

Curriculum Vitae

Jenny Elizabeth GUNTON

CONTACT DETAILS:

Room 2040, Clinical Sciences Corridor,
Westmead Hospital. NSW. 2145.

Tel: +61 (02) 8890 8089

Email: Jenny.gunton@sydney.edu.au

QUALIFICATIONS

- MBBS, 1987-1992. University of Queensland.
- Fellow of the Royal Australasian College of Physicians (FRACP), 1997-2002, Diabetes and Endocrinology.
- PhD, 2000-2003, University of Sydney, Faculty of Medicine, Molecular Medicine. Supervisors: Professor Rob Baxter, Professor Pat Delhanty.
- Post-doctoral studies 2003-2005 Kahn Laboratory, Joslin Diabetes Center & Harvard Medical School.
- Fellowship of the Australian Lifestyle Medicine Society (FALMS) 2019.

CURRENT POSITIONS

- **2014-present Chair of Medicine, University of Sydney, Westmead Hospital.**
- **2018-present Head of Discipline of Medicine, University of Sydney**
- **2015-present Director, Centre for Diabetes, Obesity and Endocrinology Research Westmead Institute of Medical Research**
- 2017-present Chair, Network Governance Committee, Western Sydney Network
- 2016-present Conjoint Professor, UNSW
- 2016-present, Honorary Scientist, Garvan Institute of Medical Research
- 2017-present, member of Hub Executive, Westmead Research Hub

Past Positions

- **2013-2017 Member, Pharmaceutical Benefits Advisory Committee (PBAC).**
- **2012-2014 President, Australian Diabetes Society**
 - **2010-2012 Vice-President, Australian Diabetes Society**
 - **2008-2010 Secretary, Australian Diabetes Society**
 - **2006-2008 Council member, Australian Diabetes Society.**
- **2008-2015 Board Member, Diabetes Australia**
- 2007-Dec 2015 Faculty, Garvan Institute of Medical Research. Head of the Diabetes and Transcription Factors Group.
 - 2007-2014 Faculty, Garvan Institute of Medical Research. Head of the Diabetes and Transcription Factors Group. Full time.
 - 2005-2007, Lab head, Garvan Institute of Medical Research.

- 2002-2014 Staff Specialist in Diabetes and Endocrinology, Westmead Hospital. 20% appointment.
 - 2002-2003 Locum Staff Specialist in Diabetes and Endocrinology at Westmead Hospital
- Jan 2011-Jan 2014 Conjoint Associate Professor, University of Sydney.
- 2005 Instructor (Lecturer Equivalent at Harvard) at Joslin Diabetes Center and Harvard Medical School, in the lab of C. Ronald Kahn
- 2003-2004 Post-doctoral Fellow Joslin Diabetes Center and Harvard Medical School, Kahn lab.
- 2000-2003 PhD, Kolling Institute, University of Sydney. Baxter Laboratory. Mechanisms of Action of Metformin.
- 2001-2003 Endocrinologist, 10% Gosford Private Rooms and 10%, Mona Vale Private Rooms.
- 2000 Medical Registrar, part time, Royal North Shore Hospital (during PhD studies).
- **1999 President of Resident Medical Officers (RMOs) Association, Royal North Shore Hospital**
- 1998- 1999 Endocrinology Advanced Trainee, Royal North Shore Hospital.
- 1997 Basic Physician Trainee, Royal Brisbane Hospital.
- 1995-1996 Basic Physician Trainee, Royal North Shore Hospital.
- 1994 RMO, Maryborough Base Hospital (QLD Government State Scholarship).
- 1993 Intern, Royal Brisbane Hospital.

HONOURS and AWARDS

- **2019 The Australian Diabetes Society Wikramanayake Mid-Career Award**
- **2013 Bruce Hunt Medal and Oration.**
- 2015 Endocrinology – My paper on vitamin D and muscle was one of the “best 5 papers in basic science” from 2014.
- Invited speaker at the ESA / AAoS “Rising Star” symposium 2008.
- L’Oreal Australian Women in Science Fellowship 2007.
- NHMRC/DART career development award 2007 – given to the highest scoring applicant in the field of diabetes.
- NHMRC CJ Martin award 2003-2007. Extended finish due to maternity leave.
- ESA Servier Award 2003, for the best paper published by a young investigator.
- ADIPS 1999 Young Investigator award.

Professional Memberships

- Medical Registration: AHPRA.
- Fellow of the Royal Australasian College of Physicians (FRACP).
- Australian Diabetes Society (ADS).
- Endocrine Society of Australia (ESA).
- Australasian Diabetes in Pregnancy Society (ADIPS).
- Australian Islet Study Group (AISG).
- Endocrine Society of America (ENDO).
- Australia New Zealand Obesity Society (ANZOS).
- Fellow of the Australasian Society of Lifestyle Medicine (ALMS)

GRANTS

NHMRC. Since starting my PhD in February 2000, I have been continuously NHMRC supported.

Grant Summary. Career total competitive funding (NHMRC and JDRF) >\$28,000,000
The total for my chief-investigator A grants is >\$4,000,000

Current funding

- NHMRC Program Grant CID. 2019-2023. \$12,980,000. Complexity in nutrition.
- Diabetes Australia Research Trust (DART) grant. Sole CI. 2019. Browning human fat for the treatment of obesity and diabetes.

Past funding

- NHMRC Project grant. Increasing beige fat to treat obesity. CIA. 2015-2018. ~\$960,000.
- NHMRC Project grant. CIE. Chris Goodnow is CIA. 2016-2019. Resigned for program grant. Now Associate investigator.
- NHMRC Project grant. CIC. Peter Thorn is CIA. 2017-2019. Resigned for program grant. Now Associate investigator.
- NHMRC Project grant. Vitamin D in acute liver disease. CIA. (CIB is Chris Liddle). 2013-2015. \$650,000.
- NHMRC Project grant. CIC (CIA Peter Thorn) Polarisation of insulin secretion in beta-cells. 2014-2016. \$682,179.
- NHMRC Project grant. Vitamin D in beta-cell function and diabetes. CIA. 2011-2013. \$534,383.
- NHMRC Career Development Award 2 2011-2014 inclusive. CIA. \$424,920.
- NHMRC Project grant. HIF1a and Diabetes. CIA. 2008-2010. \$362,304.
- NHMRC/JDRF Program grant. Beta cell mass in Type 1 diabetes and islet transplantation CID 2008-2012. \$3,037,750.
- NHMRC/DART Career Development Award 1 (The combined DART award was given to the highest scoring applicant in the field of diabetes). CIA. 2007-2011. \$469,330.
- NHMRC Project grant. The role of ARNT in Type 2 diabetes. CIA. 2006-2008. \$411,798.
- NHMRC. CJ MARTIN Fellowship. CIA. 2003-2007. \$373,780.
- NHMRC PhD Scholarship. 2000-2003. CIA. \$81,937.
- Co-PI on the NHMRC/JDRF Islet Transplant Program Grant held by Phil O'Connell, \$8,000,000.

JDRF (Juvenile Diabetes Research Foundation)

- Juvenile Diabetes Research Foundation (JDRF) program grant. Phil O'Connell is the chief investigator. \$3,300,000.
- JDRF Clinical Research Network Grant. CIA. Closed loop programming of insulin pumps: a human clinical trial. 2013 (Nov)-2014. \$80,000
- JDRF Innovative Grant. CIA. 2011. Closed loop system for insulin pump programming. \$110,000
- JDRF CIA. Islet transplant special grants. Islet transplantation, improving outcomes. CIA. 2008-2010. \$300,000.
- JDRF. CIA. Innovative grant. Trans-differentiating beta-cells. 2008. \$135,000.

OTHER FUNDING BODIES

- Diabetes Australia Research Trust (DART) CIA. Beta-cells and TRAP. 2017. \$60,000.
- Bridging grant University of Sydney. CIA. 2017. \$30,000.
- Diabetes Australia Research Trust (DART) CIA. Vitamin D and diabetes. 2013. \$60,000.
- DART CIA. GEM and diabetes. 2011. \$60,000.
- DART Millennium Type 2 diabetes Grant \$150,000, 2011-2012. DART give one Type 2 diabetes Millennium grant per year, and I was the 2011 recipient.
- DART CIA. HIF dual beta-cell liver knockout. 2009. \$60,000
- DART CIA. HIF-1a and beta-cell function. 2007. \$60,000.
- 2007 L'Oreal Women in Science Award. \$20,000.
- 2007 RACP Fellowship, \$50,000.

Smaller and Pre-2007 non-NHMRC grants are left out for brevity, available on request.

PATENTS

Method of increasing metabolism. 2016 US patent. App 14/796,842. App. 12/811,340

Method of treating diabetes. 2013 US patent. 7,700,555. App 13/957,922 24 citations

Method of treating diabetes. 2010 US patent. 8,518,419.

Method of treating diabetes using inhibitors of ARNT2. 2008. US Patent 11/848,789.

SELECTED INVITED TALKS

International

- 2018 - 13th Xiangya Diabetes Immunology Forum, China, invited speaker.
- 2017 - AOASO / OSSANZ / ANZOS joint scientific meeting invited symposium
- 2017 - Metabesity conference, London. Invited speaker.
- 2014 - Keynote speech at Obesity-2014, San Francisco November 2014. Obesity, a GEM of a problem.
- 2014 - Symposium invitation International Diabetes Federation WPF, Singapore November 2014. Gestational diabetes
- 2013 - October, Joslin Diabetes Center and Harvard Medical School, Kahn Scholars Symposium.
- 2013- October, Joslin Diabetes Center and Harvard Medical School, Joslin Diabetes Symposium, Session Chair.
- 2013 - August, Chicago, USA. 4th World Congress on Diabetes and Metabolism, Invited Speaker.
 - August, Chicago, USA. 4th World Congress on Diabetes and Metabolism, Session Chair.
- 2012 - Keystone Advances in Hypoxic Signalling – Invited Speaker. Banff, Canada.
- 2011 - Australia-China Biomedical Research Conference Invited Symposium.
- 2008 - International Transplant Congress Postgraduate Training Weekend Invited Symposium

National / local, research

- 2019 Australian Diabetes Society (ADS) Wikramanayake Prize Lecture
- 2019 RNSH Endocrine Grand Rounds
- 2018 ESA (ESA)/ ADS joint symposium, Invited symposium
- 2017 Baker IDI seminar program
- 2017 Endocrine Society of Australia invited symposium
- 2016 Clare Valley Bone Meeting April 2016. Invited Symposium.
- 2016 Metabolic Diseases, Breakthrough Discoveries in Diabetes and Obesity – Invited Symposium.
- 2016 Westmead Pancreas and Islet Transplant Unit Invited Lecture.
- 2016 Royal Prince Alfred Hospital Endocrine Grand Rounds.
- 2015 ADS invited symposium.
- 2015 Australia New Zealand Obesity Society invited symposium.
- 2014 Bosch Annual Distinguished Speaker Seminar.
- 2014 RMIT annual seminar series 2014.
- 2014 ESA invited symposium 2014, August, Vitamin D and muscle.
- 2014 ADS invited symposium 2014, August. SGLT2 inhibitors.
- 2014 Westmead Pancreas and Islet Transplant Unit Invited Lecture September.
- 2014 Westmead Grand Rounds October, “Putting your worst foot forward”
- 2013 November, Bruce Hunt Oration and Medal, Perth.
- 2013 October, ANZOS (Australia New Zealand Obesity Society), Invited Speaker.
 - Session: David James, Mark Febbraio & Jenny Gunton.
 - October, ANZOS, Session Chair.
- 2013 August, Australian Islet Study Group, Invited Speaker
- 2013 April, ESA (Endocrine Society of Australia) Seminar Weekend. Invited Speaker
- 2013 March, Western Australia Diabetes Physicians’ Meeting, Invited Speaker.
- 2013 Garvan International Fellow’s Symposium, Invited Speaker.
- 2012 Annual Womens’ and Childrens’ Health Conference, Keynote Speaker
- 2012 Australian Diabetes Society Meet the Professor Session, August.
- 2012 Australian Diabetes Society GP Education Day: Oral hypoglycaemics for treating type 2 diabetes.
- 2011 Australian Doctor Seminar for Diabetes: Latent Autoimmune Diabetes in Adulthood
- 2011 University of Adelaide School of Molecular and Biomedical Sciences Invited Lecture
- 2010 Australian Islet Study Group, Invited Symposium
- 2010 Westmead Islet and Pancreas Transplant Unit Invited Lecture
- 2008 ESA / Australian Academy of Science Rising Star Invited Symposium
- 2007 Garvan International Fellows Symposium Invited Talk
- 2007 Endocrine Society of Australia Clinical Weekend Keynote Speaker
- 2000 Australasian Diabetes in Pregnancy Society Plenary Speaker

National / local, teaching / education / mentoring

- 2019 Endocrine Society of Australia (ESA) Career Mentoring Session; Building resilience in science
- 2019 Grant writing mentoring session, Westmead Hospital
- 2019 ADS First Year Trainees Education Day Symposium.

- 2018 ADS First Year Trainees Education Day Symposium.
- 2018 Grant writing mentoring session, Westmead Hospital
- 2017 ADS First Year Trainees Education Day Symposium.
- 2016 ADS First Year Trainees Education Day Symposium.
- 2015 ADS First Year Trainees Education Day Symposium.
- 2015 ADS the Great Debate, August.
- 2014 ADS First Year Trainees Education Day Symposium.
- 2013 April, ESA Seminar Weekend. Mentoring Speaker.
- 2013 Australian Diabetes Society GP Education Day: Oral hypoglycaemics for treating type 2 diabetes.
- 2013 Australian Diabetes Society First Year Trainees Education Day Symposium
- 2007 Endocrine Society of Australia Clinical Weekend Mentoring Presentation.

MEMBERSHIP/ PROFESSIONAL EXPERIENCE AND CONTRIBUTIONS

Australian Diabetes Society, member

- **President Australian Diabetes Society (ADS) August 2012-August 2014.**
- **Vice President ADS 2010-2012.**
- **Honorary Secretary ADS 2008-2010.**
- **Council ADS 2006-2014.**
- **Chair, Medical Affairs Subcommittee, ADS, 2008-2014.**

Other, current

- **Member, Westmead Hub Research Executive**
- **Chair, Network Governance Committee, Western Basic Physician's Training Network**
- Member RACP accreditation site visits panel 2020-
- Member, Translational Academy, NHMRC.
- Member, Workplace Equity Group, Westmead Institute of Medical Research.
- Reviewer: J Clin Invest, Metabolism, Diabetes, Diabetologia, Endocrinology, JCEM, J Exp Med, Obesity and many other journals. I examine 1-3 PhD theses per year.

Other, past, selected

- **Member, Pharmaceutical Benefits Advisory Committee (PBAC) 2013-2017.**
- **Board Member, Diabetes Australia. 2008-2015.**
- **Member National Diabetes Strategy p 2013.**
- **Member, Adult Medicine Division Council (AMDC, RACP) 2012-2014.**
- **Chair, Workplace Equity Committee, Garvan Institute.**
- **National Policy Advisor & National Clinical Advisor, Diabetes Australia.**
- **Member, National Diabetes Services Scheme (NDSS) review panel, DoHA.**
- Member, Glycaemic control guidelines committee, ADS.
- Member, Diabetes Advisory Group, Dept of Health Australia (DoHA). 2013-2014.
- Ad hoc member, Higher Degrees Review Panel, Westmead Hospital.
- Member, policy statement group, Insulin glargine and cancer statement ADS.
- Member, policy statement group, Rosiglitazone and heart disease.

- Invitee, 2 Women in Science and Engineering Summits at Parliament House.
- Member ATSI Diabetes Policy Forum, Parliament House 2012.
- Member, 2013-2014 Specialist Medical Review Council (SMRC), Dept of Veterans Affairs.

Grant Reviews

- **Member of NHMRC Grant Review Panels 2017, 2012, 2011, 2010, 2008, 2007 including once as deputy chair** (before the independent chair roles were brought in)
- **Member, NHMRC Assigner's Academy, NHMRC 2013, 2014, 2015, 2016**
- **Diabetes Australia Research Program 2007-present. 3-12 per year.**
- **NHMRC, independent reviewer for NHMRC grants – 3-8 grants per year in addition to the other workload.**
- **ADS Skip Martin Fellowships. 2010-present**
- JDRF travel grant reviews 2012-2013.
- ADS Servier grants
- ADS travel grants (mainly consists of auditing eligibility)

Editorial Boards

- 2018-present Current Molecular Medicine
- 2019- present Scientific Reports

Conference Organising

- Westmead Hospital Week – Diabetes Symposium 2020
- Westmead Hospital week – Thyroid symposium 2019
- Westmead Hospital week – Obesity symposium 2018
- **Chair, Program Organising Committee ADS (Australian Diabetes Society) 2009-2011.** While I was chair of the organizing committee the meeting increased from ~1100 attendees to ~1500 attendees and the profit for the society over the same time was increased by 80%.
- Chair, Program Organising Committee (POC) AISG (Australian Islet Study Group) 2013.
- Chair Program organizing committee, GP stream, ADS conference 2014.
- Chair, Program Organising Committee (POC) AISG (Australian Islet Study Group) 2013.
- Member POC, AISG 2008-2012.
- Member, Organising Committee / Advisory Board Kahn Scholars Symposium, Harvard, Boston 2013.
- Garvan International Fellow's Symposium 2013. International Fellow Bruce Spiegelman.
- Garvan International Fellow's Symposium 2007. International Fellow Ron Kahn.
- Member, POC ADS 2007 and 2008.

Many smaller meetings are not listed for brevity.

PUBLICATIONS (citations are from Google Scholar, November 2nd 2019).

I received my PhD in November 2003, and am nearly 16 years post PhD allowing for career interruptions (2 children and time unable to work / drive after a comminuted leg fracture). I have >80 peer reviewed publications, with an average of >40 citations per paper. Twenty-nine papers (over

25% of the papers) have >50 citations (of those, 12 have >100 citations). In last 5 years I was first or senior author on 64% of these publications.

My work is in the field of diabetes, and transcription factors, particularly their roles in metabolic diseases. Many of my publications have had a direct translational impact: ADS Type 2 diabetes glycaemic control guidelines, my islet-transplantation studies identified a drug now used in the human islet transplant program, cross sectional and randomized controlled trials of nutrients in diabetes (Vitamin D and chromium studies). My H-index is 36.

2020

1. Gunton, J.E. Hypoxia Inducible Factors and Diabetes. *Journal of Clinical Investigation*. **2020**. **In press**.
2. Bouzakri, K.; Veyrat-Durebex, C.; Holterman, C.; Arous, C.; Barbieux, C.; Bosco, D.; Altirriba, J.; Alibashe, M.; Tournier, B. B.; Gunton, J. E.; Mouche, S.; Bietiger, W.; Forterre, A.; Berney, T.; Pinget, M.; Christofori, G.; Kennedy, C.; Szanto, I., Beta-Cell-Specific Expression of Nicotinamide Adenine Dinucleotide Phosphate Oxidase 5 Aggravates High-Fat Diet-Induced Impairment of Islet Insulin Secretion in Mice. *Antioxidants & redox signaling* **2020**, 32 (9), 618-635.
3. Yau, B.; Hays, L.; Liang, C.; Laybutt, D. R.; Thomas, H. E.; Gunton, J. E.; Williams, L.; Hawthorne, W. J.; Thorn, P.; Rhodes, C. J.; Kebede, M. A., A fluorescent timer reporter enables sorting of insulin secretory granules by age. *Journal of Biological Chemistry* **2020**.

2019

4. C Girgis, KM Cha, B So, M Tsang, J Chen, PJ Houweling, A Schindeler, RA Stokes, MM Swarbrick, FJ Evesson, ST Cooper, **JE Gunton**. Mice with myocyte-deletion of vitamin D receptor (VDR) have sarcopenia and impaired muscle function. *Journal of Cachexia, Sarcopenia and Muscle*, 2019; 10: 1228-1240. <https://doi.org/10.1002/jcsm.12460>.
Impact Factor 12.5. *Answers the long-standing controversy about whether there is a direct role for vitamin D action in muscle*. Citations: 10.
5. Lalwani, A., J. Warren, D. Liuwantara, W.J. Hawthorne, P.J. O'Connell, F.J. Gonzalez, R.A. Stokes, J. Chen, D.R. Laybutt, M.E. Craig, M.M. Swarbrick, C. King and **JE. Gunton**, β Cell Hypoxia-Inducible Factor-1 α Is Required for the Prevention of Type 1 Diabetes. *Cell Reports*, 2019. **27**(8): p. 2370-2384.e6.
This is the first reported beta-cell specific model which increases environmental susceptibility to diabetes. We identified a novel beta-cell factor which renders beta-cells susceptible to a range of environmental insults, leading to type 1 diabetes.
6. Carrivick S, Alfonso H, Golledge J, Flicker L, **Gunton JE**, Hankey GJ, Almeida OP, Norman PE, Yeap BB. Differential associations of ferritin and 25-hydroxyvitamin D with fasting glucose and diabetes risk in community dwelling older men. *Diabetes Metabolism Research and Reviews*. 2019 e3172.
7. Khor N, Swarbrick MM, Gunton JE. Inducible UCP1 silencing: A lentiviral RNA-interference approach to quantify the contribution of beige fat to energy homeostasis. *PLoS One*, 2019; 14 (11).
8. Scott C, Stokes RA, Cha KM, Clouston A, Eslam M, Metwally M, Swarbrick MM, George J, **Gunton JE**. Myeloid cell deletion of Aryl hydrocarbon Receptor Nuclear Translocator (ARNT) induces non-alcoholic steatohepatitis. *PLoS One*. 2019; 14 (12), citations 1.

9. Chen J, **Gunton JE**. Human Beta-cell Function and Islet Transplantation: Can We Improve? *Clinical Endocrinology*. In Press.
10. Wu L, **Gunton JE**. The Changing Landscape of Pharmacotherapy for Diabetes Mellitus: A Review of Cardiovascular Outcomes. *International Journal of Medical Sciences*. 2019; 20 (23) 5853.

2018

11. **Gunton JE**, Girgis CM. Vitamin D and Muscle. *Bone Reports*. 2018; 8. 163-167.
This was the most-read article for Bone Reports for 2018. Citations 28.
12. K Burns, C Yap, A Mina, **JE Gunton**. Iodine deficiency in women of childbearing age: not bread alone? *Asia Pacific Journal of Clinical Nutrition* 2018. 27(4); 853. **Citations: 3.**
13. S. Kou, Y. Cao, S. Yeo, D.J. Holmes-Walker, S.L. Lau, **J.E. Gunton**. Ethnicity influences cardiovascular outcomes and complications in patients with type 2 diabetes *Journal of Diabetes and its Complications* 2018; 32(2); 144–149. **Citations 9.**
14. Thi YL Le, Masahito Ogawa, **JE Gunton**, James JH Chong. Vitamin D improves cardiac function: Role of resident cardiac progenitor cells? *Heart, Lung & Circulation* 2018. 27(8) 976-75. **4 citations.**
15. Mcgrath RT, **Gunton JE**, Hocking SL, Glastras SJ, Fulcer GR. Women with type 2 diabetes in pregnancy remain a high-risk group. *Minerva Endocrinologica*. 2018;43:224.
16. M Abboud, MS Rybchyn, Y Ning, TC Brennan-Speranza, CM Girgis, **JE Gunton**, DR Fraser, SR Mason 1,25-Dihydrocholecalciferol (Calcitriol) modified uptake and release of 25-hydroxycholecalciferol in skeletal muscle cells in culture *J Steroid Biochemistry and Molecular Biology* (2017) 177; 109-115. **Citations 11.**
17. Keane JT, Elangovan H, Stokes RA, **Gunton JE**. Vitamin D and the Liver—Correlation or Cause? *Nutrients*. 2018;10:496. **Citations 20.**
18. Chowdhury S, Song S, Zhang HE, Wang XM, Gall MG, Tse Yu DM, Lay AJ, Wen Xiang MS, Evans KA, Wetzel S, Liu Y, Yau B, Coppage AL, Lo L, Stokes RA, Hawthorne WJ, Cooney GJ, McLennan SV, **Gunton JE**, Bachovchin WW, Turner N, Kebede MA, McCaughan GW, Twigg SM, Gorrell MD. Fibroblast activation protein enzyme deficiency prevents liver steatosis, insulin resistance and glucose intolerance and increases fibroblast growth factor 21 in diet induced obese mice. *BioRxIV*. doi: <https://doi.org/10.1101/460279>

2017

19. RA Stokes, K Cheng, A Lalwani, MM Swarbrick, JE Thomas, T Loudovaris, TW Kay, WJ Hawthorne, PJ O'Connell, **JE Gunton**. Transplantation sites for human and murine islets. *Diabetologia* (2017), 60 (10); 1961-1971. **Citations: 14.**
20. RA Stokes, DM Simond, H Burns, AT Patel, PJ O'Connell, **JE Gunton**, WJ Hawthorne. Transplantation sites for porcine islets. *Diabetologia* (2017), 60 (10); 1972-1976. **Citations: 4.**
21. Chi C, Snaith J, Gunton JE. Diabetes medications and cardiovascular outcomes in type 2 diabetes. *Heart, Lung and Circulation*. (2017). 26 (11) 1133-1141. **Citations: 7.**
22. Rodrigo Carlessi, Younan Chen, Jordan Rowlands, Vinicius Cruzat, Kevin Keane, Lauren Egan, Rebecca Stokes, **Jenny E. Gunton**, Paulo Ivo Homem de Bittencourt Jr., Philip Newsholme GLP-1 receptor signalling promotes beta-cell glucose metabolism via mTOR-dependent HIF-1 α activation *Scientific Reports (Nature)* (2017) 7(1); 2661. **Citations 19.**

23. CH Scott, KM Cha, J Ngai, C Jiang, K Cheng, RA Stokes, K Ho, J George, FJ Gonzalez & **JE Gunton** Hepatic Aryl hydrocarbon Receptor Nuclear Translocator (ARNT) Regulates Metabolism in Mice. *PLoS One* (2017) 12, e0186543. **Citations: 1.**
24. SJ Simpson, DG Le Couteur, DE James, J George, **JE Gunton**, SM Solon-Biet, D Raubenheimer. The geometric framework for nutrition as a tool in precision medicine. *Nutrition and Healthy Aging*. (2017) 1-10. **Citations: 10.**
25. DJ Holmes-Walker, **JE Gunton**, M Payk, S Donath, WJ Hawthorne, T Loudovaris, P Anderson, G Ward, T Kay, P O'Connell Islet transplantation provides superior glycemic control with less hypoglycemia compared to continuous subcutaneous insulin infusion (CSII) or multiple daily insulin injections (MDI). *Transplantation* (2017) 101; 1268-1275. **Citations: 23.**
26. Christie-David D, **Gunton JE**. Vitamin C Deficiency and Diabetes - Easily Missed? *Diabetic Medicine*. (2017) 34; 294-296. **Citations: 13.**
27. JM Christensen, J Cheng, P Earls, **J Gunton**, W Sewell, R Sacks, R Harvey Vitamin D pathway regulatory genes encoding 1 α hydroxylase and 24 hydroxylase are dysregulated in sinonasal tissue during chronic rhinosinusitis *Int Forum of Allergy & Rhinology* (2017) 7; 169-176. **Citations: 7.**
28. Elongovan H, Chalal S, **Gunton JE**. Vitamin D in liver disease: current evidence and potential directions. *BBA – Molecular Basis of Disease*. 1863 (4); 907-916. **Citations 15.**

2016

29. **Gunton JE**, Gates F, Fulcher GR, Clifton-Bligh PB. Bone Mineral Density in Postmenopausal Women Heterozygous for the C282Y HFE Mutation. *Journal of Osteoporosis*. 2016.
30. Do OH, **Gunton JE**, Gaisano HY, Thorn P. Changes in beta cell function occur in prediabetes and early disease in the Lepr db mouse model of diabetes. *Diabetologia*. 2016;1-9. **Citations: 20.**
31. Burns K, Christie-David D, **Gunton JE**. Fluconazole in the treatment of Cushing's disease. *Endocrinology, diabetes & metabolism case reports*. 2016. **Citations: 3.**
32. Bensellam M, Maxwell EL, Chan JY, Luzuriaga J, West PK, Jonas J-C, et al. Hypoxia reduces ER-to-Golgi protein trafficking and increases cell death by inhibiting the adaptive unfolded protein response in mouse beta cells. *Diabetologia*. 2016;1-11. **Citations: 36.**

2015

33. Yeap BB, Divitini ML, **Gunton JE**, Olynyk JK, Beilby JP, McQuillan B, et al. Higher ferritin levels, but not serum iron or transferrin saturation, are associated with Type 2 diabetes mellitus in adult men and women free of genetic haemochromatosis. *Clinical Endocrinology*. 2015;82(4):525-32. **Citations: 36.**
34. Scott C, Cha K, Rao R, Liddle C, George J, **Gunton JE**. Hepatocyte-Specific Deletion of ARNT (Aryl Hydrocarbon Receptor Nuclear Translocator) Results in Altered Fibrotic Gene Expression in the Thioacetamide Model of Liver Injury. *PloS one*. 2015;10(3):e0121650. **Citations: 9.**
35. Lam T, Burns K, Dennis M, Cheung NW, **Gunton JE**. Assessment of cardiovascular risk in diabetes: Risk scores and provocative testing. *World Journal of Diabetes*. 2015;6(4):634. **Citations: 10.**
36. Hocking SL, Stewart RL, Brandon AE, Suryana E, Stuart E, Baldwin EM, et al. Subcutaneous fat transplantation alleviates diet-induced glucose intolerance and inflammation in mice. *Diabetologia*. 2015;58(7):1587-600. **Citations 31**

37. **Gunton JE**, Girgis CM, Baldock PA, Lips P. Bone muscle interactions and vitamin D. *Bone*. 2015;80 (November):89–94. **Citations: 56.**
38. Girgis CM, Cha KM, Houweling PJ, Rao R, Mokbel N, Lin M, Clifton-Bligh RJ, **Gunton JE**. Vitamin D receptor ablation and vitamin D deficiency result in reduced grip strength, altered muscle fibers, and increased myostatin in mice. *Calcified Tissue International*. 2015;97(6):602-10. **Citations: 46.**
39. Downes MJ, Bettington EK, **Gunton JE**, Turkstra E. Triple therapy in type 2 diabetes; a systematic review and network meta-analysis. *PeerJ*. 2015;3:e1461. **Citations: 29.**
40. Christie-David DJ, Girgis CM, **Gunton JE**. Effects of vitamins C and D in type 2 diabetes mellitus. *Nutrition & Dietary Supplements*. 2015;7:21-8. **Citations: 12.**

2014

41. Girgis CM, Clifton-Bligh RJ, Mokbel N, Cheng K, **Gunton JE**. (2014) Vitamin D Signaling Regulates Proliferation, Differentiation and Myotube Size in C2C12 Skeletal Muscle Cells. *Endocrinology* 155 (2): 347-357. **Citations: 128.**
 42. **Gunton JE**, Cheung NW, Davis TME, Zoungas S, Colagiuri. A new blood glucose management algorithm for type 2 diabetes. *Medical Journal of Australia*. 2014 (1); 650-653. **Citations: 54.**
 43. Girgis CM, Clifton-Bligh RJ, Turner N, Lau SL, **Gunton JE**. (2014) Effects of Vitamin D in Skeletal Muscle: Falls, Strength, Athletic Performance and Insulin Sensitivity. *Clinical Endocrinology* 80: 169-181. **Citations: 86.**
 44. Girgis CM, Mokbel N, Minn Cha K, Houwelling P, Abboud M, Fraser DR, Mason RS, Clifton-Bligh RJ, **Gunton JE**. (2014) The Vitamin D Receptor (VDR) is Expressed in Skeletal Muscle of Male Mice and Modulates 25-Hydroxyvitamin D (25OHD) Uptake in Myofibers. *Endocrinology*. 155 (9); 3227-3237.
- Subject of “News and Views” and of “Commentary”, and “Invited Response”. Citations: 114.*
45. Greenwood NJ, **Gunton JE** (2014) A Computational Proof of Concept of a Machine-Intelligent Artificial Pancreas Using Lyapunov Stability and Differential Game Theory. *Journal of Diabetes Science and Technology* 8: 791-806.
 46. Lalwani A, Stokes RA, Lau SM, **Gunton JE**. (2014) Deletion of ARNT (Aryl Hydrocarbon Receptor Nuclear Translocator) in β -Cells Causes Islet Transplant Failure with Impaired β -Cell Function. *PloS One* 9: e98435. **Citations: 6.**
 47. Sherman MH, Yu RT, Engle DD, Ding N, Atkins AR, Tiriach H, Collisson EA, Connor F, Van Dyke T, Kozlov S, Martin P, Tseng TW, Dawson DW, Donahue TR, Masamune A, Simosegawa T, Apte MV, Wilson JS, Ng B, Lau SL, **Gunton JE**, Walh GM, Hunter T, Drebin JA, Liddle C, Tuyeson DA, Downes M, Evans RM. (2014) Vitamin D Receptor-Mediated Stromal Reprogramming Suppresses Pancreatitis and Enhances Pancreatic Cancer Therapy. *CELL* 2014; 159 (1), 80-93. **Citations: 438.**
 48. Yap C, Cheung NW, **Gunton JE**, Athayde N, Munns C, Duka A, McLean M. (2014) Vitamin D Supplementation and the Effects on Glucose Metabolism During Pregnancy: A Randomized Controlled Trial. *Diabetes Care*. (2014); 37(7); 1837-1844. **Citations: 89.**
 49. Scott C, Bonner J, Min D, Boughton P, Stokes RA, Cha KM, Walters S, Masolowski K, Sierro F, Grey ST, Twigg S, McLennan S, **Gunton JE**. Reduction of ARNT in myeloid cells causes immune suppression and delayed wound healing. *Am J Physiology Cell Metabolism*. 10.1152/ajpcell.00306.2013. **Citations: 11.**

50. Lam T, Chipps D, **Gunton JE**. Diabetic ketoacidosis secondary to L-asparaginase and dexamethasone during treatment for acute lymphoblastic leukaemia. *Journal of Diabetes and Metabolism*. (2014). 5, 10.4172. **Citations: 1.**

2013 and earlier

51. Girgis CM, Clifton-Bligh RJ, Hamrick MW, Holick MF, **Gunton JE**. The Roles of Vitamin D in Skeletal Muscle: Form, Function and Metabolism. *Endocrine Reviews*. Feb 2013; 34:33-83.
This paper was the feature article from the issue and achieved the most-downloaded article status from the journal. **Citations: 385.**
52. Ding N, Yu RT, Subramaniam N, Leblanc M, Wilson C, Rao R, He M, Coulter S, **Scott C**, Sherman M, **Lau SL**, Atkins AR, Barish GD, **Gunton, JE**, Liddle C, Downes M, Evans RM. A Master Cistronic Circuit Governing Hepatic Fibrogenesis. *CELL*, 2013; 153(3): 601-613. The other 2 bold-type authors are 2 students in my lab who contributed to this paper. **Citations: 365.**
53. RA Stokes, K Cheng, NA Deters, SM Lau, WJ Hawthorne, PJ O'Connell, J Stolp, ST Grey, T Loudovaris, TW Kay, H Thomas, FJ Gonzalez, **JE Gunton**. Hypoxia-inducible factor 1 α (HIF-1 α) potentiates β -cell survival after islet transplantation of human and mouse islets. *Cell Transplantation*. 2013. Volume 22, Number 2, pp. 253-266(14). **Citations: 55.**
54. Cheng K., Andrikopoulos S., **Gunton J.E**. First phase insulin secretion and Type 2 Diabetes. *Current Molecular Medicine*. 2013; 13: 126-139. **Citations: 39.**
55. P J O'Connell, DJ Holmes-Walker, D Goodman, W J Hawthorne, T Loudovaris, **J E Gunton**, H E Thomas, S T Grey, C J Drogemuller, G M Ward, A J Jenkins, D J Torpy, P T Coates, T W Kay Multicenter Australian Trial of Islet Transplantation: Improving Accessibility and Outcomes. *American J. Transplantation*, 2013; 13(7): 1850-1858. **Citations: 66.**
56. Lau SM, Cha KM, Karunatilake, A, Stokes RA, Cheng K, McLean M, Cheung NW, Gonzalez FJ, **Gunton JE**. Beta-cell ARNT is required for normal glucose tolerance in pregnancy. *PLoS One* 2013; 8 (10): e77419. **Citations: 10.**
57. Girgis CM, Lau SL, Clifton-Bligh RJ, **Gunton JE**. Direct Effects of VDR Ablation on Bone Mass. *Endocrinology*. 2013. *Letter, October*.
58. **JE Gunton** and CM Girgis. Pancreatic beta-cell failure in the pathogenesis of type 2 diabetes. Chapter in *A Modern Epidemic*, Eds Baur LA, Twigg SM, Magnusson RS. Sydney University Press. 2012. Chapter 5, p87-104.
59. **J. E. Gunton**, M. Sisavanh, R.A. Stokes, J. Satin, L. S. Satin, M. Zhang, S. M. Liu, W.Cai, K. Cheng, G. J. Cooney, D. R.Laybutt, T. So, J. C.Molero, S. T. Grey, D. A. Andres, M. S. Rolph, C. R. Mackay. Mice deficient in GEM GTPase show abnormal glucose homeostasis due to defects in beta-cell calcium handling. *PLoS One*. 2012. 7(6): e39462. **Citations: 12.**
60. K Cheng, V Delghingaro-Augusto, CJ Nolan, N Turner, N Hallahan, S Andrikopoulos, **JE Gunton** High passage MIN6 cells have impaired insulin secretion with impaired glucose and lipid oxidation. *PLoS One*. 2012. 7(7): e40868. **Citations: 41.**
61. C Girgis, K Cheng, C Scott, **JE Gunton**. Novel links between HIFs, type 2 diabetes, and metabolic syndrome. *Trends in Endocrinology and Metabolism*. 2012. 23 (8); 372-380. **Citation: 53.**
62. CM. Girgis, **JE. Gunton (* corresponding author)**, N.W. Cheung The Influence of Ethnicity on the Development of Type 2 Diabetes Mellitus in Women with Gestational Diabetes: A Prospective Study and Review of the Literature. *ISRN Endocrinology*. 2012, Article ID 341638, 7 pages doi:10.5402/2012/341638. **Citations: 33.**

63. MJ Cowley, A Weinberg, N Zammit, SN Walters, WJ Hawthorne, T Loudovaris, H Thomas, T Kay, **JE Gunton**, SI Alexander, W Kaplan, J Chapman, PJ O'Connell, ST Grey. Human Islets Express A Marked Pro-Inflammatory Molecular Signature Prior To Transplantation. *Cell Transplantation*, 2012; e 21, Number 9, pp. 2063-2078(16). **Citations: 51**
64. **Gunton, JE** and Lau, SM. Diabetes in Pregnancy and the Long-Term Health of Offspring. Chapter in **Advances in Medicine and Biology**, Vol 44. Ed L.V. Berhardt. Publisher Nova Biologicals. 2012.
65. S.M. Lau, S. Lin, R.A. Stokes, K. Cheng, P.A. Baldock, R.F. Enriquez, M. McLean, N.W. Cheung, A. Sainsbury, F.J. Gonzalez, H. Herzog, **J.E. Gunton**. Synergistic effects of genetic beta cell dysfunction and maternal glucose intolerance on offspring metabolic phenotype in mice. *Diabetologia* 2011. 54 (4); 910-921. **Citations: 17.**
66. Folli F, Okada T, Perego C, **Gunton JE**, D'Amico A, Larosa S, Placidi C, Capella C, Sesti G, Hellerstein M, Perego L, Kulkarni RN. Altered insulin receptor signaling and β -cell cycle dynamics in type 2 diabetes. *PLoS One*. 2011 **Citations: 67.**
67. Lau SL, **Gunton JE (* corresponding author)**, Athayde NP, Byth K, Cheung NW. Serum 25-hydroxyvitamin D and glycated hemoglobin levels in women with gestational diabetes mellitus. *Med J Aus*. 2011 April 194; 334-337. Cover, editorial. **Citations: 127.**
68. N. Deters, R.A. Stokes, **J.E. Gunton**. Islet Transplantation: Factors in Short-Term Islet Survival. *AITE*. 2011; 59(6): 421-429. **Citations: 37.**
69. K Cheng, K Ho, RA Stokes, C Scott, SM Lau, WJ Hawthorne, PJ O'Connell, T Loudovaris, T Kay, R Kulkarni, T Okada, X Wang, S Yim, Y Shah, S Grey, A Biankin, J Kench, DR Laybutt, FJ Gonzalez, CR Kahn, **JE Gunton**. Hypoxia-Inducible Factor-1 α Regulates β -Cell Function in Mouse and Human Islets. *Journal of Clinical Investigation* 2010; 120 (6): 2171-2183. This was the first senior author paper to come from my lab. **197 citations**
70. XL. Wang, R Suzuki, K Lee, T Tran, **J.E. Gunton**, AK Saha, M-E Patti, A Goldfine, NB. Ruderman, FJ. Gonzalez, and CR Kahn. Acute Ablation of ARNT/ HIF-1b in Liver Results in Elevated Gluconeogenesis, Dyslipiemia and Hypoketonemia. *Cell Metabolism* 2009; 9: 428-439. **79 citations.**
71. Cheung NW, Conn JJ, d'Emden MC, **Gunton JE**, Jenkins AJ, Ross GP, Sinha AK, Andrikopoulos S, Colagiuri S, Twigg SM; Australian Diabetes Society Position statement of the Australian Diabetes Society: individualisation of glycated haemoglobin targets for adults with diabetes mellitus *Medical Journal of Australia* 2009; 191: 339-344. **Citations: 73.**
72. Kebede M., Favaloro J., **Gunton J.E.**, Laybutt D.R., Shaw M., Wong N., Fam B.C., Aston-Mourney K., Rantza C., Zulli A., Proietto J., Andrikopoulos S. Fructose-1,6-bisphosphatase overexpression in pancreatic beta-cells results in reduced insulin secretion: a new mechanism for fat-induced impairment of beta-cell function. *Diabetes* 2008; 57: 1887-1895. **Citations: 58.**
73. O'Connell PJ, Hawthorne WJ, Holmes-Walker J, Nankivell BJ, **Gunton JE**, Patel AT, Walters SN, Pleass HCC, Allen RDM, Chapman JR. Clinical islet transplantation in Australia: Defining the next steps. *Medical Journal of Australia*. 2006; 184 (5), 221-225. IF 2.1, **Citations: 78.**
74. **Gunton JE**, Kulkarni RN, Yim S, Okada T, Hawthorne WJ, Tseng YH, Roberson RS, Ricordi R, O'Connell PJ, Gonzalez FJ, Kahn CR. Loss Of *ARNT/HIF1 β* Mediates Altered Gene Expression And Pancreatic Islet Dysfunction In Human Type 2 Diabetes. *CELL* 2005; 122: 337-349. **CITATIONS: 461.** *Described in Nature Medicine in 2006 as one of the most notable papers of 2005.*
75. **Gunton JE**, Cheung NW, Hitchman R, Hams G, Sullivan C, Foster-Powell K, McElduff A. Chromium supplementation does not improve glucose tolerance, insulin sensitivity or lipid

- profile: a randomized, placebo-controlled, double blind trial of supplementation in subjects with impaired glucose tolerance. *Diabetes Care* 2005; 28: 712-713. **83 citations.**
76. **Gunton JE**, Cheung NW, Hitchman R, Hams G, Sullivan C, Foster-Powell K, McElduff A. Chromium supplementation does not improve glucose tolerance, insulin sensitivity or lipid profile: a randomized, placebo-controlled, double blind trial of supplementation in subjects with impaired glucose tolerance response to komorowski and juturu. *Diabetes Care* 2005; 28: 1842-1843. **Citations 5.**
 77. Chan SS, Nery LM, McElduff A, Wilmschurst EG, Fulcher GR, Robinson BG, Stiel JN, **Gunton JE**, Clifton-Bligh PB. Intravenous pamidronate in the treatment and prevention of osteoporosis. *Internal Medicine Journal*. 2004; 34: 162. **Citations 14.**
 78. **Gunton JE**, Delhanty PJD, Takahashi S-I, Baxter, R. Metformin rapidly increases insulin receptor activation in human liver, and signals preferentially through insulin-receptor substrate-2. *Journal of Clinical Endocrinology and Metabolism*, 2003; 88: 1323-1332. **206 citations**
 79. **Gunton JE**, Twigg SM. Metformin Use As An Adjunct To Insulin Treatment In Selected Patients With Type 1 Diabetes Mellitus. *Medical Journal of Australia*. 2003; 178, 591. **Citations: 9.**
 80. **Gunton JE**, Davies L, Wilmschurst E, Fulcher G, McElduff A. Cigarette smoking affects glycaemic control in diabetes mellitus *Diabetes Care*, 2002 25: 796-797. **Citations: 45.**
 81. McElduff A, McElduff P, **Gunton JE**, Hams G, Wiley V, Wilcken B. Neonatal thyroid-stimulating hormone concentrations in northern Sydney: further indications of mild iodine deficiency? *Medical Journal of Australia*, 2002; 176: 317-320. **75 citations**
 82. **Gunton JE**, Morris J, Boyce S, Kelso I, McElduff A. Outcome of Pregnancy Complicated by Pre-gestational Diabetes – Improvement in Outcomes. *ANZ J Obstetrics and Gynaecology*, 2002; 42: 478-481. **Citations: 16.**
 83. **Gunton JE**, Hams G, Hitchman R, Aidan McElduff. Serum chromium does not predict glucose tolerance in late pregnancy *Am Journal of Clinical Nutrition*. 2001; 73: 99-104. **48 citations**
 84. Davies L, Wilmschurst EG, McElduff A, **Gunton J**, Clifton-Bligh P, Fulcher G. The Relationship Among Homocysteine, Creatinine Clearance, and Albuminuria in Patients with Type 2 Diabetes. *Diabetes Care*, 2001, 24; 1805-1809. **Citations: 96.**
 85. **Gunton JE**, Hitchman R, McElduff A. Effects of ethnicity on glucose tolerance, insulin resistance and beta cell function in 223 women with an abnormal glucose challenge test during pregnancy *ANZ J Obstetrics and Gynaecology*, 2001; May: 182-186. **Citations: 59.**
 86. **Gunton JE**, Stiel J, Clifton-Bligh P, Wilmschurst E, McElduff A. Prevalence of positive anti-neutrophil cytoplasmic antibody (ANCA) in patients receiving anti-thyroid medication. *European Journal of Endocrinology*. 2000; 142: 587-590. **176 citations**
 87. **Gunton JE**, McElduff A, Sulway M, Stiel J, Kelso I, Boyce S, Fulcher G, Robinson B, Clifton-Bligh P, Wilmschurst E. Outcome of Pregnancy Complicated by Pre-gestational Diabetes Mellitus. *ANZ J Obstetrics and Gynaecology*. 2000; 1: 38-43. **Citations: 42.**
 88. **Gunton JE**, McElduff A. Hemoglobinopathies and HbA1c Measurement. *Diabetes Care* 2000; 23: 1197-1198. **Citations: 42.**
 89. **Gunton JE**, McElduff A. Heterozygous Hb Hamadan Affects HbA1c Assay. *Diabetes Care* 1999; 22: 177. **Citations 5.**
 90. **Gunton JE**, Stiel J, Caterson RJ, McElduff A. Anti-thyroid Drugs and Antineutrophil Cytoplasmic Antibody Positive Vasculitis. A Case Report and Review of the Literature. *Journal of Clinical Endocrinology and Metabolism*, 1999, 88: 13-16. **149 citations**

91. **Gunton JE**, Hams G, Fiegert M, McElduff A. Iodine Deficiency in Ambulatory Subjects in a Sydney Teaching Hospital: is Australia Truly Iodine Replete? *Medical Journal of Australia* 1999; 171: 467-470. **113 citations**

Other, invited publications

92. Discussing the Cell paper (see publications, 1 above) on the Science website *Sci. Aging Knowl. Environ.*, Vol. 2005, Issue 33, pp. nf65, 17 August 2005
93. Fulcher G, Chippendale M, Gunton J. Gestational Diabetes Mellitus: Implications, Diagnosis and Management. *Current Therapeutics* October 1998; p17-25.
94. Gunton JE, Wilmschurst E. Improving Control of Type 1 Diabetes Mellitus. *Modern Medicine* 1999; 42: 72-83.
95. Gunton JE, Wilmschurst E. Improving Control of Type 1 Diabetes Mellitus. *Modern Medicine of the Middle East*, 2000; 17, September: 53-65.
96. Fulcher G, Chippendale M, Gunton J. Gestational Diabetes Mellitus: Implications, Diagnosis and Management. *Current Therapeutics*, *New Ethics Journal* September 1999; p61-66.
97. Gunton JE. Selenium, Chromium, Manganese and Molybdenum in Pregnancy – An invited review. *Pregnancy Today*.
98. SM Lau, JE Gunton. Gestational Diabetes: The Effects Don't Stop at Birth. *Australasian Science*. 2011. Cites: 4.
99. Gunton JE, Lau, SL. The “Sunshine Vitamin”: Shedding Light on the Link between Vitamin D and Diabetes. *Chemistry in Australia*. 2008; 75 (1). Cites, 1.
100. Chi C, Gunton JE. Monogenic Diabetes: does making the diagnosis matter? *Endocrinology Today*. 2016.
101. Chi C, Gunton JE. Triple oral therapy in type 2 diabetes. *Diabetic Medicine Journal*.
102. Gunton, JE and Greenwood, N. Artificial Pancreas Reduces Hypos and Highs. *Australasian Science*, 2013, June.

STUDENTS, TEACHING and MENTORING

Medical students

I deliver lectures and PBL (problem-based learning) tutorials for University of Sydney medical program. I am a member of the University of Sydney Medical School Examinations Committee. Between medical students and basic physician trainees I hear >30 long cases per year. I examine for Sydney Medical School students for long-cases and OSCEs 5-6 times yearly.

Post-graduate professional training programs

I have examined for the RACP 2017-2019 inclusive, give lectures for the basic physicians training program. I give the glycaemic control lecture each year at the post-graduate first year skills course for the Australian Diabetes Society and lectures to the Basic Physician Trainees each year, including calcium, vitamin D and type 2 diabetes. I am joining the RACP accreditation site visits committee in 2020.

Post graduate students:

Since returning from Boston in 2005, I have supervised 8 successful PhD students as primary supervisor, and 2 as co-supervisor; 1 Masters student, 2 Honours students, 12 ILP (independent learning project) Medical students at UNSW and 3 MD project students at the University of Sydney.

Currently I am primary supervisor to 1 PhD student, 1 Masters student, 1 Honours student and 3 MD project students.

My students have been a mixture of basic scientists and physician trainees. All of my students have published, and presented at national meetings. Between them, my students (including co-supervised ones) have won 8 young investigator awards from the Endocrine Society of Australia (ESA), Australian Diabetes Society (ADS), Transplant Society of Australia and New Zealand (TSANZ), or Australasian Diabetes in Pregnancy Society (ADIPS). Two of my students have gone on to win their own DART grants, and Sue Mei Lau has won an ADIPS grant.

- 2019 My research assistant Jennifer Chen won the Paul Lee Award from ESA (Endocrine Society of Australia) for the best abstract submitted to the annual scientific meeting.
- 2017 my Honours student Sing-Young Chen won the Australian Women in Endocrinology Basic Science Award 2017
- 2017 University Medal, University of Sydney for my Honours student Sing-Young Chen
- 2015 Christian Girgis won the ESA Young Investigator Scientific Article Award (previously called the Servier award) for the best paper published by a junior investigator.
- UNSW Med Honours Student of the Year Harendran Elgovan 2014.
- ESA Novartis Young investigator of the year award for my PhD student Kenneth Ho 2009.
- ESA Novartis Young investigator of the year award for my PhD student Sue Mei Lau 2008.
- TSANZ young investigator award to Rebecca Stokes, 2007

Primary supervisor: successful completions

Dr Sue Mei Lau, PhD University of Sydney 2008; Diabetes in Pregnancy and Effects on Offspring.
Dr Kenneth Ho, PhD, UNSW 2011; Iron Chelation of Treatment of Diabetes and Obesity
Dr Christopher Scott, PhD UNSW. 2013; The roles of ARNT and HIF1a in liver disease
Dr Kim Cheng, PhD, UNSW. 2011; The role of HIF1a in beta-cell function
Dr Sue Lynn Lau, PhD, University of Sydney. 2013; The role of vitamin D in diabetes
Dr Christian Girgis, PhD, University of Sydney. 2014. The role of vitamin D in muscle function
Dr Amit Lalwani, PhD, University of Sydney. 2018; The role of HIF1a in type 1 diabetes
Dr Mojgan Nazari, PhD, University of Sydney. 2019. The role of iron chelation in brown fat
Ms Rebecca Stokes, Masters, UNSW, 2012. The role of HIF1a in islet transplantation

My two honours students were awarded UNSW Med Honours student of the year (Harendran Elgovan), and a University of Sydney University Medal respectively (Sing-Young Chen).

Co-supervisor: successful completions

Dr David Liuwantara, PhD, University of Sydney, the role of A20 in islet function.

Current students

Sarah Davis, PhD student. University of Sydney. Diet and browning of fat
Fatemeh Zolghadr, co-supervisor PhD student, University of Sydney. Immune cell function and dental disease
Charmaine Cheung, MPhil student. University of Sydney. Diet and human islet function
Molly-Rose Munday, Honours student. Vitamin C and dental disease.
Lamia Nureen, Honours student. ARNT2 and beta-cell function

CAREER INTERRUPTIONS

I had 2 periods of maternity leave in 2005 and 2008. In 2011 I had a complicated comminuted fracture of the right tibia and fibula (with 6 fractures in the fibula) which meant I was not allowed to drive or weight-bear for 6 months. In 2013, I had surgery to remove the titanium with another 6 weeks of work interruption.

We moved the lab to the whole lab group from Garvan to the then-new Westmead Institute of Medical Research in 2015, which did not have an open mouse facility with consequent major interruption to work in 2015-16.

Primary Nominator

Professor Tania Sorrell, tania.sorrell@sydney.edu.au

Sponsors

Professor Louise Baur louise.baur@health.nsw.gov.au

Professor David Handelsman djh@anzac.edu.au

Professor Tony Cunningham tony.cunningham@sydney.edu.au

Four referees for nomination

1. Prof Jonathan Prins
Head, Melbourne Medical School,
University of Melbourne.
John.prins@unimelb.edu.au
2. Prof Bruce Spiegelman
Dana Faber Cancer Institute,
Harvard University
Boston. USA
Bruce_spiegelman@dcfi.harvaed.edu
3. Prof Emma Duncan
Lab director,
Queensland University of Technology,
Emma.duncan@put.edu.au
4. Prof Rohit Kulkarni
Lead, Beta-cell Biology
Joslin Diabetes Center,
Harvard University,
Boston. USA.
Rohit.kulkarni@joslin.harvard.edu

Additional Local Referees

1. Professor Wah Cheung,

Head, Department of Diabetes and Endocrinology,
Westmead Hospital.

Wah.cheung@sydney.edu.au

2. Professor Phil O'Connell,
Director, National Pancreas Transplant Unit,
University of Sydney, Westmead Hospital.
Philip.oconnell@sydney.edu.au
3. Professor Tom Kay
St Vincent's Hospital, Melbourne.
tkay@svi.edu.au
0439 985 354
4. Professor Tony Cunningham,
CEO, Westmead Institute for Medical Research,
Tony.cunningham@sydney.edu.au