRhom2 protects against diet-induced obesity by increasing thermogenesis. ***Mol Metab***. 2020 Jan;31:67-84. doi: 10.1016/j.molmet.2019.10.006.Epub 2019 Oct 31. PubMed PMID: 31918923; PubMed Central PMCID: PMC6909339.

28. Bauzá-Thorbrügge M, Rodríguez-Cuenca S, Vidal-Puig A, Galmés-Pascual BM, Sbert-Roig M, Gianotti M, Lladó I, Proenza AM. GPER and ERα mediate estradiol enhancement of mitochondrial function in inflamed adipocytes through a PKA dependent mechanism. ***J Steroid Biochem Mol Biol***. 2019 Jan;185:256-267. doi: 10.1016/j.jsbmb.2018.09.013.

29. Agrawal M, Yeo CR, Shabbir A, Chhay V, Silver DL, Magkos F, **Vidal-Puig A**, Toh SA. Fat storage-inducing transmembrane protein 2 (FIT2) is less abundant in type 2 diabetes, and regulates triglyceride accumulation and insulin sensitivity in adipocytes. ***FASEB J.*** 2019 Jan;33(1):430-440. doi: 10.1096/fj.201701321RR.

30. Coll AP, Chen M, Taskar P, Rimmington D, Patel S, Tadross JA, Cimino I, Yang M, Welsh P, Virtue S, Goldspink DA, Miedzybrodzka EL, Konopka AR, Esponda RR, Huang JT, Tung YCL, Rodriguez-Cuenca S, Tomaz RA, Harding HP, Melvin A, Yeo GSH, Preiss D, **Vidal-Puig A**, Vallier L, Nair KS, Wareham NJ, Ron D, Gribble FM, Reimann F, Sattar N, Savage DB, Allan BB, O'Rahilly S. GDF15 mediates the effects of metformin on body weight and energy balance. ***Nature.*** 2019 Dec 25. doi: 10.1038/s41586-019-1911-y. [Epub ahead of print] Erratum in: Nature. 2020 Feb 13; PubMed PMID: 31875646.

31. Vargas-Castillo A, Tobon-Cornejo S, Del Valle-Mondragon L, Torre-Villalvazo I,Schcolnik Cabrera A, Guevara-Cruz M, Pichardo-Ontiveros E, Fuentes-Romero R,Bader M, Alenina N, **Vidal-Puig A**, Hong E, Torres N, Tovar AR. Angiotensin-(1-7)induces beige fat thermogenesis through the Mas receptor. ***Metabolism***. 2020Feb;103:154048. doi: 10.1016/j.metabol.2019.154048. Epub 2019 Dec 13. PubMed PMID: 31843339.

32. Grandoch M, Flögel U, Virtue S, Maier JK, Jelenik T, Kohlmorgen C, Feldmann K, Ostendorf Y, Castañeda TR, Zhou Z, Yamaguchi Y, Nascimento EBM, Sunkari VG, Goy C, Kinzig M, Sörgel F, Bollyky PL, Schrauwen P, Al-Hasani H, Roden M, Keipert S, **Vidal-Puig A**, Jastroch M, Haendeler J, Fischer JW. 4-Methylumbelliferone improvesthe thermogenic capacity of brown adipose tissue. ***Nat Metab.*** 2019 May;1(5):546-559. doi: 10.1038/s42255-019-0055-6. Epub 2019 Apr 22. PubMed PMID: 31602424; PubMed Central PMCID: PMC6786893.

33. Lee E, Miedzybrodzka EL, Zhang X, Hatano R, Miyamoto J, Kimura I, Fujimoto K, Uematsu S, Rodriguez-Cuenca S, **Vidal-Puig A**, Gribble FM, Reimann F, Miki T. Diet-Induced Obese Mice and Leptin-Deficient Lepob/ob Mice Exhibit Increased Circulating GIP Levels Produced by Different Mechanisms***. Int J Mol Sci***. 2019 Sep 10;20(18). pii: E4448. doi: 10.3390/ijms20184448. PubMed PMID: 31509948; PubMed Central PMCID: PMC6769670.

34. Petkevicius K, Virtue S, Bidault G, Jenkins B, Çubuk C, Morgantini C, Aouadi M, Dopazo J, Serlie MJ, Koulman A, **Vidal-Puig A**. Accelerated phosphatidylcholine turnover in macrophages promotes adipose tissue inflammation in obesity. ***Elife.*** 2019 Aug 16;8. pii: e47990. doi: 10.7554/eLife.47990. PubMed PMID: 31418690; PubMed Central PMCID: PMC6748830.

35. Rana BMJ, Jou E, Barlow JL, Rodriguez-Rodriguez N, Walker JA, Knox C, Jolin HE, Hardman CS, Sivasubramaniam M, Szeto A, Cohen ES, Scott IC, Sleeman MA, Chidomere CI, Cruz Migoni S, Caamano J, Jorgensen HF, Carobbio S, **Vidal-Puig A**, McKenzie ANJ. A stromal cell niche sustains ILC2-mediated type-2 conditioning in adipose tissue. ***J Exp Med***. 2019 Sep 2;216(9):1999-2009. doi:10.1084/jem.20190689. Epub 2019 Jun 27. PubMed PMID: 31248899; PubMed Central PMCID: PMC6719433.

36. Johann K, Cremer AL, Fischer AW, Heine M, Pensado ER, Resch J, Nock S, Virtue S, Harder L, Oelkrug R, Astiz M, Brabant G, Warner A, **Vidal-Puig A**, Oster H, Boelen A, López M, Heeren J, Dalley JW, Backes H, Mittag J. Thyroid-Hormone-Induced Browning of White Adipose Tissue Does Not Contribute to Thermogenesis and Glucose Consumption. ***Cell Rep***. 2019 Jun 11;27(11):3385-3400.e3.doi: 10.1016/j.celrep.2019.05.054. PubMed PMID: 31189119

37. Ortega FJ, Moreno-Navarrete JM, Mercader JM, Gómez-Serrano M, García-Santos E, Latorre J, Lluch A, Sabater M, Caballano-Infantes E, Guzmán R, Macías-González M, Buxo M, Gironés J, Vilallonga R, Naon D, Botas P, Delgado E, Corella D, Burcelin R, Frühbeck G, Ricart W, Simó R, Castrillon-Rodríguez I, Tinahones FJ, Bosch F, **Vidal-Puig A**, Malagón MM, Peral B, Zorzano A, Fernández-Real JM. Cytoskeletal transgelin 2 contributes to gender-dependent adipose tissue expandability and immune function. ***FASEB J***. 2019 Aug;33(8):9656-9671. doi: 10.1096/fj.201900479R. Epub 2019 May 30. PubMed PMID: 31145872.

38. Baig S, Parvaresh Rizi E, Chia C, Shabeer M, Aung N, Loh TP, Magkos F, **Vidal-Puig** A, Seet RCS, Khoo CM, Toh SA.Genes Involved in Oxidative Stress Pathways Are Differentially Expressed in Circulating Mononuclear Cells Derived From Obese Insulin-Resistant and Lean Insulin-Sensitive Individuals Following a Single Mixed-Meal Challenge. ***Frontiers in endocrinology (Lausanne).*** 2019 Apr 24 ; 10:256. doi: 10.3389/fendo.2019.00256. eCollection 2019. PMID: 31068904

39. Araiz C, Yan A, Bettedi L, Samuelson I, Virtue S, McGavigan AK, Dani C, **Vidal-Puig** A, Foukas LC. Enhanced β-adrenergic signalling underlies an age-dependent beneficial metabolic effect of PI3K p110α inactivation in adipose tissue. ***Nature Communication.*** 2019 Apr 4;10(1):1546. doi: 10.1038/s41467-019-09514-1.PMID:30948720

40. Patel V, Bidault G, Chambers JE, Carobbio S, Everden AJT, Garcés C, Dalton LE, Gribble FM, **Vidal-Puig** A, Marciniak SJ. Inactivation of Ppp1r15a minimises weight gain and insulin resistance during caloric excess in female mice. ***Sci Rep.*** 2019 Feb 27;9(1):2903. doi: 10.1038/s41598-019-39562-y. PMID: 30814564

41. Patel S, Alvarez-Guaita A, Melvin A, Rimmington D, Dattilo A, Miedzybrodzka EL, Cimino I, Maurin AC, Roberts GP, Meek CL, Virtue S, Sparks LM, Parsons SA, Redman LM, Bray GA, Liou AP, Woods RM, Parry SA, Jeppesen PB, Kolnes AJ, Harding HP, Ron D, **Vidal-Puig A**, Reimann F, Gribble FM, Hulston CJ, Farooqi IS, Fafournoux P, Smith SR, Jensen J, Breen D, Wu Z, Zhang BB, Coll AP, Savage DB, O'Rahilly S. GDF15 Provides an Endocrine Signal of Nutritional Stress in

Mice and Humans. ***Cell Metab.*** 2019 Mar 5;29(3):707-718.e8. doi:10.1016/j.cmet.2018.12.016.

42. Rached MT, Millership SJ, Pedroni SMA, Choudhury AI, Costa ASH, Hardy DG, Glegola JA, Irvine EE, Selman C, Woodberry MC, Yadav VK, Khadayate S, **Vidal-Puig A**, Virtue S, Frezza C, Withers DJ. Deletion of myeloid IRS2 enhances adipose tissue sympathetic nerve function and limits obesity. ***Mol Metab***. 2019 Feb;20:38-50. doi: 10.1016/j.molmet.2018.11.010.

43. Morigny P, Houssier M, Mairal A, Ghilain C, Mouisel E, Benhamed F, Masri B, Recazens E, Denechaud PD, Tavernier G, Caspar-Bauguil S,· Virtue S, Sramkova V, Monbrun L, Mazars A, Zanoun M, Guilmeau S, Barquissau V, Beuzelin D, Bonnel S, Marques M, Roffarello BM, Lefort C, Fielding B, Sulpice T, Astrup A, Payrastre B, Michel JB, Meugnier E, Ligat L,Lopez F, Guillou H, Ling C, Holm C, Rabasa-Lhoret R, Saris WHM, Stich V, Arner P, Rydén M, Moro C, Viguerie N, Harms M, Hallén S, Vidal-Puig A, Vidal H, Postic C, Langin D.· Interaction between Hormone-Sensitive Lipase and ChREBP in Fat Cells Controls Insulin Sensitivity. ***Nature Metab*** 2019 1, 122-146. doi: 10.1038/s42255-018-0007-6.

44. Pellegrinelli V, Peirce VI, Howard L, Virtue S, Turei D, Senzacqua M, FrontiniA , Dalley JW, AR Horton AR, Bidault G, SeveriI, Whittle A, Saez-Rodriguez J, Cinti S Davie AM and **A Vidal-Puig** Adipocyte secreted BMP8b mediates adrenergic-induced remodeling of the neuro-vascular network in adipose tissue. ***Nat Comm*** *2018 Nov 26;9(1):4974. doi: 10.1038/s41467-018-07453-x.*

45. Smith MA, Katsouri L, Virtue S, **Vidal-Puig A**, Ashford MLJ, Withers Dj. Calcium channel CaV2.3 subunits regulate hepatic glucose production by modulating leptin-induced excitation of arcuate pro-opiomelanocortin neurons. ***Cell Reports*** 2018 Oct 9;25(2):278-287.e4. doi: 10.1016/j.celrep.2018.09.024.

46. Petrus P, Mejhert N, Corrales P, Lecoutre S, Li Q, Maldonado E, Kulyté A, Lopez Y, Campbell M, Acosta JR, Laurencikiene J, Douagi I, Gao H, Martínez-Álvarez C, Hedén P, Spalding K, Vidal-Puig A, Medina-Gomez G, Arner[P], Rydén M. Transforming Growth Factor-β3 Regulates Adipocyte Number in Subcutaneous White Adipose Tissue. ***Cell Reports*** 2018 Oct 16;25(3):551-560.e5. doi: 10.1016/j.celrep.2018.09.069.

47. Virtue S, Petkevicius K, Moreno-Navarrete JM, Jenkins B, Hart D, Dale M, Koulman A, Fernández-Real JM, ***Vidal-Puig A***. Peroxisome Proliferator-Activated Receptor γ2 Controls the Rate of Adipose Tissue Lipid Storage and Determines Metabolic Flexibility. ***Cell Rep***. 2018 Aug 21;24(8):2005-2012.e7. doi: 10.1016/j.celrep.2018.07.063. PMID:30134163

48. Senyilmaz-Tiebe D, Pfaff DH, Virtue S, Schwarz KV, Fleming T, Altamura S, Muckenthaler MU, Okun JG, **Vidal-Puig A**, Nawroth P, Teleman AA. Dietary stearic acid regulates mitochondria in vivo in humans. ***Nat Commun.*** 2018 Aug 7;9(1):3129. doi: 10.1038/s41467-018-05614-6. PMID:30087348

49. Sanders FWB, Acharjee A, Walker C, Marney L, Roberts LD, Imamura F, Jenkins B, Case J, Ray S, Virtue S, **Vidal-Puig A**, Kuh D, Hardy R, Allison M, Forouhi N, Murray AJ, Wareham N, Vacca M, Koulman A, Griffin JL. Hepatic steatosis risk is partly driven by increased de novo lipogenesis following carbohydrate consumption. ***Genome Biol***. 2018 Jun 20;19(1):79. doi: 10.1186/s13059-018-1439-8. PMID:29925420.

50. Rodriguez-Cuenca S, Carobbio S, Barceló-Coblijn G, Prieur X, Relat J, Amat R, Campbell M, Dias AR, Bahri M, Gray SL, **Vidal-Puig A**. P465L-PPARγ mutation confers partial resistance to the hypolipidaemic action of fibrates. ***Diabetes Obes Metab*.** 2018 Oct;20(10):2339-2350. doi: 10.1111/dom.13370. PMID: 29790245.

51. Girousse A, Virtue S, Hart D, **Vidal-Puig A**, Murgatroyd PR, Mouisel E, Sengenès C, Savage DB. Surplus fat rapidly increases fat oxidation and insulin resistance in lipodystrophic mice. ***Mol Metab.*** 2018 Jul;13:24-29. doi: 10.1016/j.molmet.2018.05.006. PMID: 29789270.

52. Morton NM, Beltram J, Carter RN, Michailidou Z, Gorjanc G, McFadden C, Barrios-Llerena ME, Rodriguez-Cuenca S, Gibbins MTG, Aird RE, Moreno-Navarrete JM, Munger SC, Svenson KL, Gastaldello A, Ramage L, Naredo G, Zeyda M, Wang ZV, Howie AF, Saari A, Sipilä P, Stulnig TM, Gudnason V, Kenyon CJ, Seckl JR, Walker BR, Webster SP, Dunbar DR, Churchill GA, **Vidal-Puig A**, Fernandez-Real JM, Emilsson V, Horvat S. Corrigendum: Genetic identification of thiosulfate sulfurtransferase as an adipocyte-expressed antidiabetic target in mice selected for leanness. ***Nat Med***. 2018 Apr 10;24(4):525. doi: 10.1038/nm0418-525e.

53. Arias de la Rosa I, Escudero-Contreras A, Rodríguez-Cuenca S, Ruiz-Ponce M, Jiménez-Gómez Y, Ruiz-Limón P, Pérez-Sánchez C, Ábalos-Aguilera MC, Cecchi I, Ortega R, Calvo J, Guzmán-Ruiz R, Malagón MM, Collantes-Estevez E, **Vidal-Puig A**, López-Pedrera C, Barbarroja N. Defective glucose and lipid metabolism in rheumatoid arthritis is determined by chronic inflammation in metabolic tissues. ***J Intern Med***. 2018 Jul;284(1):61-77. doi: 10.1111/joim.12743.

54. Langeveld M, Tan CY, Soeters MR, Virtue S, Watson LP, Murgatroyd PR, Ambler GK, Vidal-Puig S, Chatterjee KV, **Vidal-Puig A**. No metabolic effects of mustard allyl-isothiocyanate compared with placebo in men. ***Am J Clin Nutr.*** 2017 Nov;106(5):1197-1205. doi: 10.3945/ajcn.116.148395.

55. Martínez-Sánchez N, Seoane-Collazo P, Contreras C, Varela L, Villarroya J, Rial-Pensado E, Buqué X, Aurrekoetxea I, Delgado TC, Vázquez-Martínez R, González-García I, Roa J, Whittle AJ, Gomez-Santos B, Velagapudi V, Tung YCL, Morgan DA, Voshol PJ, Martínez de Morentin PB, López-González T, Liñares-Pose L, Gonzalez F, Chatterjee K, Sobrino T, Medina-Gómez G, Davis RJ, Casals N, Orešič M, Coll AP, **Vidal-Puig A**, Mittag J, Tena-Sempere M, Malagón MM, Diéguez C, Martínez-Chantar ML, Aspichueta P, Rahmouni K, Nogueiras R, Sabio G, Villarroya F, López M. Hypothalamic AMPK-ER Stress-JNK1 Axis Mediates the Central Actions of Thyroid

Hormones on Energy Balance. ***Cell Metab.*** 2017 Jul 5;26(1):212-229.e12. doi: 10.1016/j.cmet.2017.06.014.

56. Chia Rou Yeo, Madhur Agrawal, Shawn Hoon, Asim Shabbir, Manu Kunaal Shrivastava, Shiqi Huang, Chin Meng Khoo, Vanna Chhay, M. Shabeer Yassin, E. Shyong Tai, **Antonio Vidal-Puig** & Sue-Anne Toh. SGBS cells as a model of human adipocyte browning: A comprehensive comparative study with primary human white subcutaneous adipocytes. ***Sci Rep*** 2017 Jun 22;7(1):4031. doi: 10.1038/s41598-017-04369-2.

57. Burke LK, Darwish T, Cavanaugh AR, Virtue S, Roth E, Morro J, Liu SM, Xia J, Dalley JW, Burling K, Chua S, **Vidal-Puig T**, Schwartz GJ, Blouet C. mTORC1 in AGRP neurons integrates exteroceptive and interoceptive food-related cues in the modulation of adaptive energy expenditure in mice. ***Elife.*** 2017 May 23;6. pii: e22848. doi: 10.7554/eLife.22848. PMID:28532548

58. Mele L, Carobbio S, Brindani N, Curti C, Rodriguez-Cuenca S, Bidault G, Mena P, Zanotti I, Vacca M, **Vidal-Puig A**, Del Rio D. Phenyl-γ-valerolactones, flavan-3-ol colonic metabolites, protect brown adipocytes from oxidative stress without affecting their differentiation or function. ***Mol Nutr Food Res.*** 2017 Sep;61(9). doi: 10.1002/mnfr.201700074.

59. Tsuchiya Y, Peak-Chew S, Newell C, Miller-Aidoo S, Mangal S, Zhyvoloup A, Baković J, Malanchuk O, Pereira G, Kotiadis V, Szabadkai G, Duchen M, Campbell M, Rodriguez Cuenca S, **Vidal-Puig A**, James A, Murphy MP, Filonenko V, Skehel M, Gout I. Protein CoAlation: A Redox-Regulated Protein Modification by Coenzyme Ain Mammalian Cells. ***Biochem J.*** 2017 Jul 11;474(14):2489-2508. doi: 10.1042/BCJ20170129.

60. Parvaresh Rizi E, Baig S, Shabeer M, Teo Y, Mok SF, Loh TP, Magkos F, Virtue S, **Vidal-Puig A**, Tai ES, Khoo CM, Toh SA. Meal rich in carbohydrate, but not protein or fat, reveals adverse immunometabolic responses associated with obesity. ***Nutr J.*** 2016 Dec 1;15(1):100.

61. Hall Z, Bond NJ, Ashmore T, Sanders F, Ament Z, Wang X, Murray AJ, Bellafante E, Virtue S, **Vidal-Puig A**, Allison M, Davies SE, Koulman A, Vacca M, Griffin JL. Lipid zonation and phospholipid remodeling in non-alcoholic fatty liver disease. ***Hepatology.*** 2017 Apr;65(4):1165-1180. doi: 10.1002/hep.28953.

62. Baig S, Parvaresh Rizi E, Shabeer M, Chhay V, Mok SF, Loh TP, Magkos F, **Vidal-Puig A**, Tai ES, Khoo CM, Toh SA.Metabolic gene expression profile in circulating mononuclear cells reflects obesity-associated metabolic inflexibility. ***Nutr Metab (Lond***). 2016 Oct 27;13:74

63. Rodriguez-Cuenca S, Whyte L, Hagen R, **Vidal-Puig A**, Fuller M. Stearoyl-CoA Desaturase 1 Is a Key Determinant of Membrane Lipid Composition in 3T3-L1 Adipocytes. ***PLoS One.*** 2016 Sep 15;11(9):e0162047. doi: 10.1371/journal.pone.0162047.

64. Schooneman MG, Napolitano A, Houten SM, Ambler GK, Murgatroyd PR, Miller SR, Hollak CE, Tan CY, Virtue S, **Vidal-Puig A**, Nunez DJ, Soeters MR. Assessment of plasma acylcarnitines before and after weight loss in obese subjects. ***Arch Biochem Biophys.*** 2016 Jul 19;606:73-80. doi: 10.1016/j.abb.2016.07.013.

65. Morton NM, Beltram J, Carter RN, Michailidou Z, Gorjanc G, McFadden C, Barrios-Llerena ME, Rodriguez-Cuenca S, Gibbins MT, Aird RE, Moreno-Navarrete JM, Munger SC, Svenson KL, Gastaldello A, Ramage L, Naredo G, Zeyda M, Wang ZV, Howie AF, Saari A, Sipilä P, Stulnig TM, Gudnason V, Kenyon CJ, Seckl JR, Walker BR, Webster SP, Dunbar DR, Churchill GA, **Vidal-Puig A**, Fernandez-Real JM, Emilsson V, Horvat S. Genetic identification of thiosulfate sulfurtransferase as an adipocyte-expressed antidiabetic target in mice selected for leanness. ***Nat Med.*** 2016 Jul;22(7):771-9. doi: 10.1038/nm.4115.

66. Tan CY, Virtue S, Murfitt S, Roberts LD, Phua YH, Dale M, Griffin JL, Tinahones F, Scherer PE, **Vidal-Puig A**. Erratum: Adipose tissue fatty acid chain length and mono-unsaturation increases with obesity and insulin resistance. ***Sci Rep.*** 2016 Mar 30;6:23873. doi: 10.1038/srep23873

67. Van De Pette M, Tunster SJ, McNamara GI, Shelkovnikova T, Millership S, Benson L, Peirson S, Christian M, **Vidal-Puig A**, John RM. Cdkn1c Boosts the Development of Brown Adipose Tissue in a Murine Model of Silver Russell Syndrome. ***PLoS Genet***. 2016 Mar 10;12(3):e1005916. doi: 10.1371/journal.pgen.1005916. eCollection 2016 Mar.

68. Sanghez V, Cubuk C, Sebastián-Leon P, Carobbio S, Dopazo J, **Vidal-Puig A**, Bartolomucci A. Chronic subordination stress selectively downregulates the insulin signaling pathway in liver and skeletal muscle but not in adipose tissue of male mice. ***Stress***. 2016 Mar 7:1-11.

69. Correia-Melo C, Marques FD, Anderson R, Hewitt G, Hewitt R, Cole J, Carroll BM, Miwa S, Birch J, Merz A, Rushton MD, Charles M, Jurk D, Tait SW, Czapiewski R, Greaves L, Nelson G, Bohlooly-Y M, Rodriguez-Cuenca S, **Vidal-Puig A**, Mann D, Saretzki G, Quarato G, Green DR, Adams PD, von Zglinicki T, Korolchuk VI, Passos JF. Mitochondria are required for pro-ageing features of the senescent phenotype. ***EMBO J***. 2016 Feb 4. pii: e201592862

70. Razzoli M, Frontini A, Gurney A, Mondini E, Cubuk C, Katz LS, Cero C, Bolan PJ, Dopazo J, **Vidal-Puig A**, Cinti S, Bartolomucci A. Stress-induced activation of brown adipose tissue prevents obesity in conditions of low adaptive thermogenesis. ***Mol Metab.*** 2015 Nov 11;5(1):19-33. doi: 10.1016/j.molmet.2015.10.005. eCollection 2016 Jan.

71. Yew Tan C, Virtue S, Murfitt S, Robert LD, Phua YH, Dale M, Griffin JL, Tinahones F, Scherer PE, **Vidal-Puig A**. Adipose tissue fatty acid chain length and mono-unsaturation increases with obesity and insulin resistance. ***Sci Rep*.** 2015 Dec 17;5:18366. doi: 10.1038/srep18366.

72. Tan CY, Virtue S, Bidault G, Dale M, Hagen R, Griffin JL, **Vidal-Puig A**. Brown Adipose Tissue Thermogenic Capacity Is Regulated by Elovl6. ***Cell Rep***. 2015 Dec 15;13(10):2039-47. doi: 10.1016/j.celrep.2015.11.004. Epub 2015 Nov 25.

73. Lee EY, Sakurai K, Zhang X, Toda C, Tanaka T, Jiang M, Shirasawa T, Tachibana K, Yokote K, **Vidal-Puig A**, Minokoshi Y, Miki T. Unsuppressed lipolysis in adipocytes is linked with enhanced gluconeogenesis and altered bile acid physiology in Insr(P1195L/+) mice fed high-fat-diet. ***Sci Rep***. 2015 Nov 30;5:17565. doi: 10.1038/srep17565.

74. Whittle AJ, Jiang M, Peirce V, Relat J, Virtue S, Ebinuma H, Fukamachi I, Yamaguchi T, Takahashi M, Murano T, Tatsuno I, Takeuchi M, Nakaseko C, Jin W, Jin Z, Campbell M, Schneider WJ, **Vidal-Puig A***, Bujo H*. Soluble LR11/SorLA represses thermogenesis in adipose tissue and correlates with BMI in humans. ***Nat Commun***. 2015 Nov 20;6:8951. doi: 10.1038/ncomms9951.* Corresponding Author

75. Schreiber R, Hofer P, Taschler U, Voshol PJ, Rechberger GN, Kotzbeck P, Jaeger D, Preiss-Landl K, Lord CC, Brown JM, Haemmerle G, Zimmermann R, **Vidal-Puig A**, Zechner R Hypophagia and metabolic adaptations in mice with defective ATGL-mediated lipolysis cause resistance to HFD-induced obesity. ***Proc Natl Acad Sci U S A.*** 2015 Nov 10;112(45):13850-5. doi: 10.1073/pnas.1516004112. Epub 2015 Oct 27

76. Senyilmaz D, Virtue S, Xu X, Tan CY, Griffin JL, Miller AK, **Vidal-Puig A**, Teleman AA. Regulation of mitochondrial morphology and function by stearoylation of TFR1. ***Nature.*** 2015 Sep 3;525(7567):124-8. doi: 10.1038/nature14601

77. Moreno-Navarrete JM, Escoté X, Ortega F, Camps M, Ricart W, Zorzano A, Vendrell J, **Vidal-Puig A**, Fernández-Real JM. Lipopolysaccharide binding protein is an adipokine involved in the resilience of the mouse adipocyte to inflammation. **Diabetologia.** 2015 Oct;58(10):2424-34. doi: 10.1007/s00125-015-3692-7.

78. Smith MA, Katsouri L, Irvine EE, Hankir MK, Pedroni SM, Voshol PJ, Gordon MW, Choudhury AI, Woods A, **Vidal-Puig A**, Carling D, Withers DJ. Ribosomal S6K1 in POMC and AgRP Neurons Regulates Glucose Homeostasis but Not Feeding Behaviour in Mice. ***Cell Rep.*** 2015 Apr 21;11(3):335-43. doi: 10.1016/j.celrep.2015.03.029.

79. Virtue S, Masoodi M, de Weijer BA, van Eijk M, Mok CY, Eiden M, Dale M, Pirraco A, Serlie MJ, Griffin JL, **Vidal-Puig A**. Prostaglandin profiling reveals a role for haematopoietic prostaglandin D synthase in adipose tissue macrophage polarisation in mice and humans. ***Int J Obes (Lond).*** 2015 Jul;39(7):1151-60. doi: 10.1038/ijo.2015.34 Epub 2015 Mar 24.

80. Pellegrinelli V, Rouault C, Rodriguez-Cuenca S, Albert V, Edom-Vovard F, **Vidal-Puig A**, Clément K, Butler-Browne G, Lacasa D. Human adipocytes induce inflammation and atrophy in muscle cells during obesity. ***Diabetes.*** 2015 Feb 18. pii: db140796.

81. Patel MN, Bernard WG, Milev NB, Cawthorn WP, Figg N, Hart D, Prieur X, Virtue S, Hegyi K, Bonnafous S, Bailly-Maitre B, Chu Y, Griffin JL, Mallat Z, Considine RV, Tran A, Gual P, Takeuchi O, Akira S, **Vidal-Puig A**, Bennett MR, Sethi JK. Hematopoietic IKBKE limits the chronicity of inflammasome priming and metaflammation. ***Proc Natl Acad Sci U S A.*** 2015 Jan 13;112(2):506-11.

82. Clemente FJ, Cardona A, Inchley CE, Peter BM, Jacobs G, Pagani L, Lawson DJ, Antão T, Vicente M, Mitt M, DeGiorgio M, Faltyskova Z, Xue Y, Ayub Q, Szpak M, Mägi R, Eriksson A, Manica A, Raghavan M, Rasmussen M, Rasmussen S, Willerslev E, **Vidal-Puig A**, Tyler-Smith C, Villems R, Nielsen R, Metspalu M, Malyarchuk B, Derenko M, Kivisild T. A Selective Sweep on a Deleterious Mutation in CPT1A in Arctic Populations. ***Am J Hum Genet.*** 2014 Oct 23;95(5):584-589.

83. Barbarroja N, Rodriguez-Cuenca S, Nygren H, Camargo A, Pirraco A, Relat J, Cuadrado I, Pellegrinelli V, Medina-Gomez G, Lopez-Pedrera C, Tinahones FJ, Symons JD, Summers SA, Oresic M, **Vidal-Puig A**. Increased dihydroceramide/ceramide ratio mediated by defective expression of degs1 impairs adipocyte differentiation and function***. Diabetes.*** 2014 Oct 28. pii: DB_140359.

84. Charalambous M, Da Rocha ST, Radford EJ, Medina-Gomez G, Curran S, Pinnock SB, Ferrón SR, **Vidal-Puig A**, Ferguson-Smith AC. DLK1/PREF1 regulates nutrient metabolism and protects from steatosis. ***Proc Natl Acad Sci U S A.*** 2014 Nov 11;111(45):16088-93.

85. Sebastian-Leon P, Vidal E, Minguez P, Conesa A, Tarazona S, Amadoz A, Armero C, Salavert F, **Vidal-Puig A**, Montaner D, Dopazo J. Understanding disease mechanisms with models of signaling pathway activities. ***BMC Syst Biol.*** 2014 Oct 25;8(1):121.

86. Ortega FJ, Serrano M, Rodriguez-Cuenca S, Moreno-Navarrete JM, Gómez-Serrano M, Sabater M, Rodriguez-Hermosa JI, Xifra G, Ricart W, Peral B, **Vidal-Puig A**, Fernández-Real JM. Transducin-like enhancer of split 3 (TLE3) in adipose tissue is increased in situations characterized by decreased PPARγ gene expression. ***J Mol Med (Berl).*** 2015 Jan;93(1):83-92.

87. Yu, E, Calvert PA, Mercer JR, Harrison J, Baker L, Figg NL, Kumar S, Wang JJ, Hurtst LA, Obaid DR, Logan A, West NE, Clarke MC, **Vidal-Puig A**, Murphy MP, Bennett MR. Response to letter regarding article, "Mitochondrial DNA damage can promote atherosclerosis independently of reactive oxygen species through effects on smooth muscle cells and monocytes and correlates with high-risk plaques in human". ***Circulation*** 2014 Mar 25;129(12):e408. Doi: 10.1161/CIRCULATIONHA. 112.008032.

88. Roberts LD, West JA, **Vidal-Puig A**, Griffin JL. Methods for performing lipidomics in white adipose tissue. ***Methods Enzymol.*** 2014;538:211-31. doi: 10.1016/B978-0-12-800280-3.00012-8.

89. Vidal-Puig A. Adipose tissue expandability, lipotoxicity and the metabolic syndrome. ***Endocrinol Nutr.*** 2013;60 Suppl 1:39-43.

90. Paniagua JA, Escandell-Morales JM, Gil-Contreras D, Berral de la Rosa FJ, Romero-Jimenez M, Gómez-Urbano A, Sanchez-Lopez A, Bellido E, Poyato A, Calatayud B, **Vidal-Puig AJ**. Central obesity and altered peripheral adipose tissue gene expression characterize the NAFLD patient with insulin resistance: Role of nutrition and insulin challenge. ***Nutrition.*** 2014 Feb;30(2):177-85.

91. Sanghez V, Razzoli M, Carobbio S, Campbell M, McCallum J, Cero C, Ceresini G, Cabassi A, Govoni P, Franceschini P, de Santis V, Gurney A, Ninkovic I, Parmigiani S, Palanza P, **Vidal-Puig A**, Bartolomucci A. Psychosocial stress induces hyperphagia and exacerbates diet-induced insulin resistance and the manifestations of the Metabolic Syndrome. ***Psychoneuroendocrinology*** 2013 Sep 2. pii: S0306-4530(13)00287-4.

92. Moreno-Navarrete JM, Escoté X, Ortega F, Serino M, Campbell M, Michalski MC, Laville M, Xifra G, Luche E, Domingo P, Sabater M, Pardo G, Waget A, Salvador J, Giralt M, Rodriguez-Hermosa JI, Camps M, Kolditz CI, Viguerie N, Galitzky J, Decaunes P, Ricart W, Frühbeck G, Villarroya F, Mingrone G, Langin D, Zorzano A, Vidal H, Vendrell J, Burcelin R, **Vidal-Puig A**, Fernández-Real JM. A role for adipocyte-derived lipopolysaccharide-binding protein in inflammation- and obesity-associated adipose tissue dysfunction. ***Diabetologia*** 2013 Nov;56(11):2524-37

93. Carobbio S, Hagen RM, Lelliott CJ, Slawik M, Medina-Gomez G, Tan CY, Sicard A, Atherton HJ, Barbarroja N, Bjursell M, Bohlooly-Y M, Virtue S, Tuthill A, Lefai E, Laville M, Wu T, Considine RV, Vidal H, Langin D, Oresic M, Tinahones FJ, Fernandez-Real JM, Griffin JL, Sethi JK, López M, **Vidal-Puig A**. Adaptive changes of the Insig1/SREBP1/SCD1 set point help adipose tissue to cope with increased storage demands of obesity. ***Diabetes*** 2013 Aug 6.

94. Yu E, Calvert PA, Mercer JR, Harrison J, Baker L, Figg NL, Kumar S, Wang JC, Hurst LA, Obaid DR, Logan A, West NE, Clarke MC, **Vidal-Puig A**, Murphy MP, Bennett MR. Mitochondrial DNA damage can promote atherosclerosis independently of reactive oxygen species through effects on smooth muscle cells and monocytes and correlates with higher-risk plaques in humans. ***Circulation*** 2013 Aug 13;128(7):702-12. doi: 10.1161/CIRCULATIONAHA.113.002271. Epub 2013 Jul 10

95. Camacho A, Huang JK, Delint-Ramirez I, Yew Tan C, Fuller M, Lelliott CJ, **Vidal-Puig A**, Franklin RJ. Peroxisome proliferator-activated receptor gamma-coactivator-1 alpha coordinates sphingolipid metabolism, lipid raft composition and myelin protein synthesis. ***Eur J Neurosci*** 2013 Jun 14. doi: 10.1111/ejn.12281. [Epub ahead of print].

96. Alligier M, Gabert L, Meugnier E, Lambert-Porcheron S, Chanseaume E, Pilleul F, Debard C, Sauvinet V, Morio B, **Vidal-Puig A**, Vidal H, Laville M. Visceral fat accumulation during lipid overfeeding is related to subcutaneous adipose tissue characteristics in healthy men. ***J Clin Endocrinol Metab*** 2013 Feb;98(2):802-10 (2013)

97. Virtue S, Even P, **Vidal-Puig A**. Below Thermoneutrality, Changes in Activity Do Not Drive Changes in Total Daily Energy Expenditure between Groups of Mice. ***Cell Metab*** Nov 7;16(5):665-71 (2012)

98. Mercader JM, Puiggros M, Segrè AV, Planet E, Sorianello E, Sebastian D, Rodriguez-Cuenca S, Ribas V, Bonàs-Guarch S, Draghici S, Yang C, Mora S, **Vidal-Puig A**, Dupuis J; DIAGRAM Consortium, Florez JC; MITIN Consortium, Zorzano A, Torrents D. Identification of Novel Type 2 Diabetes Candidate Genes Involved in the Crosstalk between the Mitochondrial and the Insulin Signaling Systems. ***PLoS Genet*** 2012 Dec;8(12):e1003046.

99. Virtue S, Feldmann H, Christian M, Tan CY, Masoodi M, Dale M, Lelliott C, Burling K, Campbell M, Eguchi N, Voshol P, Sethi JK, Parker M, Urade Y, Griffin JL, Cannon B, **Vidal-Puig A**. A new role for Lipocalin Prostaglandin D Synthase in the regulation of brown adipose tissue substrate utilisation. ***Diabetes*** 61(12):3139-47 (2012).

100. Bartolomucci A, Parmigiani S, Rodgers RJ, **Vidal-Puig A**, Allan SE, Siegel V. The Obese Species: a special issue on obesity and metabolic disorders. ***Dis Model Mech*** 2012 Sep;5(5):563-4.

101. Virtue S, Masoodi M, Velagapudi V, Tan CY, Dale M, Suorti T, Slawik M, Blount M, Burling K, Campbell M, Eguchi N, Medina-Gomez G, Sethi JK, Orešič M, Urade Y, Griffin JL, **Vidal-Puig A**. Lipocalin Prostaglandin D Synthase and PPARγ2 Coordinate to Regulate Carbohydrate and Lipid Metabolism In Vivo. ***PLoS One*** 7(7):e39512. (2012)

102. Camacho A, Rodriguez-Cuenca C, Blount M, Prieur X, Barbarroja N, Fuller M, Hardingham GE, **Antonio Vidal-Puig**. Ablation of PGC1 beta prevents mTOR dependent endoplasmic Reticulum Stress response. ***Experimental Neurology*** 237(2):396-406 (2012)

103. Puddifoot C, Martel MA, Soriano FX, Camacho A, **Vidal-Puig A**, Wyllie DJ, Hardingham GE. PGC-1α Negatively Regulates Extrasynaptic NMDAR Activity and Excitotoxicity. ***J Neurosci.*** 2012 May 16;32(20):6995-7000.

104. Whittle AJ, Carobbio S, Martins L, Slawik M, Hondares E, Vázquez MJ, Morgan D, Csikasz RI, Gallego R, Rodriguez-Cuenca S, Dale M, Virtue S, Villarroya F, Cannon B, Rahmouni K, López M, **Vidal-Puig A**. BMP8B Increases Brown Adipose Tissue Thermogenesis through Both Central and Peripheral Actions. *Cell.* 2012 May 11;149(4):871-85.

105. Rajwani A, Ezzat V, Smith J, Yuldasheva NY, Duncan ER, Gage M, Cubbon RM, Kahn MB, Imrie H, Abbas A, Viswambharan H, Aziz A, Sukumar P, **Vidal-Puig A**, Sethi JK, Xuan S, Shah AM, Grant PJ, Porter KE, Kearney MT, Wheatcroft SB. Increasing Circulating IGFBP1 Levels Improves Insulin Sensitivity, Promotes Nitric Oxide Production, Lowers Blood Pressure, and Protects Against Atherosclerosis. ***Diabetes***. 2012 Feb 22.

106. Napolitano A, Miller SR, Murgatroyd PR, Delafont B, Brooke A, Elkhawad M, Tan CY, Virtue S, **Vidal-Puig A**, Nunez DJ. Prediction of Weight Loss and Regain Following Dietary, Lifestyle, and Pharmacologic Intervention. ***Clin Pharmacol Ther***. 2012 Feb 15.

107. Rodriguez-Cuenca S, Carobbio S, **Vidal-Puig A**. Ablation of Pparg2 impairs lipolysis and reveals murine strain differences in lipolytic responses. ***FASEB J***. 2012 Feb 8.

108. Martínez de Morentin PB, Whittle AJ, Fernø J, Nogueiras R, Diéguez C, **Vidal-Puig A**, López M. Nicotine Induces Negative Energy Balance Through Hypothalamic AMP-Activated Protein Kinase. ***Diabetes***. 2012 Feb 7.

109. Rodriguez-Cuenca S, Carobbio S, Velagapudi VR, Barbarroja N, Moreno-Navarrete JM, Tinahones FJ, Fernandez-Real JM, Oresic M, **Vidal-Puig A**. PPARγ DEPENDENT REGULATION OF LIPOLYTIC NODES AND METABOLIC FLEXIBILITY. ***Moll Cell Biol***. 2012 Feb 6.

110. Mercer JR, Yu E, Figg N, Cheng KK, Prime TA, Griffin JL, Masoodi M, **Vidal-Puig A**, Murphy MP, Bennett MR. The mitochondria-targeted antioxidant MitoQ decreases features of the metabolic syndrome in ATM(+/-)/ApoE(-/-) mice. ***Free Radic Biol Med***. 2012 Mar 1;52(5):841-9.

111. Vivas Y, Martinez-Garcia C, Izquierdo A, Garcia-Garcia F, Callejas S, Velasco I, Campbell M, Ros M, Dopazo A, Dopazo J, **Vidal-Puig A**, Medina-Gomez G. Early Peroxisome proliferator-activated receptor gamma regulated genes involved in expansion of pancreatic beta cell mass. ***BMC Med Genomics***. 2011 Dec 30;4(1):86.

112. Meneses ME, Camargo A, Perez-Martinez P, Delgado-Lista J, Cruz-Teno C, Jimenez-Gomez Y, Paniagua JA, Gutierrez-Mariscal FM, Tinahones FJ, **Vidal-Puig A**, Roche HM, Perez-Jimenez F, Malagon MM, Lopez-Miranda J. Postprandial inflammatory response in adipose tissue of patients with metabolic syndrome after the intake of different dietary models. *Mol Nutr Food Res*. 2011 Dec;55(12):1759-70.

113. Gotz AA, **Vidal-Puig A**, Rodel HG, Hrabe de Angelis M, Stoeger T. Carbon-nanoparticle-triggered acute lung inflammation and its resolution are not altered in PPARgamma-defective (P465L) mice. ***Part Fibre Toxicol***. 2011 Sep 20;8:28.

114. Skrede S, Fernø J, Vázquez MJ, Fjær S, Pavlin T, Lunder N, **Vidal-Puig A**, Diéguez C, Berge RK, López M, Steen VM. Olanzapine, but not aripiprazole, weight-independently elevates serum

triglycerides and activates lipogenic gene expression in female rats. ***Int J Neuropsychopharmacol.*** 2011 Aug 19:1-17.

115. Riehle C, Wende AR, Zaha VG, Pires KM, Wayment B, Olsen C, Bugger H, Buchanan J, Wang X, Moreira AB, Doenst T, Medina-Gomez G, Litwin SE, Lelliott CJ, **Vidal-Puig A**, Abel ED. PGC-1{beta} Deficiency Accelerates the Transition to Heart Failure in Pressure Overload Hypertrophy. ***Circ Res.*** 2011 Sep 16;109(7):783-93.

116. Jassim G, Skrede S, Vázquez MJ, Wergedal H, Vik-Mo AO, Lunder N, Diéguez C, **Vidal-Puig A**, Berge RK, López M, Steen VM, Fernø J. Acute effects of orexigenic antipsychotic drugs on lipid and carbohydrate metabolism in rat. ***Psychopharmacology (Berl)***. 2012 Feb;219(3):783-94.

117. Bengestrate L, Virtue S, Campbell M, **Vidal-Puig A**, Hadaschik D, Hahn P, Bielke W. Genome-Wide Profiling of MicroRNAs in Adipose Mesenchymal Stem Cell Differentiation and Mouse Models of Obesity. ***PLoS One***. 2011;6(6):e21305.

118. Kilpeläinen TO, Zillikens MC, Stančákova A, Finucane FM, Ried JS, Langenberg C, Zhang W, Beckmann JS, Luan J, Vandenput L, Styrkarsdottir U, Zhou Y, Smith AV, Zhao JH, Amin N, Vedantam S, Shin SY, Haritunians T, Fu M, Feitosa MF, Kumari M, Halldorsson BV, Tikkanen E, Mangino M, Hayward C, Song C, Arnold AM, Aulchenko YS, Oostra BA, Campbell H, Cupples LA, Davis KE, Döring A, Eiriksdottir G, Estrada K, Fernández-Real JM, Garcia M, Gieger C, Glazer NL, Guiducci C, Hofman A, Humphries SE, Isomaa B, Jacobs LC, Jula A, Karasik D, Karlsson MK, Khaw KT, Kim LJ, Kivimäki M, Klopp N, Kühnel B, Kuusisto J, Liu Y, Ljunggren O, Lorentzon M, Luben RN, McKnight B, Mellström D, Mitchell BD, Mooser V, Moreno JM, Männistö S, O'Connell JR, Pascoe L, Peltonen L, Peral B, Perola M, Psaty BM, Salomaa V, Savage DB, Semple RK, Skaric-Juric T, Sigurdsson G, Song KS, Spector TD, Syvänen AC, Talmud PJ, Thorleifsson G, Thorsteinsdottir U, Uitterlinden AG, van Duijn CM, **Vidal-Puig A**, Wild SH, Wright AF, Clegg DJ, Schadt E, Wilson JF, Rudan I, Ripatti S, Borecki IB, Shuldiner AR, Ingelsson E, Jansson JO, Kaplan RC, Gudnason V, Harris TB, Groop L, Kiel DP, Rivadeneira F, Walker M, Barroso I, Vollenweider P, Waeber G, Chambers JC, Kooner JS, Soranzo N, Hirschhorn JN, Stefansson K, Wichmann HE, Ohlsson C, O'Rahilly S, Wareham NJ, Speliotes EK, Fox CS, Laakso M, Loos RJ. Genetic variation near IRS1 associates with reduced adiposity and an impaired metabolic profile. ***Nat Genet.*** 2011 Jun 26;43(8):753-60.

119. Fernø J, Varela L, Skrede S, Vázquez MJ, Nogueiras R, Diéguez C, **Vidal-Puig A**, Steen VM, López M. Olanzapine-Induced Hyperphagia and Weight Gain Associate with Orexigenic Hypothalamic Neuropeptide Signaling without Concomitant AMPK Phosphorylation. ***PLoS One.*** 2011;6(6):e20571.

120. Pietiläinen KH, Róg T, Seppänen-Laakso T, Virtue S, Gopalacharyulu P, Tang J, Rodriguez-Cuenca S, Maciejewski A, Naukkarinen J, Ruskeepää AL, Niemelä PS, Yetukuri L, Tan CY, Velagapudi V, Castillo S, Nygren H, Hyötyläinen T, Rissanen A, Kaprio J, Yki-Järvinen H,

Vattulainen I, **Vidal-Puig A**, Orešič M. Association of lipidome remodelling in the adipocyte membrane with acquired obesity in humans. ***PLoS Biol.*** 2011 Jun;9(6):e1000623.

121. Gurung IS, Medina-Gomez G, Kis A, Baker M, Velagapudi V, Neogi SG, Campbell M, Rodriguez-Cuenca S, Lelliott C, McFarlane I, Oresic M, Grace AA, **Vidal-Puig A***, Huang CL. Deletion of the metabolic transcriptional coactivator PGC1{beta} induces cardiac arrhythmia. ***Cardiovasc Res.*** 2011 Oct 1;92(1):29-38. (*Corresponding author)

122. D'Errico I, Salvatore L, Murzilli S, Lo Sasso G, Latorre D, Martelli N, Egorova AV, Polishuck R, Madeyski-Bengtson K, Lelliott C, **Vidal-Puig AJ**, Seibel P, Villani G, Moschetta A. Peroxisome proliferator-activated receptor-{gamma} coactivator 1-{alpha} (PGC1{alpha}) is a metabolic regulator of intestinal epithelial cell fate. ***Proc Natl Acad Sci USA.*** 2011 Apr 19;108(16):6603-8.

123. Prieur X, Mok CY, Velagapudi VR, Núñez V, Fuentes L, Montaner D, Ishikawa K, Camacho A, Barbarroja N, O'Rahilly S, Sethi J, Dopazo J, Oresic M, Ricote M, **Vidal-Puig A**. Differential Lipid Partitioning Between Adipocytes and Tissue Macrophages Modulates Macrophage Lipotoxicity and M2/M1 Polarization in Obese Mice. ***Diabetes.*** 2011 Mar;60(3):797-809.

124. McLaughlin BL, Wells AC, Virtue S, **Vidal-Puig A**, Wilkinson TD, Watson CJ, Robertson PA. Electrical and optical spectroscopy for quantitative screening of hepatic steatosis in donor livers. ***Phys Med Biol***. 2010 Nov 21;55(22):6867-79.

125. Lopez M, Varela L, Vázquez MJ, Rodríguez-Cuenca S, González R, Velagapudi VR, Morgan DA, Schoenmakers E, Chatterjee K, Saha AK, Rahmouni K, Diéguez C, **Vidal-Puig A**. Hypothalamic AMPK and fatty acid metabolism mediate thyroid regulation of energy balance. ***Nat Med***. 2010 Sep;16(9):1001-8.

126. Virtue S, Dale M, Sethi JK, **Vidal-Puig** A. LEM-PCR: a method for determining relative transcript isoform proportions using real-time PCR without a standard curve. ***Genome.*** 2010 Aug;53(8):637-42.

127. Mercer JR, Cheng KK, Figg N, Gorenne I, Mahmoudi M, Griffin J, **Vidal-Puig A**, Logan A, Murphy MP, Bennett M. DNA Damage Links Mitochondrial Dysfunction to Atherosclerosis and the Metabolic Syndrome. ***Circ Res.*** 2010 Oct 15;107(8):1021-31.

128. Barbarroja N, Lopez-Pedrera R, Mayas MD, Garcia-Fuentes E, Garrido-Sanchez L, Macias-Gonzalez M, El Bekay R, **Vidal-Puig A**, Tinahones FJ. The obese healthy paradox: is inflammation the answer? ***Biochem J.*** 2010 Aug 15;430(1):141-9.

129. Lagathu C, Christodoulides C, Tan CY, Virtue S, Laudes M, Campbell M, Ishikawa K, Ortega F, Tinahones FJ, Fernández-Real JM, Orešič M, Sethi JK, **Vidal-Puig A**. Secreted frizzled-related protein 1 regulates adipose tissue expansion and is dysregulated in severe obesity. ***Int J Obes (Lond).*** 2010 Dec;34(12):1695-705.

130. Szopa M, Meirhaeghe A, Luan J, Moreno LA, Gonzalez-Gross M, **Vidal-Puig A**, Cooper C, Hagen R, Amouyel P, Wareham NJ, Loos RJ. No association between polymorphisms in the INSIG1 gene and the risk of type 2 diabetes and related traits. ***Am J Clin Nutr*** July;92 (1):252-7.

131. Lage R, Vázquez MJ, Varela L, Saha AK, **Vidal-Puig A**, Nogueiras R, Diéguez C, López M. Ghrelin effects on neuropeptides in the rat hypothalamus depend on fatty acid metabolism actions on BSX but not on gender. ***FASEB J.*** 2010 Aug;24(8):2670-9.

132. Fernandez-Real JM, Menendez JA, Moreno-Navarrete JM, Blüher M, Vazquez-Martin A, Vázquez MJ, Ortega F, Diéguez C, Frühbeck G, Ricart W, **Vidal-Puig A**. Extracellular Fatty Acid Synthase: a possible surrogate biomarker of insulin resistance. ***Diabetes.*** 2010 Jun;59(6):1506-11.

133. Rodriguez-Cuenca S, Cochemé HM, Logan A, Abakumova I, Prime TA, Rose C, **Vidal-Puig A**, Smith AC, Rubinsztein DC, Fearnley IM, Jones BA, Pope S, Heales SJ, Lam BY, Neogi SG, McFarlane I, James AM, Smith RA, Murphy MP. Consequences of long-term oral administration of the mitochondria-targeted antioxidant MitoQ to wild-type mice. ***Free Radic Biol Med***. 2010 Jan 1;48(1):161-72.

134. Medina-Gomez G, Yetukuri L, Velagapudi V, Campbell M, Blount M, Jimenez-Linan M, Ros M, Oresic M, **Vidal-Puig A**. Adaptation and failure of pancreatic beta cells in murine models with different degrees of metabolic syndrome. ***Dis Model Mech***. 2009 Nov-Dec;2(11-12):582-92.

135. Parker N, Crichton PG, **Vidal-Puig AJ**, Brand MD. Uncoupling protein-1 (UCP1) contributes to the basal proton conductance of brown adipose tissue mitochondria. ***J Bioenerg Biomembr***. 2009 Aug;41(4):335-42.

136. Singh A, Wirtz M, Parker N, Hogan M, Strahler J, Michailidis G, Schmidt S, **Vidal-Puig A**, Diano S, Andrews P, Brand MD, Friedman J. Leptin-mediated changes in hepatic mitochondrial metabolism, structure, and protein levels. ***Proc Natl Acad Sci U S A***. 2009 Aug 4;106(31):13100-5.

137. Crichton PG, Parker N, **Vidal-Puig AJ**, Brand MD. Not all mitochondrial carrier proteins support permeability transition pore formation: no involvement of uncoupling protein 1. ***Biosci Rep***. 2009 Dec 15;30(3):187-92.

138. Roberts LD, Virtue S, **Vidal-Puig AJ**, Nicholls AW, Griffin JL. Metabolic Phenotyping of a Model of Adipocyte Differentiation. ***Physiol Genomics***. 2009 Oct 7;39(2):109-19.

139. Parker N, **Vidal-Puig AJ**, Azzu V, Brand MD. Dysregulation of glucose homeostasis in nicotinamide nucleotide transhydrogenase knockout mice is independent of uncoupling protein 2. ***Biochim Biophys Acta***. 2009 Dec;1787(12):1451-7.

140. Kis A, Murdoch C, Zhang M, Siva A, Rodriguez-Cuenca S, Carobbio S, Lukasik A, Blount M, O'Rahilly S, Gray SL, Shah AM, **Vidal-Puig A**. Defective peroxisomal proliferators activated receptor gamma activity due to dominant-negative mutation synergizes with hypertension to accelerate cardiac fibrosis in mice. ***Eur J Heart Fail***. 2009 Jun;11(6):533-41. Epub 24 Apr 2009.

141. Chavey C, Lazennec G, Lagarrigue S, Clapé C, Iankova I, Teyssier J, Annicotte JS, Schmidt J, Mataki C, Yamamoto H, Sanches R, Guma A, Stich V, Vitkova M, Jardin-Watelet B, Renard E, Strieter R, Tuthill A, Hotamisligil GS, **Vidal-Puig A**, Zorzano A, Langin D, Fajas L. CXC ligand 5 is an adipose-tissue derived factor that links obesity to insulin resistance. ***Cell Metab*** 9(4):339-49. Apr 2009.

142. Tang J, Tan CY, Oresic M, **Vidal-Puig A**. Integrating post-genomic approaches as a strategy to advance our understanding of health and disease. ***Genome Med***. 30;1(3):35. Mar 2009.

143. Ishii KA, Fumoto T, Iwai K, Takeshita S, Ito M, Shimohata N, Aburatani H, Taketani S, Lelliott CJ, **Vidal-Puig A**, Ikeda K. Coordination of PGC-1beta and iron uptake in mitochondrial biogenesis and osteoclast activation. ***Nat Med***. 2009 Mar;15(3):259-66. Epub Mar 2009.

144. Lagathu C, Christodoulides C, Virtue S, Cawthorn WP, Franzin C, Kimber WA, Nora ED, Campbell M, Medina-Gomez G, Cheyette BN, **Vidal-Puig AJ**, Sethi JK. Dact1, a nutritionally regulated preadipocyte gene, controls adipogenesis by coordinating the Wnt/beta-catenin signaling network. ***Diabetes***. 2009 Mar;58(3):609-19. Epub Dec 2008.

145. Brookes PS, Parker N, Buckingham JA, **Vidal-Puig A**, Halestrap AP, Gunter TE, Nicholls DG, Bernardi P, Lemasters JJ, Brand MD. UCPs--unlikely calcium porters. ***Nat Cell Biol***. (11):1235-7; author reply 1237-40. Nov 2008.

146. Liesa M, Borda-d'Agua B, Medina-Gómez G, Lelliott CJ, Paz JC, Rojo M, Palacín M, **Vidal-Puig A**, Zorzano A. Mitochondrial fusion is increased by the nuclear coactivator PGC-1beta. ***PLoS ONE***. 2008;3(10):e3613. Epub Oct 2008.

147. Vázquez MJ, González CR, Varela L, Lage R, Tovar S, Sangiao-Alvarellos S, Williams LM, **Vidal-Puig A**, Nogueiras R, López M, Diéguez C. Central resistin regulates hypothalamic and peripheral lipid metabolism in a nutritional dependent fashion***. Endocrinology***. 149(9):4534-43. Sept. 2008**.**

148. Barber TM, Hazell M, Christodoulides C, Golding SJ, Alvey C, Burling K, **Vidal-Puig A,** Groome NP, Wass JA, Franks S, McCarthy MI. Serum levels of retinol-binding protein 4 and adiponectin in women with polycystic ovary syndrome: associations with visceral fat but no evidence for fat mass-independent effects on pathogenesis in this condition. ***J Clin Endocrinol Metab***. 93(7):2859-65. Jul 2008**.**

149. Parker N, Affourtit C, **Vidal-Puig A**, Brand MD. Energization-dependent endogenous activation of proton conductance in skeletal muscle mitochondria. ***Biochem J***. 15;412(1):131-9. May 2008.

150. López M, Lage R, Saha AK, Pérez-Tilve D, Vázquez MJ, Varela L, Sangiao-Alvarellos S, Tovar S, Raghay K, Rodríguez-Cuenca S, Deoliveira RM, Castañeda T, Datta R, Dong JZ, Culler M, Sleeman MW, Alvarez CV, Gallego R, Lelliott CJ, Carling D, Tschöp MH, Diéguez C, **Vidal-Puig A**. Hypothalamic Fatty Acid Metabolism Mediates the Orexigenic Action of Ghrelin. ***Cell Metab***. 7;7(5):389-399. May 2008.

151. Parker N, **Vidal-Puig A**, Brand MD. Stimulation of mitochondrial proton conductance by hydroxynonenal requires a high membrane potential. ***Biosci Rep.***;28(2):83-8. Apr 2008.

152. Nogueiras R, López M, Lage R, Perez-Tilve D, Pfluger P, Mendieta-Zerón H, Sakkou M, Wiedmer P, Benoit S, Datta R, Dong JZ, Culler M, Sleeman M, **Vidal-Puig A**, Horvath T, Treier M, Diéguez C, Tschöp MH. Bsx, a Novel Hypothalamic Factor linking Feeding with Locomotor Activity, is Regulated by Energy Availability. ***Endocrinology***.149(6):3009-15. Jun 2008.

153. Savage DB, Zhai L, Ravikumar B, Choi CS, Snaar JE, McGuire AC, Wou SE, Medina-Gomez G, Kim S, Bock CB, Segvich DM, **Vidal-Puig A**, Wareham NJ, Shulman GI, Karpe F, Taylor R, Pederson BA, Roach PJ, O'Rahilly S, DePaoli-Roach AA. A prevalent variant in PPP1R3A impairs glycogen synthesis and reduces muscle glycogen content in humans and mice. ***PLoS Med***. 29;5(1):e27. Jan 2008.

154. Goodman AO, Murgatroyd PR, Medina-Gomez G, Wood NI, Finer N, **Vidal-Puig AJ**, Morton AJ, Barker RA. The metabolic profile of early Huntington's disease- a combined human and transgenic mouse study. ***Exp Neurol.*** 210(2):691-8. Apr 2008.

155. Schinner S, Ulgen F, Papewalis C, Schott M, Woelk A, **Vidal-Puig A**, Scherbaum WA. Regulation of insulin secretion, glucokinase gene transcription and beta cell proliferation by adipocyte-derived Wnt signalling molecules. ***Diabetologia.*** 51(1):147-54. Jan 2008.

156. Adams BA, Gray SL, Isaac ER, Bianco AC, **Vidal-Puig A**J, Sherwood NM. Feeding and metabolism in mice lacking pituitary adenylate cyclase-activating polypeptide ***Endocrinology***. 149(4):1571-80. Apr 2008.

157. Paniagua JA, de la Sacristana AG, Sánchez E, Romero I, **Vidal-Puig A**, Berral FJ, Escribano A, Moyano MJ, Peréz-Martinez P, López-Miranda J, Pérez-Jiménez F. A MUFA-rich diet improves posprandial glucose, lipid and GLP-1 responses in insulin-resistant subjects. ***J Am Coll Nutr***. 26(5):434-44. Oct 2007.

158. Chakravarthy MV, Zhu Y, Lopez M, Yin L, Wozniak DF, Coleman T, Hu Z, Wolfgang M, **Vidal-Puig A**, Lane MD, Semenkovich CF. Brain fatty acid synthase activates PPARalpha to maintain energy homeostasis***. J Clin Invest***. 117(9):2539-52. Sep 2007.

159. Lopez M, Lage R, Tung YC, Challis BG, Varela L, Virtue S, O'Rahilly S, **Vidal-Puig A**, Dieguez C, Coll AP. Orexin Expression is Regulated by alpha-Melanocyte-Stimulating Hormone. ***J Neuroendocrinol***. Sep;19(9):703-707, 2007.

160. Yetukuri L, Katajamaa M, Medina-Gomez G, Seppanen-Laakso T, **Vidal-Puig A,** Oresic M. Bioinformatics strategies for lipidomics analysis: characterization of obesity related hepatic steatosis. ***BMC Syst Biol*** 1:12, 2007.

161. Medina-Gomez G, Gray SL, Yetukuri L, Shimomura K, Virtue S, Campbell M, Curtis RK, Jimenez-Linan M, Blount M, Yeo GS, Lopez M, Seppanen-Laakso T, Ashcroft FM, Oresic M, **Vidal-Puig A**. PPAR gamma 2 prevents lipotoxicity by controlling adipose tissue expandability and peripheral lipid metabolism. ***PLoS Genet*** 3:e64, 2007.

162. Wheatcroft SB, Kearney MT, Shah AM, Ezzat VA, Miell JR, Modo M, Williams SC, Cawthorn WP, Medina-Gomez G, **Vidal-Puig A,** Sethi JK, Crossey PA. IGF-Binding Protein-2 Protects Against the Development of Obesity and Insulin Resistance. ***Diabetes*** 56:285-294, 2007.

163. Paniagua JA, Gallego de la Sacristana A, Romero I, **Vidal-Puig A**, Latre JM, Sanchez E, Perez-Martinez P, Lopez-Miranda J, Perez-Jimenez F. Monounsaturated fat-rich diet prevents central body fat distribution and decreases postprandial adiponectin expression induced by a carbohydrate-rich diet in insulin-resistant subjects. ***Diabetes Care*** 30:1717-1723, 2007.

164. Lelliott CJ, Medina-Gomez G, Petrovic N, Kis A, Feldmann HM, Bjursell M, Parker N, Curtis K, Campbell M, Hu P, Zhang D, Litwin SE, Zaha VG, Fountain KT, Boudina S, Jimenez-Linan M, Blount M, Lopez M, Meirhaeghe A, Bohlooly YM, Storlien L, Stromstedt M, Snaith M, Oresic M, Abel ED, Cannon B, **Vidal-Puig A**. Ablation of PGC-1beta results in defective mitochondrial activity, thermogenesis, hepatic function, and cardiac performance. ***PLoS Biol*** 4:e369, 2006.

165. Gray SL, Nora ED, Grosse J, Manieri M, Stoeger T, Medina-Gomez G, Burling K, Wattler S, Russ A, Yeo GS, Chatterjee VK, O'Rahilly S, Voshol PJ, Cinti S, **Vidal-Puig A.** Leptin deficiency unmasks the deleterious effects of impaired peroxisome proliferator-activated receptor gamma function (P465L PPARgamma) in mice. ***Diabetes*** 55:2669-2677, 2006.

166. Gray SL, Dalla Nora E, Backlund EC, Manieri M, Virtue S, Noland RC, O'Rahilly S, Cortright RN, Cinti S, Cannon B, **Vidal-Puig A.** Decreased brown adipocyte recruitment and thermogenic capacity in mice with impaired peroxisome proliferator-activated receptor (P465L PPARgamma) function. ***Endocrinology*** 147:5708-5714, 2006.

167. Lopez M, Lelliott CJ, Tovar S, Kimber W, Gallego R, Virtue S, Blount M, Vazquez MJ, Finer N, Powles TJ, O'Rahilly S, Saha AK, Dieguez C, **Vidal-Puig AJ.** Tamoxifen-induced anorexia is associated with fatty acid synthase inhibition in the ventromedial nucleus of the hypothalamus and accumulation of malonyl-CoA. ***Diabetes*** 55:1327-1336, 2006.

168. Christodoulides C, Laudes M, Cawthorn WP, Schinner S, Soos M, O'Rahilly S, Sethi JK, **Vidal-Puig A.** The Wnt antagonist Dickkopf-1 and its receptors are coordinately regulated during early human adipogenesis. ***J Cell Sci*** 119:2613-2620, 2006.

169. Christodoulides C, Scarda A, Granzotto M, Milan G, Dalla Nora E, Keogh J, De Pergola G, Stirling H, Pannacciulli N, Sethi JK, Federspil G, **Vidal-Puig A,** Farooqi IS, O'Rahilly S, Vettor R. WNT10B mutations in human obesity. ***Diabetologia*** 49:678-684, 2006.

170. Simmgen M, Knauf C, Lopez M, Choudhury AI, Charalambous M, Cantley J, Bedford DC, Claret M, Iglesias MA, Heffron H, Cani PD, **Vidal-Puig A,** Burcelin R, Withers DJ. Liver-specific deletion of insulin receptor substrate 2 does not impair hepatic glucose and lipid metabolism in mice. ***Diabetologia*** 49:552-561, 2006.

171. Medina-Gomez G, Virtue S, Lelliott C, Boiani R, Campbell M, Christodoulides C, Perrin C, Jimenez-Linan M, Blount M, Dixon J, Zahn D, Thresher RR, Aparicio S, Carlton M, Colledge WH, Kettunen MI, Seppanen-Laakso T, Sethi JK, O'Rahilly S, Brindle K, Cinti S, Oresic M, Burcelin R, **Vidal-Puig A.** The link between nutritional status and insulin sensitivity is dependent on the adipocyte-specific peroxisome proliferator-activated receptor-gamma2 isoform. ***Diabetes*** 54:1706-1716**,** 2005.

172. Jitrapakdee S, Slawik M, Medina-Gomez G, Campbell M, Wallace JC, Sethi JK, O'Rahilly S, **Vidal-Puig A**J. The peroxisome proliferator-activated receptor-gamma regulates murine pyruvate carboxylase gene expression in vivo and in vitro. ***J Biol Chem*** 280:27466-27476, 2005.

173. Semple RK, Meirhaeghe A, **Vidal-Puig AJ,** Schwabe JW, Wiggins D, Gibbons GF, Gurnell M, Chatterjee VK, O'Rahilly S. A dominant negative human peroxisome proliferator-activated receptor (PPAR){alpha} is a constitutive transcriptional corepressor and inhibits signaling through all PPAR isoforms. ***Endocrinology*** 146:1871-1882, 2005.

174. Solanes G, Pedraza N, Calvo V, **Vidal-Puig A,** Lowell BB, Villarroya F. Thyroid hormones directly activate the expression of the human and mouse uncoupling protein-3 genes through a thyroid response element in the proximal promoter region. ***Biochem J*** 386:505-513, 2005.

175. Degawa-Yamauchi M, Moss KA, Bovenkerk JE, Shankar SS, Morrison CL, Lelliott CJ, **Vidal-Puig A,** Jones R, Considine RV. Regulation of adiponectin expression in human adipocytes: effects of adiposity, glucocorticoids, and tumor necrosis factor alpha. ***Obes Res*** 13:662-669, 2005.

176. Lelliott CJ, Lopez M, Curtis RK, Parker N, Laudes M, Yeo G, Jimenez-Linan M, Grosse J, Saha AK, Wiggins D, Hauton D, Brand MD, O'Rahilly S, Griffin JL, Gibbons GF, **Vidal-Puig A**. Transcript and metabolite analysis of the effects of tamoxifen in rat liver reveals inhibition of fatty acid synthesis in the presence of hepatic steatosis. ***Faseb J*** 19:1108-1119, 2005.

177. Rochford JJ, Semple RK, Laudes M, Boyle KB, Christodoulides C, Mulligan C, Lelliott CJ, Schinner S, Hadaschik D, Mahadevan M, Sethi JK, **Vidal-Puig A**, O'Rahilly S. ETO/MTG8 is an inhibitor of C/EBPbeta activity and a regulator of early adipogenesis. ***Mol Cell Biol*** 24:9863-9872, 2004.

178. Leonardsson G, Steel JH, Christian M, Pocock V, Milligan S, Bell J, So PW, Medina-Gomez G, **Vidal-Puig A,** White R, Parker MG. Nuclear receptor corepressor RIP140 regulates fat accumulation. ***Proc Natl Acad Sci U S A*** 101:8437-8442, 2004.

179. Laudes M, Barroso I, Luan J, Soos MA, Yeo G, Meirhaeghe A, Logie L, **Vidal-Puig A,** Schafer AJ, Wareham NJ, O'Rahilly S. Genetic variants in human sterol regulatory element binding protein-1c in syndromes of severe insulin resistance and type 2 diabetes. ***Diabetes*** 53:842-846, 2004.

180. Hagen T, Sethi JK, Foxwell N, **Vidal-Puig A**. Signalling activity of beta-catenin targeted to different subcellular compartments. ***Biochem J*** 379:471-477, 2004.

181. Laudes M, Christodoulides C, Sewter C, Rochford JJ, Considine RV, Sethi JK, **Vidal-Puig A,** O'Rahilly S. Role of the POZ zinc finger transcription factor FBI-1 in human and murine adipogenesis. ***J Biol Chem*** 279:11711-11718, 2004.

182. Semple RK, Crowley VC, Sewter CP, Laudes M, Christodoulides C, Considine RV, **Vidal-Puig A**, O'Rahilly S. Expression of the thermogenic nuclear hormone receptor coactivator PGC-1alpha is reduced in the adipose tissue of morbidly obese subjects. ***Int J Obes Relat Metab Disord*** 28:176-179, 2004.

183. Echtay KS, Esteves TC, Pakay JL, Jekabsons MB, Lambert AJ, Portero-Otin M, Pamplona R, **Vidal-Puig AJ,** Wang S, Roebuck SJ, Brand MD. A signalling role for 4-hydroxy-2-nonenal in regulation of mitochondrial uncoupling. ***EMBO J*** 22:4103-4110, 2003.

184. Meirhaeghe A, Crowley V, Lenaghan C, Lelliott C, Green K, Stewart A, Hart K, Schinner S, Sethi JK, Yeo G, Brand MD, Cortright RN, O'Rahilly S, Montague C, **Vidal-Puig AJ.** Characterization of the human, mouse and rat PGC1 beta (peroxisome-proliferator-activated receptor-gamma co-activator 1 beta) gene in vitro and in vivo. ***Biochem J*** 373:155-165, 2003.

185. Savage DB, Tan GD, Acerini CL, Jebb SA, Agostini M, Gurnell M, Williams RL, Umpleby AM, Thomas EL, Bell JD, Dixon AK, Dunne F, Boiani R, Cinti S, **Vidal-Puig A**, Karpe F, Chatterjee VK, O'Rahilly S. Human metabolic syndrome resulting from dominant-negative mutations in the

nuclear receptor peroxisome proliferator-activated receptor-gamma. ***Diabetes*** 52:910-917, 2003.

186. Noland RC, Hickner RC, Jimenez-Linan M, **Vidal-Puig A,** Zheng D, Dohm GL, Cortright RN. Acute endurance exercise increases skeletal muscle uncoupling protein-3 gene expression in untrained but not trained humans. ***Metabolism*** 52:152-158, 2003.

187. Roche HM, Noone E, Sewter C, Mc Bennett S, Savage D, Gibney MJ, O'Rahilly S, **Vidal-Puig AJ**. Isomer-dependent metabolic effects of conjugated linoleic acid: insights from molecular markers sterol regulatory element-binding protein-1c and LXRalpha. ***Diabetes*** 51:2037-2044, 2002.

188. Lelliott CJ, Logie L, Sewter CP, Berger D, Jani P, Blows F, O'Rahilly S, **Vidal-Puig A.** Lamin expression in human adipose cells in relation to anatomical site and differentiation state. ***J Clin Endocrinol Metab*** 87:728-734, 2002.

189. Sewter CP, Blows F, **Vidal-Puig A,** O'Rahilly S. Regional differences in the response of human pre-adipocytes to PPARgamma and RXRalpha agonists. ***Diabetes*** 51:718-723, 2002.

190. Hagen T, **Vidal-Puig A.** Characterisation of the phosphorylation of beta-catenin at the GSK-3 priming site Ser45. ***Biochem Biophys Res Commun*** 294:324-328, 2002.

191. Sewter C, Berger D, Considine RV, Medina G, Rochford J, Ciaraldi T, Henry R, Dohm L, Flier JS, O'Rahilly S, **Vidal-Puig AJ**. Human obesity and type 2 diabetes are associated with alterations in SREBP1 isoform expression that are reproduced ex vivo by tumor necrosis factor-alpha. ***Diabetes*** 51:1035-1041, 2002.

192. Sewter C, Blows F, Considine R, **Vidal-Puig A,** O'Rahilly S. Differential effects of adiposity on peroxisomal proliferator-activated receptor gamma1 and gamma2 messenger ribonucleic acid expression in human adipocytes. ***J Clin Endocrinol Metab*** 87:4203-4207, 2002.

193. Savage DB, Agostini M, Barroso I, Gurnell M, Luan J, Meirhaeghe A, Harding AH, Ihrke G, Rajanayagam O, Soos MA, George S, Berger D, Thomas EL, Bell JD, Meeran K, Ross RJ, **Vidal-Puig A,** Wareham NJ, O'Rahilly S, Chatterjee VK, Schafer AJ. Digenic inheritance of severe insulin resistance in a human pedigree. ***Nat Gene****t* 31:379-384, 2002.

194. Huppertz C, Fischer BM, Kim YB, Kotani K, **Vidal-Puig A,** Slieker LJ, Sloop KW, Lowell BB, Kahn BB. Uncoupling protein 3 (UCP3) stimulates glucose uptake in muscle cells through a phosphoinositide 3-kinase-dependent mechanism. ***J Biol Chem*** 276:12520-12529, 2001.

195. Cline GW, **Vidal-Puig AJ,** Dufour S, Cadman KS, Lowell BB, Shulman GI. In vivo effects of uncoupling protein-3 gene disruption on mitochondrial energy metabolism. ***J Biol Chem*** 276:20240-20244, 2001.

196. Zhang CY, Baffy G, Perret P, Krauss S, Peroni O, Grujic D, Hagen T, **Vidal-Puig AJ,** Boss O, Kim YB, Zheng XX, Wheeler MB, Shulman GI, Chan CB, Lowell BB. Uncoupling protein-2 negatively regulates insulin secretion and is a major link between obesity, beta cell dysfunction, and type 2 diabetes. ***Cell*** 105:745-755, 2001.

197. Savage DB, Sewter CP, Klenk ES, Segal DG, **Vidal-Puig A**, Considine RV, O'Rahilly S. Resistin / Fizz3 expression in relation to obesity and peroxisome proliferator-activated receptor-gamma action in humans. ***Diabetes*** 50:2199-2202, 2001.

198. Vidal-Puig A, O'Rahilly S. Obesity and diabetes: an avalanche of new information. ***Mol Med Today*** 6:221-223, 2000.

199. Vidal-Puig AJ, Grujic D, Zhang CY, Hagen T, Boss O, Ido Y, Szczepanik A, Wade J, Mootha V, Cortright R, Muoio DM, Lowell BB. Energy metabolism in uncoupling protein 3 gene knockout mice. ***J Biol Chem*** 275:16258-16266, 2000.

200. Chung WK, Luke A, Cooper RS, Rotini C, **Vidal-Puig A,** Rosenbaum M, Chua M, Solanes G, Zheng M, Zhao L, LeDuc C, Eisberg A, Chu F, Murphy E, Schreier M, Aronne L, Caprio S, Kahle B, Gordon D, Leal SM, Goldsmith R, Andreu AL, Bruno C, DiMauro S, Leibel RL, et al. Genetic and physiologic analysis of the role of uncoupling protein 3 in human energy homeostasis. ***Diabetes*** 48:1890-1895, 1999.

201. Chung WK, Luke A, Cooper RS, Rotini C, **Vidal-Puig A,** Rosenbaum M, Gordon D, Leal SM, Caprio S, Goldsmith R, Andreu AL, Bruno C, DiMauro S, Heo M, Lowe WL, Jr., Lowell BB, Allison DB, Leibel RL. The long isoform uncoupling protein-3 (UCP3L) in human energy homeostasis. ***Int J Obes Relat Metab Disord*** 23 Suppl 6:S49-50, 1999.

202. Boss O, Bachman E, **Vidal-Puig A,** Zhang CY, Peroni O, Lowell BB. Role of the beta(3)-adrenergic receptor and/or a putative beta(4)-adrenergic receptor on the expression of uncoupling proteins and peroxisome proliferator-activated receptor-gamma coactivator-1. ***Biochem Biophys Res Commun*** 261:870-876, 1999.

203. Vidal-Puig A, Rosenbaum M, Considine RC, Leibel RL, Dohm GL, Lowell BB. Effects of obesity and stable weight reduction on UCP2 and UCP3 gene expression in humans. ***Obes Res*** **7**:133-140, 1999.

204. Audi L, Mantzoros CS, **Vidal-Puig A,** Vargas D, Gussinye M, Carrascosa A. Leptin in relation to resumption of menses in women with anorexia nervosa. ***Mol Psychiatry*** 3:544-547, 1998.

205. Ito M, Grujic D, Abel ED, **Vidal-Puig A**, Susulic VS, Lawitts J, Harper ME, Himms-Hagen J, Strosberg AD, Lowell BB. Mice expressing human but not murine beta3-adrenergic receptors under the control of human gene regulatory elements. ***Diabetes*** 47:1464-1471, 1998.

206. Park KS, Ciaraldi TP, Lindgren K, Abrams-Carter L, Mudaliar S, Nikoulina SE, Tufari SR, Veerkamp JH, **Vidal-Puig A**, Henry RR. Troglitazone effects on gene expression in human skeletal muscle of type II diabetes involve up-regulation of peroxisome proliferator-activated receptor-gamma. ***J Clin Endocrinol Metab*** 83:2830-2835, 1998.

207. Vidal-Puig A, Solanes G, Grujic D, Flier JS, Lowell BB: UCP3. An uncoupling protein homologue expressed preferentially and abundantly in skeletal muscle and brown adipose tissue. ***Biochem Biophys Res Commun*** 235:79-82, 1997.

208. Vidal-Puig AJ, Considine RV, Jimenez-Linan M, Werman A, Pories WJ, Caro JF, Flier JS. Peroxisome proliferator-activated receptor gene expression in human tissues. Effects of obesity, weight loss, and regulation by insulin and glucocorticoids. ***J Clin Invest*** 99:2416-2422, 1997.

209. Solanes G, **Vidal-Puig A**, Grujic D, Flier JS, Lowell BB. The human uncoupling protein-3 gene. Genomic structure, chromosomal localization, and genetic basis for short and long form transcripts. ***J Biol Chem*** 272:25433-25436, 1997.

210. Werman A, Hollenberg A, Solanes G, Bjorbaek C, **Vidal-Puig AJ,** Flier JS. Ligand-independent activation domain in the N terminus of peroxisome proliferator-activated receptor gamma (PPARgamma). Differential activity of PPARgamma1 and -2 isoforms and influence of insulin. ***J Biol Chem*** 272:20230-20235, 1997.

211. Fajas L, Auboeuf D, Raspe E, Schoonjans K, Lefebvre AM, Saladin R, Najib J, Laville M, Fruchart JC, Deeb S, **Vidal-Puig A,** Flier J, Briggs MR, Staels B, Vidal H, Auwerx J. The organization, promoter analysis, and expression of the human PPARgamma gene. ***J Biol Chem*** 272:18779-18789, 1997.

212. Vidal-Puig A, Jimenez-Linan M, Lowell BB, Hamann A, Hu E, Spiegelman B, Flier JS, Moller DE. Regulation of PPAR gamma gene expression by nutrition and obesity in rodents. ***J Clin Invest*** 97:2553-2561, 1996.

213. Ludwig DS, **Vidal-Puig A,** O'Brien RM, Printz RL, Granner DK, Moller DE, Flier JS. xamination of the phosphoenolpyruvate carboxykinase gene promoter in patients with noninsulin-dependent diabetes mellitus. ***J Clin Endocrinol Metab*** 81:503-506, 1996.

214. Hamann A, Mantzoros C, **Vidal-Puig A,** Flier JS. Genetic variability in the TNF-alpha promoter is not associated with type II diabetes mellitus (NIDDM). *Biochem* ***Biophys Res Commun*** 211:833-839, 1995.

215. Vidal-Puig A, Printz RL, Stratton IM, Granner DK, Moller DE. Analysis of the hexokinase II gene in subjects with insulin resistance and NIDDM and detection of a Gln142-->His substitution. ***Diabetes*** 44:340-346**,** 1995.

216. Vidal-Puig A, Faustman DL. Tolerance to peripheral tissue is transient and maintained by tissue-specific class I expression. ***Transplant Proc*** 26:3314-3316, 1994.

217. Vidal-Puig A, Munoz-Torres M, Jodar-Gimeno E, Garcia-Calvente C, Lardelli P, Ruiz-Requena ME, Escobar-Jimenez F. Hyperinsulinemia in polycystic ovary syndrome: relationship to clinical and hormonal factors. ***Clin Investig*** 72:853-857, 1994.

218. Vidal-Puig A, Munoz-Torres M, Garcia-Calvente C, Jodar-Gimeno E, Lardelli P, Ruiz-Requena ME, Escobar-Jimenez F. Reduction of endogenous, ovarian and adrenal androgens with ketoconazole does not alter insulin response in the polycystic ovary syndrome. ***J Endocrinol Invest*** 17:647-652, 1994.

219. Vidal-Puig A, Moller DE. Comparative sensitivity of alternative single-strand conformation polymorphism (SSCP) methods. ***Biotechniques*** 17:490-492, 494, 496, 1994.

220. Vidal-Puig AJ, Munoz-Torres M, Jodar-Gimeno E, Garcia-Calvente CJ, Lardelli P, Ruiz-Requena ME, Escobar-Jimenez F. Ketoconazole therapy: hormonal and clinical effects in non-tumoral hyperandrogenism. ***Eur J Endocrinol*** 130:333-338, 1994.

221. Vidal-Puig A, Munoz-Torres M, Garcia Calvente C, Lardelli P, Jodar Gimeno E, Cano M, Ruiz Requena ME, Escobar-Jimenez FE. Lipid profile of hyperandrogenic women undergoing treatment with ketoconazole and its relationship with the evolution of the hormone pattern. ***Med Clin (Barc)*** 101:766-768, 1993.

222. Tercedor, J., Rodenas, C., Herranz,T., **Vidal A.,** Muñoz –Torres,M. The antiinflammatory effect of ketoconazole in the hyperandrogenism, insulinresistance and Acanthosis Nigricans (HAIR AN) Syndrome. ***J Am Acad Derm.*** 27(5):786. 1992.

223. Muñoz-Torres,M., Diaz, J., Cespedes,S., **Vidal-Puig, A.,** Alvarez Cienfuegos, M., Escobar-Jimenez, F. Hipotiroidismo primario asociado a alteraciones de la silla turca y de la funcion hipofisaria. Presentacion de cinco casos. ***Rev Clín Esp.*** 6:46-50. 1992.

224. Muñoz-Torres, M., **Vidal-Puig, A**., Tercedor, J., Diaz, J., Cespedes, S, Escobar Jimenez, F. Hiperandrogenismo, resistencia a la insulina y acantosis nigricans: respuesta a dosis bajas de ketoconazol. ***Endocrinologia.*** 2:57-59. 1990.

225. Muñoz-Torres, M., **Vidal-Puig, A.,** Escobar-Jimenez, F., Hernando, I., Diaz de Madrid, J., Cespedes, S. Hiperinsulinismo en mujeres con hiperandrogenismo. ***Endocrinologia*.** 6:202-205. 1990.

<u>Reviews and Editorials</u>

1. Rodriguez-Cuenca S, **Vidal-Puig A.** Insulin and the last gasp of failing adipocytes. ***Nat Metab.*** 2021 Nov;3(11):1443-1444. doi: 10.1038/s42255-021-00492-7. PMID: 34732886

2. Leggat J, Bidault G, **Vidal-Puig A.** Lipotoxicity: a driver of heart failure with preserved ejection fraction? ***Clin Sci (Lond).*** 2021 Oct 15;135(19):2265-2283. doi: 10.1042/CS20210127.PMID: 34643676

3. Chondronikola M, Bartelt A, **Vidal-Puig A**, Virtanen KA. Editorial: Brown Adipose Tissue: From Heat Production in Rodents to Metabolic Health in Humans. ***Front Endocrinol (Lausanne)***. 2021 Jul 26;12:739065. doi: 10.3389/fendo.2021.739065. eCollection 2021.PMID: 34381425

4. Virtue S, **Vidal-Puig A**. GTTs and ITTs in mice: simple tests, complex answers. ***Nat Metab.*** 2021 Jun 11. doi: 10.1038/s42255-021-00414-7. Online ahead of print.

5. Corrales P, **Vidal-Puig A,** Medina-Gómez G. Obesity and pregnancy, the perfect metabolic storm. ***Eur J Clin Nutr***. 2021 Apr 28. doi: 10.1038/s41430-021-00914-5. PMID: 33911209

6. Samuelson I, **Vidal-Puig A.** Studying Brown Adipose Tissue in a Human *in vitro* Context. ***Front Endocrinol (Lausanne).*** 2020 Sep 15;11:629. doi: 10.3389/fendo.2020.00629. eCollection 2020. PMID: 33042008; PMCID:PMC7523498

7. Azzu V, Vacca M, Virtue S, Allison M, **Vidal-Puig A**. Adipose tissue-liver cross talk in the control of whole-body metabolism: implications in non-alcoholic fatty liver disease. ***Gastroenterology.*** 2020 Feb 12. pii: S0016-5085(20)30224-9. doi:10.1053/j.gastro.2019.12.054. [Epub ahead of print] PubMed PMID: 32061598.

8. "Obesity associated metabolic complications, the second wave of the tsunami" 14_{th} Key Symposium. **Vidal-Puig A**, Enerback S. ***J Intern Med***. 2018 Aug 23. doi: 10.1111/joim.12828. [Epub ahead of print] PMID:30141829.

9. Corrales P, **Vidal-Puig A**, Medina-Gómez G. PPARs and Metabolic Disorders Associated with Challenged Adipose Tissue Plasticity. ***Int J Mol Sci***. 2018 Jul 21;19(7). pii: E2124. doi: 10.3390/ijms19072124. Review. PMID:30037087.

10. Carobbio S, Guénantin AC, Samuelson I, Bahri M, **Vidal-Puig A**. Brown and beige fat: From molecules to physiology and pathophysiology. ***Biochim Biophys Acta. Mol Cell Biol Lipids***. 2018 May 28. pii: S1388-1981(18)30106-9. doi: 10.1016/j.bbalip.2018.05.013. [Epub ahead of print] Review. PMID:29852279.

11. Samuelson I, Vidal-Puig AJ. Fed-EXosome: extracellular vesicles and cell-cell communication in metabolic regulation. ***Essays Biochem.*** 2018 May 15;62(2):165-175. doi: 10.1042/EBC20170087. Print 2018 May 15. Review. PMID:29717059

12. Carobbio S, Guénantin AC, **Vidal-Puig A**. Basic and Applied Thermogenesis Research' Bridging the Gap. ***Trends Endocrinol Metab.*** 2017 Oct 27. pii: S1043-2760(17)30132-7. doi: 10.1016/j.tem.2017.10.002. [Epub ahead of print]

13. Mele L, Bidault G, Mena P, Crozier A, Brighenti F, **Vidal-Puig A**, Del Rio D. Dietary (Poly)phenols, Brown Adipose Tissue Activation, and Energy Expenditure: A Narrative Review. ***Adv Nutr.*** 2017 Sep 15;8(5):694-704. doi: 10.3945/an.117.015792. Print 2017 Sep.

14. Carobbio S, Pellegrinelli V, **Vidal-Puig** A. Adipose Tissue Function and Expandability as Determinants of Lipotoxicity and the Metabolic Syndrome. ***Adv Exp Med Biol*.** 2017;960:161-196. doi: 10.1007/978-3-319-48382-5_7.PMID:28585199

15.Rodriguez-Cuenca S, Pellegrinelli V, Campbell M, Oresic M, **Vidal-Puig A**. Sphingolipids and glycerophospholipids - The "ying and yang" of lipotoxicity in metabolic diseases. ***Prog Lipid Res***. 2017 Jan 16. pii: S0163-7827(16)30033-9. doi: 10.1016/j.plipres.2017.01.002. [Epub ahead of print]

16. Huang-Doran I, Zhang CY, **Vidal-Puig A**. Extracellular Vesicles: Novel Mediators of Cell Communication In Metabolic Disease. ***Trends Endocrinol Metab***. 2016 Oct 31. pii: S1043-2760(16)30128-X. doi: 10.1016/j.tem.2016.10.003. [Epub ahead of print]

17. Pellegrinelli V, Carobbio S, **Vidal-Puig A**. Adipose tissue plasticity: how fat depots respond differently to pathophysiological cues. ***Diabetologia***. 2016 Jun;59(6):1075-88. doi: 10.1007/s00125-016-3933-4.

18. Pellegrinelli V, **Vidal-Puig A**. Deriving functional beige fat from capillaries. ***Nat Med.*** 2016 Mar 3;22(3):234-6. doi: 10.1038/nm.4056.

19. Vacca M, Allison M, Griffin JL, **Vidal-Puig A**. Fatty Acid and Glucose Sensors in Hepatic Lipid Metabolism: Implications in NAFLD. ***Semin Liver Dis***. 2015 Aug;35(3):250-61..

20. Rodriguez-Cuenca S, Barbarroja N, **Vidal-Puig A**. Dihydroceramide desaturase 1, the gatekeeper of ceramide induced lipotoxicity. ***Biochim Biophys Acta.*** 2015 Jan;1851(1):40-50.

21. Peirce V, Carobbio S, **Vidal-Puig A**. The different shades of fat. ***Nature.*** 2014 Jun 5;510(7503):76-83. Doi: 10.1038/nature13477.

22. Peirce V, **Vidal-Puig A**. Regulation of glucose homeostasis by brown adipose tissue. ***Lancet Diabetes Endocrinol.*** 2013 Dec;1(4):353-60. Doi: 10.1016/S2213-8587(13)70055-X.

23. Roberts LD, West JA, **Vidal-Puig A**, Griffin JL. Methods for performing lipidomics in white adipose tissue. ***Methods Enzymol.*** 2014;538:211-31.

24. Carobbio S, Rosen B, **Vidal-Puig A**. Adipogenesis: new insights into brown adipose tissue differentiation. ***J Mol Endocrinol.*** 2013 Sep 16.

25. Vidal-Puig A. Adipose tissue expandability, lipotoxicity and the metabolic syndrome. ***Endocrinol Nutr.*** 2013;60 Suppl 1:39-43.

26. Virtue S, **Vidal-Puig A**. Assessment of brown adipose tissue function. ***Front Physiol*** 4:128. doi: 10.3389/fphys.2013.00128. 2013.

27. Whittle A, Relat-Pardo J, **Vidal-Puig A**. Pharmacological strategies for targeting BAT thermogenesis. ***Trends Pharmacol Sci*** 2013 Jun;34(6):347-55. doi: 10.1016/j.tips.2013.04.004. Epub 2013 May 3.

28. Whittle A, **Vidal-Puig A**. When BAT is lacking. WAT steps up. ***Cell Res*** [Epud ahead of print]. (2013)

29. Villarroya F, **Vidal-Puig A**. Beyond the Sympathetic Tone: The New Brown Fat Activators. ***Cell Metab*** [Epud ahead of print]. (2013)

30. Dhurandhar NV, Geurts L, Atkinson RL, Casteilla L, Clement K, Gerard P, Vijay-Kumar M, Nam JH, Nieuwdorp M, Trovato G, Sørensen TI, **Vidal-Puig A**, Cani PD. Harnessing the beneficial properties of adipogenic microbes for improving human health. ***Obes Rev*** 2013 May 12. doi: 10.1111/obr.12045. [Epub ahead of print] (2013)

31. Whittle AJ, **Vidal-Puig A**. NPs - heart hormones that regulate brown fat? ***J Clin Invest***. February 6. 2012.

32. Whittle AJ, **Vidal-Puig A**. Physiology: Immune cells fuel the fire. ***Nature***. December 1, 2011.

33. Carobbio S, Rodriguez-Cuenca S, **Vidal-Puig A**. Origins of metabolic complications in obesity: ectopic fat accumulation. The importance of the qualitative aspect of lipotoxicity. ***Curr Opin Clin Nutr Metab Care.*** 16 August 2011.

34. Virtue S, **Vidal-Puig A**. Nothing Iffy about HIF in the Hypothalamus. ***PLoS Biol.*** July, 2011.

35. Whittle AJ, López M, **Vidal-Puig A.** Using brown adipose tissue to treat obesity - the central issue. ***Trends Mol Med*** May 20, 2011.

36. Blanco Martínez de Morentin P, González CR, Saha AK, Martins L, Diéguez C, **Vidal-Puig A**, Tena-Sempere M, López M. Hypothalamic AMP-activated proteína kinase as a mediator of whole body energy balance. ***Rev Endocr Metab Disord*** Feb 24, 2011.

37. Johnson F, Mavroggiani A, Ucci M, **Vidal-Puig A**, Wardle J. Could increased time spent in a thermal comfort zone contribute to population increases in obesity? ***Obes Rev*** Jan 24, 2011.

38. Varela L, Vázquez MJ, Cordido F, Nogueiras R, **Vidal-Puig A**, Diéguez C, López M. Ghrelin and lípido metabolismo key partners in energy balance. ***J Mol Endocrino*l** Dec 17, 2010.

39. Hagen RM, Rodriguez-Cuenca S, **Vidal-Puig A**. An allostatic control of membrane lipid composition by SREBP1. ***FEBS Lett***. **2010** Apr 9.

40. Vidal-Puig A, Unger RH. *Special issue on lipotoxicity*. **Biochim Biophys Acta**. 2010 Mar;1801(3):207-8.

41. Sethi JK, **Vidal-Puig A**. Wnt signalling and the control of cellular metabolism. ***Biochem J*. 2010** Mar 15;427(1):1-17.

42. Virtue S, **Vidal-Puig A**. Adipose tissue expandability, lipotoxicity and the Metabolic Syndrome--an allostatic perspective. ***Biochim Biophys Acta*. 2010** Mar;1801(3):338-49

43. Sørensen TI, Virtue S, **Vidal-Puig A**. Obesity as a clinical and public health problem: is there a need for a new definition based on lipotoxicity effects? ***Biochim Biophys Acta*. 2010** Mar;1801(3):400-4.

44. Christodoulides C, **Vidal-Puig A**. PPARs and adipocyte function. ***Mol Cell Endocrinol***. **2009** Sep 20.

45. Medina-Gómez G, **Vidal-Puig A**. Adipose tissue as a therapeutic target in obesity. ***Endocrinol Nutr***. 2009 Oct;56(8):404-11.

46. Lelliott CJ, **Vidal-Puig A**. PGC-1beta: A Co-activator That Sets the Tone for Both Basal and Stress-Stimulated Mitochondrial Activity. ***Adv Exp Med Biol***. 646:133-9. **2009**

47. Sethi JK, **Vidal-Puig AJ**. Wnt signalling at the crossroads of nutritional regulation. ***Biochem J***. 1;416(2):e11-3. Dec **2008.**

48. Lage R, Diéguez C, **Vidal-Puig A**, López M. AMPK: a metabolic gauge regulating whole-body energy homeostasis***. Trends Mol Med***. 2008 Dec;14(12):539-49. Epub 1 Nov **2008**.

49. Christodoulides C, Lagathu C, Sethi JK, **Vidal-Puig A**. Adipogenesis and WNT signalling. ***Trends Endocrinol Metab***. Nov **2008**.

50. Oresic M, Hänninen VA, **Vidal-Puig A**. Lipidomics: a new window to biomedical frontiers. ***Trends Biotechnol***. 2008 Dec;26(12):647-52. Epub Oct **2008**.

51. Tan CY, **Vidal-Puig A**. Adipose tissue expandability: the metabolic problems of obesity may arise from the inability to become more obese. ***Biochem Soc Trans***. 36(Pt 5):935-40. Oct **2008.**

52. Virtue S and **Vidal-Puig A**. It is not how fat you are it is what you do with it that counts. ***PLOS Biol*** 6,9 237. **2008.**

53. López M, Saha AK, Diéguez C, **Vidal-Puig A**. The AMPK-Malonyl-CoA-CPT1 Axis in the Control of Hypothalamic Neuronal Function-Reply. ***Cell Metab***. 8(3):176. Sep **2008.**

54. López M, **Vidal-Puig A**. Brain lipogenesis and regulation of energy metabolism. ***Curr Opin Clin Nutr Metab Care***. 11(4):483-90. Jul **2008.**

55. Griffin JL, **Vidal-Puig A**. Current challenges in Metabolomics for diabetes research: a vital functional genomic tool or just a ploy for gaining funding? ***Physiol Genomics***. 12;34(1):1-5. Jun **2008.**

56. Yetukuri L, Ekroos K, **Vidal-Puig A**, Oresic M. Informatics and computational strategies for the study of lipids. ***Mol Biosyst***. 4(2):121-7. Feb **2008.**

57. Edoardo Dalla Nora, Sarah L Gray and **Antonio Vidal-Puig**. Role of PPARγ in adipocyte recruitment and thermogenesis. ***Future Drugs Ltd.*** **2007.**

58. Burguera B, Agusti A, Arner P, Baltasar A, Barbe F, Barcelo A, Breton I, Cabanes T, Casanueva FF, Couce ME, Dieguez C, Fiol M, Fernandez Real JM, Formiguera X, Fruhbeck G, Garcia Romero M, Garcia Sanz M, Ghigo E, Gomis R, Higa K, Ibarra O, Lacy A, Larrad A, Masmiquel L, Moizé V, Moreno B, Moreiro J, Ricart W, Riesco M, Salinas R, Salvador J, Pi-Sunyer FX, Scopinaro N, Sjostrom L, Pagan A, Pereg V, Sánchez Pernaute A, Torres A, Urgeles JR, **Vidal-Puig A**, Vidal J, Vila M. Critical assessment of the current guidelines for the management and treatment of morbidly obese patients. ***J Endocrinol Invest***. 30(10):844-52. Nov **2007.**

59. Medina-Gomez G, Gray S, **Vidal-Puig A**. Adipogenesis and lipotoxicity: role of peroxisome proliferator-activated receptor gamma (PPARgamma) and PPARgammacoactivator-1 (PGC1). ***Public Health Nutr.*** 10(10A):1132-7. Oct **2007.**

60. Slawik M, **Vidal-Puig AJ**. Adipose tissue expandability and the metabolic syndrome. ***Genes Nutr***. 2(1):41-5. No abstract available. Oct **2007**.

61. Lopez M, Lelliott CJ, **Vidal-Puig A**: Hypothalamic fatty acid metabolism: a housekeeping pathway that regulates food intake. ***Bioessays*** 29:248-261, **2007.**

62. Sethi JK, **Vidal-Puig AJ**: Thematic review series: adipocyte biology. Adipose tissue function and plasticity orchestrate nutritional adaptation. ***J Lipid Res*** 48:1253-1262, **2007.**

63. Sethi JK, **Vidal-Puig AJ:** Targeting fat to prevent diabetes. ***Cell Metab*** 5:323-325, **2007.**

64. Gray SL, **Vidal-Puig AJ:** Adipose tissue expandability in the maintenance of metabolic homeostasis. ***Nutr Rev*** 65:S7-12, **2007.**

65. Slawik M, **Vidal-Puig AJ**: Lipotoxicity, overnutrition and energy metabolism in aging. ***Ageing Res Rev*** 5:144-164, **2006.**

66. Stephens JM, **Vidal-Puig AJ**: An update on visfatin/pre-B cell colony-enhancing factor, an ubiquitously expressed, illusive cytokine that is regulated in obesity. ***Curr Opin Lipidol*** 17:128-131, **2006.**

67. Jitrapakdee S, **Vidal-Puig A**, Wallace JC: Anaplerotic roles of pyruvate carboxylase in mammalian tissues. ***Cell Mol Life Sci*** 63:843-854, **2006.**

68. Vidal-Puig A: [Obesity, MODY and juvenile diabetes: a new diagnostic challenge]. ***Med Clin (Barc)*** 126:656-657, **2006.**

69. Oresic M, **Vidal-Puig A,** Hanninen V: Metabolomic approaches to phenotype characterization and applications to complex diseases. ***Expert Rev Mol Diagn*** 6:575-585, **2006.**

70. Curtis RK, Oresic M, **Vidal-Puig A**: Pathways to the analysis of microarray data. ***Trends Biotechnol*** 23:429-435, **2005.**

71. Medina-Gomez G, **Vidal-Puig A:** Gateway to the metabolic syndrome. ***Nat Med*** 11:602-603, **2005.**

72. Gray SL, Dalla Nora E, **Vidal-Puig AJ**: Mouse models of PPAR-gamma deficiency: dissecting PPAR-gamma's role in metabolic homoeostasis. ***Biochem Soc Trans*** 33:1053-1058, **2005.**

73. Sethi JK, **Vidal-Puig A**: Visfatin: the missing link between intra-abdominal obesity and diabetes? ***Trends Mol Med*** 11:344-347, **2005.**

74. M Slawik, **Vidal-Puig A**. Peripheral molecular targets for anti obesity drugs
Method Find Exp Clin Pharmacol (suppl2):23-26. **2005.**

75. Lelliott C, **Vidal-Puig AJ**: Lipotoxicity, an imbalance between lipogenesis de novo and fatty acid oxidation. ***Int J Obes Relat Metab Disord*** 28 Suppl 4:S22-28, **2004.**

76. Medina G, Lelliott C **Vidal-Puig A**. Lipotoxicidad y Diabetes. ***Investigacion y Ciencia***. (*Scientific American*). *Sept. 58-65.* **2004.**

77. Hagen T, **Vidal-Puig A**: Mitochondrial uncoupling proteins in human physiology and disease. ***Minerva Med*** 93:41-57, **2002.**

78. Sewter C, **Vidal-Puig A**: PPARgamma and the thiazolidinediones: molecular basis for a treatment of 'Syndrome X'? ***Diabetes Obes Metab*** 4:239-248, **2002.**

79. Vidal-Puig, A. Mitochondrial proteins. Biochemistry of Obesity. **Investigacion y Ciencia.** (***Scientific American***) July, Pag. 310**.2002.**

80. Vidal-Puig, A. Nutrient gene interactions in health and disease.
Nutrition Bulletin 27 (2), 143-144.**2002.**

81. Crowley V, **Vidal-Puig AJ**: Mitochondrial uncoupling proteins (UCPs) and obesity. ***Nutr Metab Cardiovasc Dis*** 11:70-75, **2001.**

82. Vidal-Puig A, O'Rahilly S: Metabolism. Controlling the glucose factory. ***Nature*** 413:125-126, **2001.**

83. Vidal-Puig, A., O'Rahilly S. Resistin: A New Link between Obesity and Insulin Resistance? **Clin Endocrinol.** Oct;55(4):437-8. **2001.**

84. Vidal-Puig AJ: Uncoupling expectations. ***Nat Genet*** 26:387-388, **2000.**

85. Medina, G., Sewter, C., **Vidal-Puig A**. PPARy Tiazolidinedionas, algo mas que un tratamiento para la diabetes. ***Medicina Clinica***.115 (10) **2000.**

86. Vidal-Puig A and O'Rahilly S. Obesity and Diabetes: an avalanche of new information. ***Molecular Medicine Today.*** (2000), 6: 221-223.

87. Vidal-Puig, A., Erani , D. Role of PPARs in the treatment of the dyslipidaemia associated with type 2 Diabetes.***Cardiovasc Risk Factors***., (9), 136-144. **1999.**

88. Vidal-Puig A. Nuevos aspectos moleculares de la obesidad. ***An. Esp Pediatria***. Sup111. 29-35.**1998.**

89. Vidal-Puig A, Bjorbaek C: [Molecular genetics of non insulin dependent diabetes mellitus]. ***Med Clin (Barc)*** 109:107-114, **1997.**

90. Moller DE, Bjorbaek C, **Vidal-Puig A**: Candidate genes for insulin resistance. ***Diabetes Care*** 19:396-400, **1996.**

91. Vidal-Puig A, Garcia-Calvente C, Munoz Torres M: [Adrenal androgens: traditionally forgotten hormones. Today, of current importance]. ***An Med Interna*** 10:559-564, **1993.**

92. Vidal-Puig A, Munoz-Torres M, Escobar-Jimenez F: [New trends in the definition and diagnostic criteria of polycystic ovary syndrome]. ***Med Clin (Barc)*** 100:389-393, **1993.**

93. Vidal Puig A, Muñoz Torres, M., Garcia calvente, C. Andrógenos adrenales; unos hormonas tradicionalmente olvidadas. Hoy de actualidad. ***An Med Int.*** (22) 559-642. **1993.**

94. Ugarte, H., **Vidal-Puig A**., Cuesta-Muñoz, L., Sastre-Gallego, A. Principios generales para la correcta nutrición del paciente con diabetes mellitus. ***Nutr Clin.*** 13:21-28. **1993.**

95. Vidal-Puig A., Muñoz-Torres, M., Escobar-Jimenez, F. Nuevas tendencias en ldefinicion y criterios diagnosticos del Sindrome de Ovario Poliquistico (PCO). ***Medicina Clínica.*** 10:389-393.**1993.**

96. Vidal-Puig, A., M. Muñoz-Torres, F. Escobar-Jimenez. Hiperinsulinemia en los estados de hiperandrogenismo*.* ***Endocrinologia*** 13-16.**1992.**

<u>Book Chapters</u>

1. Paniagua J.A,Vidal-Puig A. The Diabetes Textbook: Clinical Principles, Patient Management and Public Health Issues. Chapter 14, Obesity in the Pathophysiology of Diabetes. Editor. Joel Rodríguez-Saldaña Springer (2019)

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

3. Vidal-Puig. A Alteraciones del Tejido Adiposo. ***Internal Medicine Textbook***. ***Capitulo 7.***Farreras Rozman. XVII Edition Elsevier Science .2014.

4. Vidal-Puig. A Patogenia de la Diabetes tipo 2. ***Internal Medicine Textbook. Capitulo 10.*** Farreras Rozman. XVII Edition Elsevier Science .**2014.**

5. Vidal-Puig, A Obesidad ysindrome metabolico. ***Internal Medicine Textbook. Capitulo 12.*** Farreras Rozman. XVII edition. Elsevier Sciences. **2014.**

6. Oresic M, **Vidal-Puig A**. A Systems Biology Approach to Study Metabolic Syndrome. Springer Verlag, NY; 2013; ISBN 978-3-319-01007-6.

7. Jaswinder K, Sethi and Antonio Vidal-Puig. Adipose Tissue Development, Structure and function. ***In metabolic basis of Disease*** Pp 53 Springer, New York.

8. Lelliott C, **Vidal-Puig A**. PGC-1ß: a co-activator that sets the tone for both basal and stress-stimulated mitochondrial activity. ***In Early Nutrition Programming and Health Outcomes in Later Life***: Obesity and beyond Series: Advances in Experimental Medicine and Biology , Vol. 646 Koletzko, B.; Decsi, T.; Molnár, D.; De la Hunty, A. (Eds.), 250 p., Hardcover ISBN: 978-1-4020-9172-8. **2009.**

9. Lelliott C, Oresic M, **Vidal Puig A** : Lipotoxicity**,** Obesity and Diabetes
"Adipose tissue in health and disease" STM Books. Wiley-VCH Verlag Weinheim, Germany **2008**.

10. Keira Curtis, Matej Orešič and **Antonio Vidal-Puig.** Systems biology approaches to study obesity. Chapter 10.2. Analysis and data integration. In "***Genetics of Obesity***". Ed. Taylor & Francis Group, LLC. pp491 **2008**.

11. Lopez M, **Vidal-Puig, A.** Homeostasis energética: regulación de la ingesta y del gasto. ***Pediatric Endocrinology Textbook*** McGraw-Hill/Interamericana Ed. **2008 .**

12. Vidal-Puig. A Patogenia de la Diabetes tipo 2. ***Internal Medicine Textbook.*** Farreras Rozman. XVI Edition Elsevier Science .**2008.**

13. Vidal-Puig, A Obesidad ***Internal Medicine Textbook.*** Farreras Rozman. XVI edition. Elsevier Sciences. pp. **2008.**

14. Malo C**, Vidal-Puig A** Chapter 30: Glitazones and the Metabolic Syndrome. ***Tratado de Diabetes de la Sociedad Española de Diabetes****. Ed Panamericana.* pp 315-322. **2007.**

15. Moller D, **Vidal-Puig A,** Azziz R**.** Severe Insulin-Resistant Hyperandrogenic Syndromes **in** ***Androgen Excess Disorders in Women****.* Humana Press, pp129-138. **2006.**

16. Medina G, Gray S, **Vidal-Puig, A** "The role of PPARs in the pathogenesis of the Metabolic Syndrome" **in The Metabolic Syndrome at the Beginning of the XX1 Century. Eds Elsevier,** p253-270. **2005.**

17. Crowley V, **Vidal-Puig A.** "Peripheral targets for antiobesity drugs" **in Pharmacotherapy of Obesity. CRC Press,** pp 345-362**. 2005.**

18. Medina G, Lelliott, C and **Vidal-Puig A.** Animal models of Insulin resistance in **Insulin Resistance** John Wiley & Sons, Ltd, West Sussex. pp.133-148. **2005.**

19. Vidal-Puig AJ, Abel ED**.** Insulin resistance and cardiovascular disease-New insights from genetics. **In Handbook of Experimental Pharmacology** -Volume 160: Cardiovascular Pharmacogenetics. Edited by Martin R. Wilkins. Heidelberg. Springer-Verlag. pp 243-279. **2004**.

20. Vidal-Puig, A Obesidad ***Internal Medicine Textbook.*** Farreras Rozman. XV edition. Elsevier Sciences. pp 1986-1993. **2004.**

21. Vidal-Puig. A Patogenia de la Diabetes tipo 2. ***Internal Medicine Textbook.*** Farreras Rozman. XV Edition Elsevier Science pp.1945-1949. **2004.**

22. Vidal-Puig, A. Homeostasis energética: regulación de la ingesta y del gasto. ***Pediatric Endocrinology Textbook*** McGraw-Hill/Interamericana Ed*.* **2003.**

23. Vidal-Puig, A. Cual es la importancia clinica del PPARγ ***Diabetes 2001.*** Ed Lilly pp124-126. **2000.**

24. Vidal-Puig A. Patogenia de la Diabetes Mellitus. ***Internal Medicine Textbook****. XIV Edition* Farreras Rozman. Harcourt. *pp 2195-2199.***2000.**

25. Vidal-Puig A and O'Rahilly S**.** Leptin and the Leptin receptor. ***Encyclopedia of Molecular Medicine***. Vol 5 pp 1903-1910. John Wiley & Sons. **2002.**

26. Vidal-Puig A and O'Rahilly, S. Insulin receptor***. Encyclopedia of Molecular Medicine****. Vol 5, 1774-1780 John Wiley & Sons.* **2002.**

27. Moller, DE., **Vidal-Puig, A.** Genetics and molecular pathophysiology of the severe insulin resistant hyperandrogenic syndromes. ***Androgens in Women Disease*** Academic press. Pp 236-246. **1997.**

28. Vidal-Puig A, Moller, DE. Classification, Prevalence, clinical manifestation and diagnosis of Insulin resistant hyperandrogenic syndromes. in ***Androgens in Women Disease***. Academic Press. Pp 226-236. **1997.**

29. Vidal-Puig A, Moller., DE. Single strand conformational polymorphism. in ***PCR: Essential Techniques.*** Bios Scientific Publishers. Wiley. pp 47-51.**1996.**

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, "PPARγ, 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. "*PPARγ, 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*: "PPARγ, 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*: "PPARγ2 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 Investigacion Sanitaria (INCLIVA)

10. **Barcelona, Spain. 27th November 2019.** External Scientific Council meeting, Institut D'investigacions Blomediques 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. **Cadiz, 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:* "PPARγ, adipose tissue expandability and the metabolic syndrome".

97. **Aberdeen, UK. 30th May 2007.** *ACERO Symposium*: "PPARγ, 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 síndorme 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 Obesit*y: "Adipose tissue and the Metabolic Syndrome".

102. **Oxford, UK. 12th- 15th September 2006.** *European Network of Excellence in Nutrigenomics*: "PPARγ2, 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 Endocrinologia y Nutricion): "PPARγ: 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 PPARγ2".

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: "PPARγ 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 PPARγ".

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 PPARγ 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