Life Sciences Newsletter

Imperial College London

April 2016

DoLS Committees and Initiatives

DoLS Newsletter Archive

Message from the HoD

As you will have heard, the consultation process for the next Head of Department of Life Sciences has now taken place, and I am delighted that <u>Professor Anne Dell</u> CBE FRS FMedSci, currently the Director of UG Studies (Biochemistry) and Chair of the <u>DoLS Equal Opportunities Committee</u>, has agreed to take on the role – she will be taking up her position on January 1st 2017. I would like to invite you all to join me in congratulating Anne and wishing her all the best in her new role.

Best wishes – Murray

WELCOME TO ALL NEW STAFF

Research Assistants: Sarah Kelly and Amie Jaye (George Christophides); Shorok Mombrikotb (Thomas Bell) and Carla Siniscalchi (Andrea Cristanti). Research Associates: Linus Schumacher (Robert Endres); Sara Lamas Oliveira Marques (Cristina Lo Celso); Kyoko Tossell (Nick Franks) and Andrew Aldersley (Lauren Cator). Research Technicians: Fernando Sanchez-Roman Teran (Jake Baum) and Steven Swan (Allison Hunter). Stakeholder Engagement Development Officer. Mouhamed Drabo (Delphine Thizy).

RESEARCH GRANTS AND FELLOWSHIPS

Jake Baum together with colleagues Friedrich Frischknecht (University of Heidelberg), David Kovar (University of Chicago) and Anne Houdusse (Institut Curie) have been awarded a \$1.5M Human Frontier Science Program grant to continue their work into the mechanics of malaria parasite actomyosin-based motility.

Alain Filloux was awarded a 3 year MRC research grant (£556,000) for the research project "the T6SS toxins are powerful weapons for Pseudomonas' antibacterial strategy".

USEFUL INFORMATION:

- ▶ Working at Imperial
- Funding Opportunities for Women
- ► Staff Networks
- Organisational and Staff Development
- ► Equality, Diversity and Inclusion Centre
- Occupational Health Service
- ► Postdoc Development Centre



PRIZES AND AWARDS

Outstanding undergraduate teaching is central to the department's role, and so it is with great pleasure that the following staff have been awarded a Faculty of Natural Sciences Prize for Excellence in Teaching for 2016: Excellence in Teaching - Lauren Cator, Alfonso De Simone & Kleoniki Gounaris. Excellence in the Support of Teaching and Learning - Charles Aigbokhai; Steve Cook; Eoin O'Gorman; Paul Hitchen, Kazim Ogmen; Sarah Rouse & Moira Sarsfield. Thank you & congratulations to you all!

Giorgio Gilestro's lab was awarded a BBSRC Impact Accelerator Award for the value of £15k to be spent on the commercialization of their "ethoscopes".

Jim Barber has been awarded the 2016 <u>Porter Medal</u> - awarded every two years to the scientist who, in the opinion of the European Photochemistry Association, the Inter-American Photochemistry Society, and the Asian and Oceanian Photochemistry Association, has contributed most to the subject of Photochemistry.

Dennis Nuernberg has been awarded the Hayes-Burnet Award by the Microbiology Society to attend the Annual Meeting of the Australian Society for Microbiology and visit an institution in the country.

PUBLICATIONS

Ernesto Cota Segura and **Nessim Kichik** are co-authors on the paper <u>Candidalysin is a fungal</u> <u>peptide toxin critical for mucosal infection</u>, Nature 532, 64–68 (07 April 2016) doi:10.1038/nature17625.

Morgan Beeby's paper "Diverse high-torque bacterial flagellar motors assemble wider stator rings using a conserved protein scaffold" was published in PNAS 113(13):E1917-26 (2016)

Progatzky F., Cook H.T., **Lamb** J.R., **Bugeon** L., **Dallman** M.J.: <u>Mucosal inflammation at the respiratory interface: a zebrafish model</u>, published in Am J Physiol Lung Cell Mol Physiol (2016). This paper shows for the first time that zebrafish gills can be used to study aspects of human lung inflammation.

Sanz-Hernandez M, Vostrikov V, Veglia G, **De Simone A** 2016, "Accurate Determination of Conformational Transitions in Oligomeric Membrane Proteins", Scientific Reports, 6:23063.

MEDIA/OUTREACH ACTIVITIES/EVENTS BEING HOSTED

Tanai Cardona's paper "Origin of Bacteriochlorophyll a and the Early Diversification of Photosynthesis" published in PLoS ONE (11(3): e0151250) was featured on the Imperial's homepage the 16th of March. The press release by Hayley Dunning, Photosynthesis more ancient than thought, and most living things could do it, was also picked up by many different science news sites including sciencedaily.com, phys.org, upi.com, hngn.com, among several others. It was also featured in other languages including Russian (gazeta.ru), Italian (focus.it), and Spanish (noticiasdelaciencia.com).

Stephen Curry was interviewed for a 2-part BBC Radio 4 documentary <u>Saving Sciences from the Scientist</u> on scientific integrity and for the BBC Radio 3 programme, <u>Free Thinking</u>, about moves to increase the speed of scientific publishing in response to the Zika virus outbreak. He was also quoted in the research publishing "<u>Taking the online medicine</u>" by The Economist and wrote a piece in the Guardian about the EU Brexit debate: <u>The scientific impact of Brexit: it's complicated.</u>

Armand Leroi and **Vincent Savolainen** were quoted in an article "Evolution Of Live Birth Helped Fish Diversify" IFL Science.

Bernadette Byrne's research story Research reveals how cells receive essential cargo via transporter proteins was published on the Imperial College's website on 18 April 2016.

TALKS

Cristina Lo Celso presented her lab's recent work at the Single Cell Biology conference held at the Sanger centre in March.

Lenne Lillepuu gave her first inspirational talk to approx. 40 Imperial women on the <u>Springboard</u> Women's <u>Development Programme</u> on the 15 April.

POSTDOC NEWS

Haven't set aside preparation time for your upcoming **career development discussion** yet? Following the success of the previous session, DoLS <u>postdoc committee</u> is organising yet another pop-up workshop designed specifically to help postdocs to prepare for their career development discussions via the annual PRDP process. **16 May, 12-2 pm.** <u>Sign up</u>.

How many of your **10 days of training allowance per annum** have you used this year? Check out the courses offered by the award winning <u>Postdoc Development Centre</u>. What skill will you develop next?

ATHENA SWAN

DoLS UG student **Gabriella Santosa** is amongst the finalists in the 2016 <u>Althea-Imperial Programme!</u> This pioneering programme for female students develops enterprising skills and knowledge, encouraging the next generation of women in business, science and technology. Five finalists will be pitching their innovative ideas to a panel of academic and industry experts to win a total of £20,000 to develop their projects. Tickets can be booked at http://althea-imperialfinal2016.eventbrite.com or by emailing althea-programme@imperial.ac.uk. Go on – get your tickets and show your support for Gabriella, and the other finalists!

UPCOMING EVENTS

<u>Mental Health Awareness Week</u>: the aim is to get people to talk more openly about the issues that surround mental health and to raise awareness of the issues people face. Which event will you attend?

Free staff portraits photo session: Any staff members who would like to have their portrait photograph taken, for their professional web page or other purposes, are invited to <u>sign up</u> for a free photoshoot taking place on 3 May at the South Kensington Campus.

TECH NEWS

This month's Tech News cover the following areas:

- Shared Services cost sharing for universities (e.g. equipment asset sharing)
- Biennial SLS Scientific Laboratory Show and Conference 25th May 2016 attendance free, get in touch with Allison Hunter by 9th May if you want to attend
- HEaTED Training Courses

Read the detailed Tech news report by Allison Hunter for further details.

PERSONAL NEWS

Many congratulations to **Nicola Ruivo** of Cristina Lo Celso's lab on the birth of lovely Luca, born on the 1 March 2016.



DoLS STAFF @ IMPERIAL FESTIVAL (7-8 MAY 2016)

Jake Baum, Marion Koch and Andrea Ruecker

Title & description: "Malaria-the killer in the blood". Follow the journey of the malaria parasite from mosquito to man and become an expert in diagnosing this deadly disease.

&

Delphine Thizy, Austin Burt

Description: Our stall will be focusing on gene drive with some infographics explaining the technology and mosquito vectors, as well as showing alive wild-type *Anopheles gambiae* mosquitoes at different stages (eggs, pupae, larvae, adult). We will also have a fluorescent microscope with fixed modified mosquitoes showing fluorescent markers.

Location: In the superbug zone in the flowers building in G47A

Suhail Islam, Mike Sternberg & the Goldsmiths College

Title & description: "Proteins, Disease and Computer Games". Take a journey into the world of proteins, by using 3D computer graphics and a computer game, to understand their 3D shape, function and role in diseases.

Location: Main Marquee

Heather Ang, Constandina Pospori, Sara Lamas Oliveira Marques & Cristina Lo Celso

Title & description: Blood stem cells love their homes. "Did you know that blood cells in the body have a place to call home? And then an invader comes in... What happens next?"

Location: on the corner of the Main Marquee

Patrik Jones' lab - Nicole Prandi, Mathieu Bousquet, Merlin Williams, Dipankar Chosh, Danielle Gallagher, Laura de Arroyo Garcia, Marine Valton & Phoebe Tickell

Title: "What does synthetic biology smell like?"

Location: Research Zone

Abigail Clements and Gerald Larrouy-Maumus are helping out with the CMBI exhibition in the Flowers building, Superbug Zone

Morgan Beeby's lab will have a stall in the SuperBug Zone, demonstrating the sizes of bacteria using models of bacteria and their macromolecular machines.

Samraat Pawar's lab has a stall along with Dan Goodman's in Electrical and Electronic Engg. in the Energy and Environment section, located in the Queens Tower Rooms, Sherfield Building. **"Can you rebuild a broken ecosystem?** Play jenga with an Earth ecosystem! How fast can you rebuild a functional ecosystem in an ever-changing world using a biodiversity toolbox?"

View or **Download** the full programme

