Hello and Welcome...

to the 14th WHRI Newsletter. In this issue, we will be celebrating the WHRI's newest Knight of the Realm, looking back at our Annual Review, and reflecting on the achievements of WHRI academics.

Sir Mark Caulfield

Just around the time of the Annual Review we received the amazing news that Professor Mark Caulfield has been awarded a knighthood in the Queen's Birthday Honours List. Many congratulations Sir Mark!

Annual Review 2019
The William Harvey Annual Review took place on the 12th of June, 2019 at the Derek Willoughby Lecture Theatre, Charterhouse Square.

This one-day conference takes place each year in celebration of the most outstanding research activities at the institute.

This year we had outstanding lectures from:

**Iain MacIntyre Award for Excellence in Endocrinology**
Professor Krishna Chatterjee (University of Cambridge) - “Disorders of thyroid hormone action: insights into diverse biological processes”

**Outstanding Contribution to Science Lifetime Award Lecture**
Professor Elizabeth Simpson (Imperial College London) - “Wrestling with T cells”

**Derek Willoughby Award**
Professor Fiona Watt (King’s College London)

The day also featured several talks from across our three research themes of cardiovascular, inflammation and endocrine science.

Congratulations to the following award winners:

**Best Talk**
Anne-Sophie Thorup (Experimental Medicine and Rheumatology) - “A novel target for disease-modifying treatment for osteoarthritis”

**Best Student Poster**
Anisha Mistry (Endocrinology)

**Best Staff Poster**
Edward Stephenson (Biochemical Pharmacology)

**WHRI Excellence in Teaching Prize**
Dr Manuela Angioi (Sports and Exercise Medicine)

The day’s talks were followed by BBQ on the Charterhouse Square Campus lawn and a summer party at the Shield.
Save the Date......New Year Celebration and PhD symposium 2020

The WHRI New year Celebration and PhD Symposium will take place on the afternoon of **Wednesday the 15th of January 2020**. There will be talks from our final year PhD students followed by a party.

BSc Pharmacology and Innovative Therapeutics NSS Scores

The 2019 NSS (National Student Survey) results have revealed that the BSc Pharmacology & Innovative Therapeutics degree is rated the highest across all Science and Engineering undergraduate degrees on offer at QMUL. We are also amongst the highest scorers across all Russel group Universities offering pharmacology undergraduate degrees. The degree gained an overall satisfaction rate of 88.2% with 100% of students saying that staff value their views and opinions about the course. The course was launched in September 2015 and in July 2019 we saw our second cohort of students graduate with flying colours. Congratulations to **Dr Sadani Cooray** and all WHRI staff involved.

WHRI Academic Promotions 2019

Congratulations to:
Dr Michael Barnes promoted to Professor

Dr Jesmond Dalli promoted to Professor

Dr Leonardo Guasti promoted to Reader

Dr Manuela Angioi promoted to Senior Lecturer

Dr Simon Lack promoted to Senior Lecturer

Pint of Science: Volunteers Needed

Are you passionate about science? Public engagement? Pubs? If you answered yes to any of these questions, you may be interested in helping to run Pint of Science festival in QMUL in 2020!

What is Pint of Science?

Pint of Science is an international science festival that happens annually over three evenings in May. From May 11th—13th 2020, science researchers will be making their way from the lab to the pub to share their research stories with the public over a nice cold pint.

Last year, our fantastic festival here in QMUL saw ~500 attendees and 26 speakers sharing a pint at over 12 events.

The festival doesn’t happen by itself; it needs a team of enthusiastic and inventive volunteers to make it happen. That’s where you might come in... We need volunteers to run the festival in London! Roles require part-time commitment from October 2019 – May 2020 and include event managers, communications managers and web manager.

What's involved for volunteers?
Pint of Science is a great way to learn team-working, event management and science public engagement. Not only is it a great boost to your CV, it’s also excellent for meeting new people and generally having a laugh – how often do you get to run your own festival in your spare time?

Get involved and help showcase the world-class science that happens in QMUL’s universities.

Our events include the following topics: Beautiful Mind (neuroscience, psychology and psychiatry), Atoms to Galaxies (physics, chemistry, maths, astronomy), Our Body (medicine, human biology, health), Planet Earth (geosciences, plant sciences, zoology), Tech Me Out (biotechnology, robotics, computers), Our Society (law, history, politics, policy, languages).

Please click on the following links to see events from previous years:

https://pintofscience.co.uk/organisation/qmul

https://pintofscience.co.uk/organisation/qmul/2018

https://pintofscience.co.uk/organisation/qmul/2017

https://pintofscience.co.uk/organisation/qmul/2016

If you would like to get involved, please complete this form:

https://forms.gle/DgkXcMi2hciMzUe37 to register your interest – we will get back to you if we think there is a role for you! We anticipate a lot of interest so please don’t think badly of us if you don’t hear back this year – there will be plenty more opportunities in the future.

Interested in finding out more? Visit the website for more info: pintofscience.co.uk

Any further questions, please contact Sam (s.arokiasamy@qmul.ac.uk) or Tom (tom.mitchell@qmul.ac.uk) and we’ll get back to you. We look forward to receiving your responses! Thank you!

The QMUL Pint of Science Team
British Heart Foundation Summer BBQ

On September 12th the WHRI hosted the ‘British Heart Foundation Summer BBQ’, a charity event attended by 50 WHRI staff and students, raising over £500 for the BHF. Organised by the QMUL BHF fundraising committee, the event was their biggest fundraiser to date and would not have been possible without the generosity of an anonymous donor, support of the attendees and the dedication and hard work of the committee members! Thank you, we look forward to the next!

EMR delivers “Creating without constraint: Arthritis and art” at QMUL’s Tate Exchange

For details click here

Summer Work Experience Programme

The work experience programme was the 4th intake and took place July 8th-12th. We hosted 32 students from 20 schools/colleges and as always the feedback received was excellent. The highlights specifically commented upon by the students were the clinical trials unit, the laboratory
practicals and the shadowing. Thank you to all involved in the delivery of the programme and for your continued support.

The next work experience programme will be from 21st-25th October with the deadline for applications, closing on Monday 22nd.

Grants & Awards of Note

**Gareth Ackland** (TMT) has been awarded an NIHR Advanced Fellowship 2020-2024 £1.1M, a BHF Program grant renewal [PI] 2020-2025 £1.1M, a QMi Proof of Concept award £50K and a grant from the Obstetric Anaesthesia Association £60K.

**Helen Storr** (Endo) has been awarded an NIHR Advanced Fellowship.

**Lucy Norling** (BP) has been awarded a Senior Fellowship from Verses Arthritis.

**Tom Nightingale** (CMR) has been awarded Ta BHF project grant “Controlling the haemostatic response: Novel regulatory mechanisms for Von Willebrand factor secretion from endothelial cells”

**Stavros Fotiadis** (Biopharm, Endo) was awarded an EARMA-SARIMA StoRM fellowship, amount €2,780

**Anthony Thaventhiran** (TMT) has received the Royal College of Surgeons of England Surgical Research
Fellowship (https://www.rcseng.ac.uk/standards-and-research/research/) and the British Medical Association Foundation for Medical Research (http://www.bmafoundationmr.org.uk) "Lift into Research" Grant.

Recruitment to the biopsy driven RCT Stratification of Biologic Therapies for RA by Pathobiology (STRAP) completed at the end of May, with a total of 226 patients. Twenty-six sites across the UK and mainland Europe participated in this complex study which is now in the follow-up phase, results will be available in 2020. See http://www.matura-mrc.whri.qmul.ac.uk

Li Chan (Endo) has been awarded £99,984.00 from the Welcome Trust to look at Adrenal dysfunction and obesity in Down Syndrome. Additionally she lead on a 5,965,967.75 Euro EU H2020 (Better Health and care, economic growth and sustainable health systems) project which was funded. 579,885.00 euros will come to QMUL.

James Whiteford (CMR) has been awarded project grants from The Macular Society and The Dunhill Medical Trust.

Chris Thiemermann and Magdi Yaqoob have been awarded a Barts HCA Clinical PhD Studentship.

Assessing Lipid mediator profiles following neuronal stimulation: GSK/Galvani. J. Dalli £200K

Dr Suchita Nadkarni: £302,000 for a Clinical Research Training Fellowship - (£252,000 BHF-funded + £50,000 Barts Charity-funded) Title of project: "Linking the maternal immune system to cardiac function during preeclampsia"

Publications of Note

Arokiasamy S ... Voisin MB. (CMR) “Heparanase-dependent Remodelling of Initial Lymphatic Glycocalyx Regulates Tissue-fluid Drainage during Acute Inflammation in vivo” Accepted Sept 2019 Frontiers in Immunology (Sep 2019)
Cartwright JH...Munroe PB. (CP) “Genetic variants in TRPM7 associated with unexplained stillbirth modify ion channel function.” Hum Mol Genet. (Aug 2019)

Fung K, ... Munroe PB. (CP) “Genome-wide association study identifies loci for arterial stiffness index in 127,121 UK Biobank participants.” Sci Rep. (Jun 2019)

Noordam R, ... Warren HR. (CP) “Effects of Calcium, Magnesium and Potassium Concentrations on Ventricular Repolarization in Unselected Individuals.” J Am Coll Cardiol. (Jun 2019)

Sung YJ, ... Morrison AC. (CP) “A multi-ancestry genome-wide study incorporating gene-smoking interactions identifies multiple new loci for pulse pressure and mean arterial pressure.” Hum Mol Genet. (Apr 2019)


Woodbridge SP, ... Petersen SE. (ACI) “Physical activity and left ventricular trabeculation in the UK Biobank community-based cohort study.” Heart. (2019).


Novoselova T,...Chan LF. (Endo) “ACTH signalling and adrenal development: lessons from mouse models.” Endocr Connect. (Jun 2019)


Flak MB,... Pitzalis C (EMR). Inflammatory arthritis disrupts gut resolution mechanisms, promoting barrier breakdown by Porphyromonas gingivalis. JCI Insight. (Jul 2019).


Li J, ... Hua X. (SEM) “Development of a finite element musculoskeletal model with the ability to predict contractions of three-dimensional muscles.” J Biomech. (Aug 2019).


Holopainen M, ... Laitinen S. (BP) “Polyunsaturated fatty acids modify the extracellular vesicle membranes and increase the production of proresolving lipid mediators of human mesenchymal stromal cells.” Biochim Biophys Acta Mol Cell Biol Lipids. (Oct 2019).


Dakin SG, ... Carr AJ. (BP) “15-Epi-LXA4 and MaR1 counter inflammation in stromal cells from patients with Achilles tendinopathy and rupture.” FASEB J. (Jul 2019).

Frigerio F, ...Vezzani A*. (BP) “n-3 Docosapentaenoic acid-derived protectin D1 promotes resolution of neuroinflammation and arrests epileptogenesis.” Brain. (Nov 2018).


Lau EYM,...Henson SM. (TMT) “Type 2 Diabetes is Associated with the Accumulation of Senescent T Cells” Clin Exp Immunol. (Aug 2019).

Peden CJ....Pearse RM (TMT) “Effectiveness of a national quality improvement programme to improve survival after emergency abdominal surgery (EPOCH): a stepped-wedge cluster-randomised trial” Lancet (Apr 2019).


Emma Zub, ...Nicola Marchi (TMT) “Modification and potentiation of the anti-inflammatory ANXA1-GR pathway during seizures” FASEB J (2019).

Abbott TEF, ... Ackland GL. (TMT) “Chronotropic incompetence and myocardial injury after noncardiac surgery: planned secondary analysis of a prospective observational international cohort study”. Br J Anaesth. (Jul 2019)

Ackland GL, ... Miller TE (TMT) “Perioperative Quality Initiative-3 workgroup; POQI chairs; Physiology group; Preoperative blood pressure group; Intraoperative blood pressure group; Postoperative blood pressure group. Perioperative Quality Initiative consensus statement on the physiology of arterial blood pressure control in perioperative medicine.” Br J Anaesth. (May 2019).

Rasmussen LD, ... Böttcher M. (ACI) “Danish study of Non-Invasive testing in Coronary Artery Disease 2 (Dan-NICAD 2): Study design for a controlled study of diagnostic accuracy.” Am Heart J. (2019)


Nissen L, ... Böttcher M. (ACI) “Influence of Cardiac CT based disease severity and clinical symptoms on the


Broyd CJ, ... Mullen M. (ACI) “Pulse wave velocity can be accurately measured during transcatheter aortic valve implantation and used for post-procedure risk stratification. “ J Hypertens. (Sep 2019).

Khanji MY,...Petersen SE. (ACI) “Personalized E-Coaching in Cardiovascular Risk Reduction: A Randomized Controlled Trial.” Ann Glob Health. (Jul 2019)


Congratulations to....
Professor Maralyn Druce has been announced as a new National Teaching Fellow by Advance HE. The National Teaching Fellowship Scheme celebrates and recognises individuals who have made an outstanding impact on student outcomes and the teaching profession in higher education.

Madeeha Sheikh (TMT) was awarded a “Guarantors of brain” travel grant to participate in the 13th Cerebrovascular Biology meeting in Miami (USA) June 2019 where she presented her PhD project impact of metabolism on BBB physiopathology.

Dr Egle Solito (TMT) was an invited speaker at the CVB 2019 in Miami (USA) and at the 22nd International Symposium on Signal Transduction at the Blood-Brain Barriers”, September 2019 Würzburg, Germany.

Dr Francesca Pugliese (ACI) appointed Module Co-lead for MBBS Phase 1, Metabolism Year 2.

Natalia Reglero Real and Lorena Perez (CMR) won the best poster prize at the International Cell Adhesion Zoo Conference, Rotterdam.

Congrats to Anna Barkaway from Sussan Nourshargh’s group and Yaqi You from Ken Suzuki’s group (CMR) on completing their PhDs.
Ken Suzuki (CMR) is highlighted on the next round of Cash Appeal by BHF (August 2019)

Mihai Podaru (CMR) received a travel fund from European Society of Cardiology

Sasha Howard (Endo) won the presidential Poster Prize at ENDO. The abstract title was "Delayed or Absent? Use of Next Generation Sequencing Diagnostic Tools in a UK Puberty Cohort". Other authors were Claudia Cabrera, Michael Barnes and Leo Dunkel.

Samantha Arokiasamy (CMR) won the best poster prize at the BSMB Autumn Meeting at UEA


June 2019 Winner of the “best of the best clinical abstracts - cardiac rhythm management” at the British Cardiovascular Society conference. Poster and oral presentation title: "CARDIAC REPOLARIZATION DURING EXERCISE REVEALS INDEPENDENT PROGNOSTIC INFORMATION FOR CARDIOVASCULAR RISK PREDICTION". S. van Duijvenboden
The cardiovascular predictive value and genetic basis of T-wave morphology J. Ramírez. Runner-up of the “best of the best clinical abstracts - cardiac rhythm management” at the British Cardiovascular Society conference.

Nay Aung. Winner of Young Investigator Award at EuroCMR 2019

Nay Aung. Life Sciences Image Award for Health and Technology theme

Nay Aung. High score abstract award x 2 at EuroCMR 2019

Nay Aung - New role. NIHR clinical lecturer (Commencement date: October 2019)

WHRF Lay Communication Prize 2019

“A great learning opportunity and an honour” Zahra Raisi Estabragh wins the Inaugural William Harvey Research Foundation Communications Prize

On 12th June 2019 during the Annual Review Day, Zahra Raisi Estabragh was awarded the Inaugural William Harvey Research Foundation Communications Prize by the Foundation’s Chair, Dr John Gordon and Liaison Director, Professor Adrian Clark.

Delighted, Cardiovascular PhD student Zahra said,

“The WHRF Lay Communications Competition provided a fantastic opportunity to share my research with a highly impressive panel from a variety of disciplines. The process was a great learning opportunity and prompted me to consider the importance of public engagement and clear communication of research activities. It was a pleasure to compete alongside my colleagues and an honour to be selected as the 2019 inaugural WHRF Lay Communications Prize Winner.”

Special commendation was given to runners-up, Dr Rayomand Khambata (Clinical Pharmacology) and Dr Anne-Sophie Thorup (Centre for Experimental Medicine
and Rheumatology) for their fascinating respective talks on “Green leafy vegetables: the way to Beet heart and gum disease”, and “A novel treatment for osteoarthritis and pain”.

The six finalists were challenged to deliver a two-minute pitch, in the scenario of whilst heading up in a lift to their hotel room at an international meeting, a familiar-looking man joins them in the lift. “Hi” he says, “I’m Bill Gates. I can see from your name badge that you are one of the scientists attending this meeting. Tell me why I should fund your research.”

Zahra, a student supervised by Professor Steffen Petersen, engagingly discussed her research on the links between osteoporosis and ischaemic heart disease, and what impact further funding in her study would achieve to benefit the public.

The expert judging panel, including Professor Rod Flower FRS, and a PR and communications specialist, were blown away by the outstanding quality and delivery of the competitors. The Foundation considers the ability to communicate high-quality science in an understandable and engaging way to the lay public, particularly potential donors, a vital but untaught skill, and welcomes further collaboration and development across WHRI.

Videos of the finalists delivering their pitches will be displayed on the Foundation website (www.whrf.org.uk) in the coming weeks.

**New WHRI Members**

**Nini Nguyen** joined Li Chan’s (Endo) laboratory to work on models of ACTH excess (Technician).

**Laura Vazquez Martinez** has joined CMR as an RA in the Nourshargh group.

**Dr Laura Fields** (post-doc; back from her maternity leave) and **Dr Maryam Jangani** (part-time post-doc) have joined Ken Suzuki’s group (CMR).

**Ilaria Esposito** joined EMR in June working as post-doctoral research fellow working with Dr Myles Lewis.
Matthew Bolton joined the EMR clinical trials nursing team at Mile End Hospital.

Dr Maria Gonzalez Nunez will be investigating the role of essential fatty acid supplements in regulating macrophage responses and vascular inflammation.

Welcome to Anna Monika Poliniewicz (TMT) PhD student Life Science who will study “a model of 3D shear stress BBB system”

Elena Giusto, Postdoctoral Research Assistant starting in September with Gareth Ackland’s team (TMT)

Alastair Somerville, Research Technician started in July with Rupert Pearse’s team (TMT).

A big WHRI welcome to all of you!

Departing WHRI Members

Dr Ioanna Ntalla (CP) has left QMUL, we wish to thank her for all her hard work for the past 4 years.

Goodbye to Mr Nobuhiko Sato (return to Kaneka corporation, Japan) and Dr Vanessa Machado (back to Portugal) from Ken Suzuki’s Group (CMR)

Natalia Dominik left the EMR technician core team in August to take up a technical position in a neuromuscular lab at UCL.

Sara Caxaria – left Professor Dell’Accio’s team for a postdoctoral position at KCL.
If there's something you would like included in next month's newsletter please send an email to James Whiteford at j.whiteford@qmul.ac.uk