

SECTION OF ENDOCRINOLOGY AND INVESTIGATIVE MEDICINE

CELEBRATING OUR SUCCESS

January 2020

WELCOME

Suzanne Wheeler will take over from Yasmin as PA to Waljit Dhillon. Many thanks to Yasmin for her work in the Section over the last few years – she will be missed.

CONGRATULATIONS



Bryn Owen - Leonidas (Leo) born on the 19th of December.



Tia Hunjan - Amaya Iris Salm born on the 26th of December.

Limon Nahar on passing her PhD viva on 16th of January. "Determining the prevalence and concentrations of baclofen, gabapentin and pregabalin in post-mortem femoral vein blood samples from Coroners' cases."



Heartiest congratulations to **Anastasia Dimakopoulou** on her gorgeous wedding!

PUBLICATIONS

Live Birth in Sex-Reversed XY Mice Lacking the Nuclear Receptor Dax1. Isabel Fernandes-Freitas, Alexandra Milona, Waljit S Dhillon and Bryn M Owen. Scientific Reports 2020: in press.

Kisspeptin Enhances Brain Processing of Olfactory and Visual Cues of Attraction in Men. L. Yang, L. Demetriou, MB. Wall, EG. Mills, D. Zargarani, M. Sykes, JK. Prague, A. Abbara, BM. Owen, P. Bassett, EA. Rabiner, AN. Cominos & WS. Dhillon. JCI Insight 2020: in press.

Prof. Jonathan Valabhji and Prof. Nick Oliver had papers featured in January's issue of *Diabetes Care* (**Diabetes Care** Volume 43, January 2020) – highlight notice and papers below. *Diabetes Care* is one of the highest impact factor Diabetes journals (IF 15.27 2018).

Continuous Glucose Monitoring in People with Type 1 Diabetes on Multiple-Dose Injection Therapy: The Relationship Between Glycemic Control and Hypoglycemia. *Diabetes Care* 2020;43:53–58. Nick Oliver, Marga Gimenez, Peter Calhoun, Nathan Cohen, Vanessa Moscardo, Norbert Hermanns, Guido Freckmann, Monika Reddy and Lutz Heinemann.

Early Outcomes from the English National Health Service Diabetes Prevention Programme. *Diabetes Care* 2020;43:152–160. Jonathan Valabhji, Emma Barron, Dominique Bradley, Chirag Bakhai, Jamie Fagg, Simon O’Neill, Bob Young, Nick Wareham, Kamlesh Khunti, Susan Jebb, and Jenifer Smith.

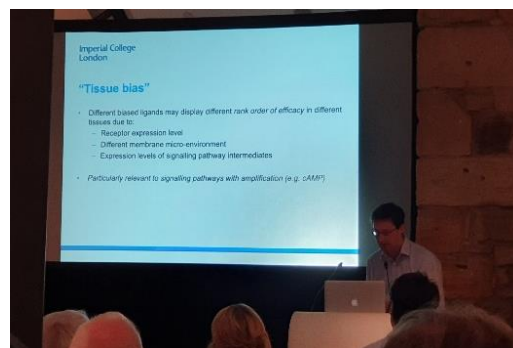
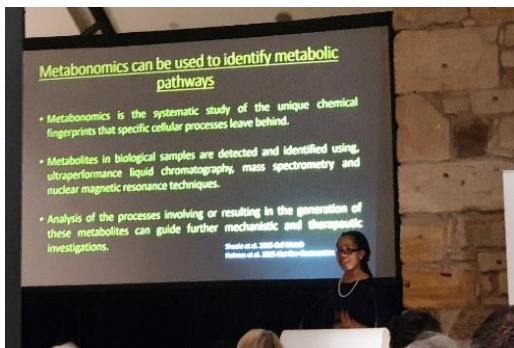
GRANTS

Alex Miras – The Jon Moulton Charity Trust grant - £310k.

PRESENTATIONS

Dr. Channa Jayasena gave an invited talk at the Fertility 2020 conference in Edinburgh (<https://fertilityconference.org/>), entitled “Metabolic Approaches to Treating Male Infertility.”

British Society for Neuroendocrinology Early Career Researchers meeting in Glasgow 9th December – Chioma Izzi-Engbeaya and Ben Jones both gave oral presentations:



UPCOMING EVENTS

Diabetes, Endocrinology and Metabolism – Lunchtime Seminar Series 2020.

First lecture commences Thursday 30th January and then every two weeks thereafter. Networking lunch to follow.



Thursday 30th January (Host: Professor Gary Rutter)

12-12.45: Dr. Slavica Tudzarova (David Geffen School of Medicine, UCLA)
“Metabolic signaling to the rescue – the role of HIF1 α /PFKFB3 in diabetes”.

Wolfson Centre – LT3, Hammersmith Campus.
Light lunch will be provided in the Breakout Space.

First Divisional Away Day - Wednesday 5th February. Holiday Inn London, High Street Kensington, W8 5SP.

Please save the date for our first Divisional Away Day. The theme for the meeting will be to showcase the exciting science which is happening in the Division. The aim of the meeting is for everyone to get an idea of what other research groups are doing and this is likely to identify areas of common interest and encourage collaboration between research groups. Everyone welcome.

- 10.15: Welcome & Aim of the day – Prof. Waljit Dhillon.
- 10.30: Talk from Prof. Mark Thursz (the Division in the Department).
- 10.45: Lecture Programme.
- 16.30: Review of the day – next steps – Prof. Waljit Dhillon.
- 16.45-18.00: Cheese & Wine Networking Reception.

PhD Termly Meeting – first meeting on 12th March 2020.

OTHER NEWS



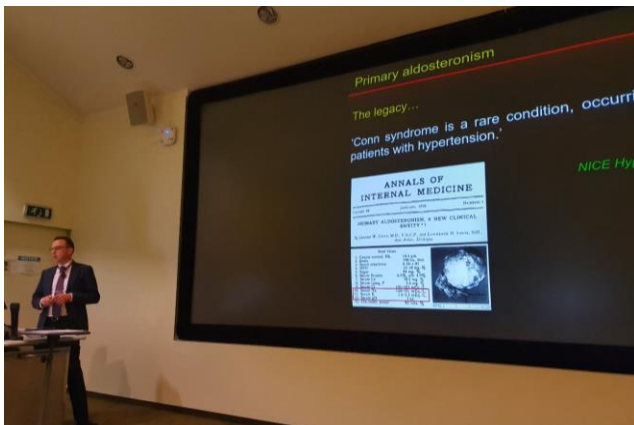
Appointment of Head of Imperial College School of Medicine

On behalf of Mr Martin Lupton, Vice Dean (Education), Faculty of Medicine.

I am very pleased to announce to you all the appointment of **Dr Amir Sam** as the new Head of Imperial College School of Medicine. His journey to medicine is a very interesting story. He studied and worked at UCL, Harvard and Oxford, and holds a PhD in neuroendocrinology from Imperial College London. He has been a part of Imperial since 2006 and, in that time, he has taught on each year of the MBBS course in both science and clinical areas and led several modules. A consultant physician and endocrinologist, he has also held positions including Director of Clinical Studies at Charing Cross Hospital and has most recently been the School of Medicine's Director of Assessment. He won a prestigious President's Medal in 2015 for Outstanding Contribution to Teaching Excellence. More widely, he has held senior positions at both the Medical Schools Council and at the General Medical Council and has an international profile in medical education research. Outside medicine, he is also a distinguished setar player and composer in Persian music.

Waljit Dhillon – invited to join NIHR Strategy Board.

Waljit Dhillon was on the Steering group of a report published this month from the Academy of Medical Sciences entitled 'transforming health through innovation: integrating the NHS and academia' - <https://acmedsci.ac.uk/policy/policy-projects/nhs-academia-interface>



Hammersmith Endocrine Symposium took place on 6th December – 250 delegates attended. Professor Mark Gurnell from Cambridge giving a talk on primary hyperaldosteronism.

Zhipp secures £3.3m Series A financing led by Mubadala to develop obesity and diabetes treatments

UK-Based Company Offers Biopharmaceutical Weight-Loss Solutions

Abu Dhabi- UAE- 22 January 2020: Mubadala Investment Company announced financing the development of peptide hormones for the treatment of diabetes and obesity, by Zhipp Limited, a UK-based biopharmaceutical company.

Zhipp will use the £3.3 million Series A financing round to develop a pipeline of oxyntomodulin and PYY peptides originating in the laboratory of Professor Sir Stephen Bloom FRS at Imperial College London.

Zhipp's products address the global pandemics of obesity and diabetes, linked conditions which affect 1 in 11 individuals worldwide and account for 12% of global healthcare expenditure. Diabetes is closely linked to obesity, and type 2 diabetes can be effectively treated through weight reduction. At present, diabetes affects over 435 million people worldwide, and its prevalence is growing.

Obesity also affects a significant proportion of the world's population – one study suggests that obesity levels in the UAE are as high as 37 per cent of the population. Though weight reduction is an effective treatment for diabetes, it is difficult to achieve through calorie-controlled dieting as patients have difficulty complying with such regimes.

Weight loss interventions have therefore become well-established and include gastro-intestinal bypass surgery, and pharmaceutical approaches using hormone treatments e.g. injectable glucagon-like peptide-1 (GLP-1) analogues.

In both cases increased satiety hormones reduce food intake, however, gastric bypass surgery is expensive and invasive, and can lead to serious complications, while GLP-1s only produce limited weight loss.

Data has been generated by the Bloom laboratory in both in vivo and human studies, and in vitro models, that demonstrates the Zhipp products to be more potent and longer-lasting than marketed GLP-1 products, allowing patients to lose significant weight without surgery.

The company holds an extensive exclusive license to multiple families of patents and pending applications covering oxyntomodulin and PYY peptides analogues developed in the Bloom laboratory, as well as access to the pre-clinical and clinical data packages resulting from clinical trials Imperial College has conducted to date. Additionally, the company has entered into a partnership with Imperial College under which it has an exclusive option to receive further IP developed by the Bloom group.

Abdulla Al Shamsi, Head of Healthcare at Mubadala commented, "With the high rates of obesity and diabetes in the UAE, these new treatments promise to make a significant impact on public health. We are always seeking to invest in cutting-edge healthcare-related technologies that can benefit our patients."

"I am delighted that Zhipp has secured Series A financing from Mubadala", commented Professor Sir Stephen Bloom FRS, Chairman of Zhipp. "Mubadala has an excellent track record of investing to address the most pressing healthcare needs and we look forward to working with them to develop these exciting new treatments."

About Mubadala Investment Company

Mubadala Investment Company is a sovereign investor managing a global portfolio, aimed at generating sustainable financial returns for its shareholder, the Government of Abu Dhabi.

Mubadala's US \$229 billion portfolio spans five continents with interests in multiple sectors including aerospace, ICT, semiconductors, metals and mining, renewable energy, oil and gas, petrochemicals, utilities, healthcare, real estate,

pharmaceuticals and medical technology, agribusiness and a global portfolio of financial holdings across all asset classes. Mubadala has offices in Rio de Janeiro, Moscow, New York and San Francisco, with a joint venture in Hong Kong.

Mubadala is a trusted partner, an engaged shareholder and a responsible global company that is committed to world-class standards of governance.

About Zhipp

Zhipp is a UK-based biopharmaceutical company focused on the development of peptide hormones for the treatment of diabetes and obesity. The Company's core technology, derived from the research of Professor Sir Stephen Bloom FRS at Imperial College London, is based on the regulatory role played by gut peptide hormones such as oxyntomodulin and PYY, which are released by the intestines in response to food ingestion, and serve to regulate appetite as part of the body's own natural energy balancing mechanisms. Zhipp's intellectual property has been licensed from Imperial College London.