Life Sciences Newsletter

Imperial College London

DoLS Committees and Initiatives

Health & Wellbeing

Nov 2016

DoLS Newsletter Archive

WELCOME TO ALL NEW STAFF

<u>Research Fellow</u>: Matteo Fumagalli (Tim Barraclough). <u>Research</u> <u>Associates</u>: Marta Hojka (Peter Nixon); Faaizah Khan (Geoff Baldwin) and Emma Ransome (Thomas Bell). <u>Research</u> <u>Assistants</u>: Laura Bouche (Anne Dell) & Matthew Watts (Samraat Pawar). <u>Technical Staff</u>: Yik Chan (James Rosindell). <u>Professional Services</u>: Bethan Johnson (Pat Evans); Olivia Majorin (Delphine Thizy) and Julie Etheridge (Karen Logan)

APPOINTMENTS

George Christophides has been appointed a member of the Scientific Advisory Board of the Tsinghua University Centre for Global Health and Infectious Diseases

USEFUL INFORMATION:

- College's EU referendum webpage
- Working at Imperial
- Organisational and Staff
 Development
- Equality, Diversity and Inclusion Centre
- Occupational Health Service
- Postdoc Development <u>Centre</u>

GRANTS

George K. Christophides and **Nikolai Windbichler** were awarded a \$2.8 million grant from the Bill and Melinda Gates Foundation to develop an intervention that renders populations of Anopheles gambiae mosquitoes unable to become infected with the malaria parasite thus preventing disease transmission to humans

James Murray was awarded a BBSRC grant application "Role of Atypical D1 Proteins in Photosystem II", with cols Peter Nixon & Bill Rutherford (£730K FEC)

Giorgio Gilestro's lab was awarded a grant for the value of £400k together with Robert Dickinson (Faculty of Medicine) for a project "*Determining biological effects of low level exposure, developing novel biomarkers & therapies in in vivo animal models of CO toxicity*"

TALKS

Vincent Savolainen attended the EMBO Members Meeting in Heidelberg (26-28 October) and gave a short inaugural presentation following his election

Arkhat Abzhanov gave two invited lectures: 1) at the BMP 2017 Conference in Boston, USA; Oct 25-30th, 2016 and 2) for the Euro Evo-Devo Conference in Uppsala, Sweden; July 25-29th, 2016

Kostas Beis was an invited speaker at the 'Joint International Conference of the Hellenic Crystallographic Association and the Hellenic Society for Computational Biology and Bioinformatics' held in Athens, Greece. His talk was entitled 'Structural basis for antibacterial peptide transport across membranes'

PUBLICATIONS

A large fraction of HLA class I ligands are proteasome-generated spliced peptides. Liepe J, Marino F, Sidney J, Jeko A, Bunting DE, Sette A, Kloetzel PM, Stumpf MPH, Heck AJR and Mishto M Science. 2016 October. DOI: 10.1126/science.aaf4384 The recent <u>UK State of Nature report</u> and the <u>Living Planet Report</u> both reported the Biodiversity Intactness Index, a biodiversity indicator developed by **Andy Purvis** and his group as part of their PREDICTS project (published earlier this year in Science)

Yu, S.-C.; Dawson, A.; Henderson, A. C.; Lockyer, E. J.; Read, E.; Sritharan, G.; Ryan, M.; Sgroi, M.; Ngou, P. M.; Woodruff, R.; Zhang, R.; Ren Teen Chia, T.; Liu, Y.; Xiang, Y.; **Spanu, P. D**. Nutrient supplements boost yeast transformation efficiency. *Scientific Reports* **2016**, 6, 35738 - this paper results mainly from the research carried out by a group of undergraduates who worked under the direct supervision of **Sheng-Chun (Joe) YU** over a summer placement under the UROP scheme. Other undergraduates and postgraduates also contributed to this.

Lockyer E. The potential of CRISPR-Cas9 for treating genetic disordersBioscience Horizons **2016** 9 doi: 10.1093/biohorizons/hzw012 - a review published by an undergraduate student, **Ms E Lockyer**. The main part of this review was her second year Tutored Dissertation. An example of a possibility, when students produce exceptionally good dissertations on topical themes with potential for publication

N. Ojkic, J. Lopez-Garrido, K. Pogliano, **R.G. Endres**, *Cell wall remodeling drives engulfment during Bacillus subtilis sporulation*, eLife, accepted for publication.

PRIZES AND AWARDS

The Imperial team at the iGEM (International Genetically Engineered Machine) competition won the Grand Prize for Undergraduates as well as Best Wiki, Best Poster, Best New Basic Part, Best Education and Outreach, and Best Foundational Advance. The team was supervised by **Karen Polizzi (Life Sciences)**, Guy-Bart Stan (Bioengineering), Nicolas Kylilis (Medicine), Kirsten Jensen (Medicine), Paul Freemont (Medicine), and Dick Kitney (Bioengineering). The team included 12 students from both Departments, of which 6 were Life Sciences students: **Akash Bhattacharjee**, **Stefan Grossfurthner**, **Alyssa Henderson**, **Henry Lloyd-Laney**, **Rachapun Rotrattanadumrong**, and **Aditi Satija**.

Armand Leroi and Matthias Mauch from QMUL have been nominated for the <u>Times Higher Awards</u> this year, under "Research Project of the Year" for their audio-based analysis of trends and revolutions in chart music from 1960 to 2010." The paper - Matthias Mauch, **Robert M. MacCallum**, Mark Levy, **Armand M. Leroi**., *The evolution of popular music: USA 1960–2010*, R. Soc. open sci. 2015 can be <u>viewed here</u>.

POSTDOC NEWScheck out DoLS Postdoc's Christmas Party details here...

The new Postdoc Handbook brought to you by DoLS Postdoc Reps is now available to view and download on the <u>Postdoc Committee</u> and <u>New Staff</u> webpages. The tailored handbook guides you to resources available at Imperial College and DoLS to help you gain teaching experience, develop your science communication skills, cultivate industrial collaborations, enhance your professional visibility, identify tailored postdoc developmental courses and mingle with fellow postdocs over beer and pizzas! The handbook is available to all DoLS staff and students.

MEDIA/OUTREACH ACTIVITIES/EVENTS BEING HOSTED

Arkhat Abzhanov was quoted in an article '<u>The two-headed creatures that may have inspired Hydra</u>' by BBC Earth, 19 Oct 2016.

Tracking leukaemia-resistant cells - listen to Cristina Lo Celso explaining the work on Naked Scientist at BBC5

Susy Echeverria-Londono (PhD student) presented the findings from her recent paper on the history and possible futures of Colombian biodiversity to the (Nobel Peace Prize-winning) President of Colombia and His Royal Highness the Prince of Wales at the Natural History Museum on 2nd November, during the President's state visit.



All the "fly people" in the College met for the 3rd ICL Fly Away Day at the Museum of London.



Pic above: 4 groups from DoLS (Southall, Dionne, Windbichler and Gilestro) and 3 from the MRC CSC in Hammersmith.

Last month's Science Museum Lates event, supported by the Bill and Melinda Gates Foundation. explored some of the biggest challenges in global health, showcasing exhibits around the theme of 'Contagion'. The 4500 visitors to Science Museum Lates were 'infected' with one of a range of deadly diseases on entry, and tasked were with discovering everything they could about their disease as they explored the event.

Malaria researchers from Crisanti Lab, Blagborough Lab and Baum Lab, designed, created and exhibited an interactive Malaria Zone, which was dedicated to the investigation and fight against the mosquitoborne infectious disease. The Malaria Zone proved hugely popular, with a wide range of 'hands-on' exhibits, see Imperial **College Science News** article by Dr Roya Haghighat-Khah to learn more.



Organisers and volunteers from the Department of Life Sciences included: Alekos Simoni, Alexander Nash, Andrea Crisanti, Anna Beber, Ann Hall, Andrew Hammond, Andrew Waters, Antonios Kriezis, Carla Siniscalchi, Claudia Wyer, Fabio Fisher, Fernando Sanchez-Roman Teran, Ioannis Kirmitzoglou, Jake Baum, Katherine Wright, Kathrin Witmer, Katja Hassler, Louise Marston, Lucy Collyns, Maria Giorgalli, Mariana reis Wunderlich, Marion Koch, Mark Wilkinson, Michal Mielcarek, Myriam Haltalli, Oliver Lyth, Olivia Swann, Roya Haghighat-Khah, Sara Zakutansky and Tom Blake

PERSONAL NEWS

Abigail Clements gave birth to a beautiful baby boy Maxwell who arrived on the 21st September!

Many Congratulations and welcome to the world!





USEFUL INFORMATION

Professor Christopher M Dobson, FRS, Master of St John's College Cambridge and member of Department of Chemistry, Cambridge, has accepted the invite to deliver the **Ernst Chain Lecture in spring 2018**! He has published more than 700 research articles (including more than 60 in Nature/Science Journals) and has a H-index higher than 100. He has a long list of international prizes and recently was awarded the Heineken Prize for Biochemistry and Biophysics for his work on amyloidogenesis and related disease.

Focus groups on equality, diversity and inclusion at Imperial Staff who identify as LGB, Transgender and gender non-binary, carers, BAME and disabled are invited to attend focus groups in December and January to discuss particular challenges for these groups of staff at Imperial, what is done well and what still needs addressing. The sessions will be led by an external facilitator, and anonymised feedback from the sessions will be used as the basis for recommendations to be taken forward to the Equality and Diversity Committee, the Disability Action Committee and other relevant senior level committees. <u>Find out more and register to attend</u>

Briefings for staff who access student data

Staff involved in student data administration are invited to attend a briefing on the implementation of the new Banner student information system. The College will use Banner to support processes across the student lifecycle to improve the experience for students interacting with College systems, to provide staff with access to high quality information and to integrate information systems.

The first briefing is on 30 November 14.30-15.30 on the South Kensington Campus. <u>Find out more and register.</u>

Listen to what Bonnie Greer, an American-British playwright has to say about diversity and inclusion – she spoke at the 2016 Annual Diversity Conference – Diversity matters – the road to inclusivity. The conference was streamed **online** - skip to 3h 44 min for the closing talk by Bonnie Greer.