

Life Sciences Newsletter

Imperial College London

October 2015

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WELCOME TO ALL NEW STAFF

ACADEMIC & RESEARCH

Arkhat Abzhanov - Reader in Evolution and Developmental Genetics (Silwood Campus)

Research Assistants:

Barcena Menendez, Mr Diegom (Isalan, Dr Mark); **Budzak, Mr James Daniel & Sidhu, Miss Haneesh Kaur** (Rudenko, Professor Gloria); **Geng, Ms Tian** (Moraes, Dr Isabel); **Hawthorne, Mr William James** (Matthews, Professor Steve); **Jamshidiha, Mr Mostafa** (Cota Segura, Dr Ernesto); **Patel, Mr Jayneil Rajesh** (De Simone, Dr Alfonso); **Valton, Miss Marine Anne-Sophie Marie & Li, Miss Wen** (Jones, Dr Patrik); Cotton, Mr Charles Anthony Rowland (Rutherford, Professor Bill); **Katsanos, Mr Dimitrios & Koneru, Ms Sneha Latha** (Barkoulas, Dr Michalis); **Osborne, Mr Owen Gregory** (Savolainen, Professor Vincent).

Research Associates:

Sauerwein, Dr Andrea Christine (Matthews, Professor Steve); **Fasseas, Dr Michail Konstantinos** (Barkoulas, Dr Michalis); **Vogwill, Dr Tom** (Bell, Dr Thomas); **Nowell, Dr Reuben William** (Barracough, Professor Tim); **Valentini, Dr Martina** (Filloux, Professor Alain); **Wright, Dr Katherine Elizabeth** (Baum, Dr Jake)

PROFESSIONAL, TECHNICAL AND OPERATIONAL SERVICES, AND LEARNING & TEACHING FAMILIES

Lecturer (Fixed-Term, Silwood Park) - **Simon Pooley**

Research Technicians - **Miliara, Miss Xenii; Toufexi, Miss Alexia; Duggan, Mr Cian Joseph; Coelho de Almeida, Mr Pedro Miguel**

RESEARCH GRANTS & FELLOWSHIPS

Co-investigators **Samraat Pawar & Rebecca Kordas** won a Royal Society research grant for £14k.

Robert Endres and Andre Brown got responsive-mode BBSRC grant "Biophysical genetics of collective feeding in *C. elegans*, £608,132.00.

Michael Stumpf is part of a successful European grant on the systems medicine of Type 2 diabetes and islet cell biology, coordinating modelling and statistical analysis of a large EU consortium.

Alfonso De Simone has been awarded a 1 year grant from BBSRC within the IB Catalyst scheme (Innovate UK), which boosts collaboration between academia and industry. The grant is for an early stage project with Unilever entitled "Novel Formulation Design Strategy" for an overall value of £229,948 (combined academic and industrial side).

USEFUL POLICIES & PROCEDURES & INFO

[Working at Imperial](#)

- family friendly benefits, equality and diversity, financial benefits and more...

[Equality & Diversity Policies](#)

[Staff Networks](#)

[Women @ Imperial](#)

TALKS

Pietro Spanu participated at a workshop entitled "Biotrophy meets Epigenetics" at the RWTH-Aachen (Germany, 5th October) and gave a talk entitled: "Why do powdery mildew fungi deploy so many RNase-like proteins?"

James Murray gave a plenary talk on debunking the superoxide-dependent nitrogenase of *Streptomyces thermoautotrophicus* at the [19th International Congress on Nitrogen Fixation](#) at Pacific Grove, California.

Stephen Curry is attending and speaking at a [Gender Summit in Berlin](#) in November.

George K. Christophides gave an invited talk about the latest research findings of his laboratory at the XIV Brazilian Meeting on Malaria Research that was held in Sao Paulo from September 30 to October 3.

John Heap and **Karen Polizzi** were invited speakers at the prestigious [World Economic Forum Annual Meeting of the New Champions](#) ('Summer Davos') 9-11 September 2015, in Dalian, China. **Karen** and **John** were also invited speakers and discussion leaders in the [Ideas Lab 'The Revolution in Synthetic Biology](#) with Imperial College London and **John** was an invited discussion leader of the session on [Socially Disruptive Technology](#).

Cristina Lo Celso presented her team's work at the German Society for Hematology and Oncology meeting in Base - it was well received and our work was cited by in least two other talks.

Bill Rutherford gave an invited talk at a policy meeting in Munich on the future of aviation ("Aviation 2050 Shaping the Future") at a German Institute called the Bauhaus Luftfahrt Neue Wege on "Long-term perspectives for renewable fuels in aviation".

PUBLICATIONS

Yang Y, Darbari VC, **Zhang N**, Lu D, Glyde R, Wang Y-P, Winkelman JT, Gourse RL, Murakami KS, **Buck M**, Zhang X, 2015, [Structures of the RNA polymerase-sigma\(54\) reveal new and conserved regulatory strategies](#), *SCIENCE*, Vol: 349, Pages: 882-885, ISSN: 0036-8075

Juliane Liepe and **Michael Stumpf**, together with an experimental group in Berlin have published a paper in eLife: Quantitative time-resolved analysis reveals intricate, differential regulation of standard- and immuno-proteasomes. **Liepe J**, Holzhütter HG, Bellavista E, Kloetzel PM, **Stumpf MP**, Mishto M. *Elife*. 2015 Sep 22;4. doi: 10.7554/eLife.07545.

Ann Babbie, Paul Kirk and **Michael Stumpf** have a paper coming out in Science later this month: The (un)certainities of systems biology, Babbie AC, Kirk PDW, Stumpf MP. *Science* (in press).

Adam L MacLean, Paul DW Kirk, **Michael PH Stumpf**, [Cellular population dynamics control the robustness of the stem cell niche](#), published in *Biology Open*, doi:10.1242/bio.013714.

Anna M. Ukkola, **I. Colin Prentice**, Trevor F. Keenan, Albert I. J. M. van Dijk Neil R. Viney, Ranga B. Myneni Jian Bi, [Reduced streamflow in water-stressed climates consistent with CO2 effects on vegetation](#), *Nature Climate Change*, 19 October 2015.

PRIZES AND AWARDS

Helen Pennington (PhD Student) has been awarded a travel grant of €750 to attend the 36th New Phytologist Symposium on Cell Biology at the Plant Microbe Interface in Munich.

Martina Valentini in **Alain Filloux** lab has been awarded a Wellcome Trust ARC Early Career Fellowship, which has started on 1st October.

POSTDOC NEWS

The 2015-16 PDC course dates are now live on the [website](#).

Athena SWAN

The results of the [Athena SWAN](#) applications have been published – great news - we were successful in renewing our Bronze Award for the next three years! The application and action plan will be published once we have received detailed feedback from the panel by the end of October.

New online training resource: All staff can now access [lynda.com](#), which provides unlimited access to online courses on a wide variety of technologies and disciplines such as Microsoft Office, the Adobe Creative suite, and project management. [Find out more](#)

National Stress Awareness Day: All staff are invited to a series of workshops and talks on 4 November held at the South Kensington and Hammersmith Campuses, including a stress management course and other activities. [Find out more](#)

New equality and diversity online course: All staff, particularly managers, are encouraged to take this new course which covers all aspects of equality and diversity at Imperial. [Find out more and take the course](#)

Children's activity camp: A multi-activity camp will run during the October half-term, open to the children of College parents. The camp is aimed at children aged 3-12 and will take place at the South Kensington Campus from Monday 26 October to Friday 30 October. Places are limited and are available at a discounted rate to Imperial staff. [Find out more and book a place](#)

Bonfire Night fireworks display at Heston Sports Ground: The display on 5 November is open to staff. There will be a cash bar and hot food available, as well as children's entertainment. [Find out more and buy tickets](#)

EPSRC Science Photo Competition: EPSRC-supported researchers and doctoral students are invited to share their research through pictures. [Find out more](#)

The Royal Society's
Third [Annual Diversity Conference: Pride and Prejudice - breaking down barriers in science](#) -
23 Nov 2015

BABY NEWS & **MANY CONGRATULATIONS!**



On the 12 September, Mathilde Gendrin gave birth to a beautiful baby boy, called **Alban**.



Paul and Ruth Hitchen welcome to the world their gorgeous little baby boy **Marnix**, weighing in at 7lb, born at 00.39 am on the 3 October.



APPOINTMENTS

Martin Buck was appointed deputy chair of the Royal Society URF B side panel.

Steve Matthews was appointed as Executive Editor of the International journal *Biochimica et Biophysica Acta* (BBA) - Protein and Proteomics

Bernadette Byrne has been appointed as co-chair of Committee D at the BBSRC.

Pietro Spanu has been appointed to serve on BBSRC Research Committee B Core (assessing responsive mode funding applications) until 31 March 2019.

Geoff Baldwin has been appointed to the pool of assessors for grants by BBSRC.

MEDIA/OUTREACH ACTIVITIES/EVENTS BEING HOSTED

Robert Ewers was quoted in an article - [World's largest ecological study aims to make palm oil wildlife-friendly](#), Guardian 29 September 2015.

Alfonso De Simone reports that the Department hosted an NMR symposium to celebrate the Wellcome Trust funds for the upgrade of the NMR centre. With notable speakers from Imperial, UCL, Cambridge, Oxford and Leeds, the symposium was highly successful and attracted visitors from all major research institutes in London, as well as Cambridge, Birmingham, Southampton, Oxford and Leeds. It was a great science day that flags the central role of Imperial in the vibrant UK NMR community.

Dr Armand Leroi was quoted in an article ["The five surprising health benefits of being short"](#) Daily Telegraph (2 October).

Jason Hodgson was interviewed by Science for a story about the sequencing of the first ancient African human genome. The story is entitled ["First DNA extracted from an ancient African skeleton shows widespread mixing with Eurasians"](#). **Jason** was also quoted in an article ["First Ancient DNA found in Mota Cave Gives Rise To Understanding Human Migration in Africa"](#) Daily Times Gazette (12 October).

Anita Hall had a fantastic time as a FunPalace maker running a 'dopamine table' in a library on October 3rd. There were lots of 'wows' and enthusiastic questions, stained human brain slices, drawings, 3D spinning brain apps, good chocolate, laughs and singalongs. FunPalaces' theme is, 'everyone an artist, everyone a scientist' and Anita is part of a group of people who want to get much more STEM (and STEAM) engagement as well as information about. On a similar note, if any of you plant scientists would like to give a talk at the charming South London Botanical Institute, please also let Anita know - she's more involved in the tea and cake-selling there but knows they'd be very interested in hearing about current research.

George K. Christophides has organised an EMBO Conference on Molecular and population biology of mosquitoes and other disease vectors: Current, resurgent and emerging diseases. This is the top international conference in the area of disease vector mosquitoes held every two years in Kolymbari, Crete, Greece.

Laura Martinez-Suz (Royal Botanic Gardens, Kew), **Sietse van der Linde** (Imperial College) and **Martin Bidartondo** (Imperial College and Royal Botanic Gardens, Kew) organised a workshop on Environmental Change and Forest Fungi supported by the Plants, Soils and Ecosystems group of the British Ecological Society and the British Mycological Society. The workshop ran over two days (8 and 9 October) and brought together leaders from the fungal ecology and forest monitoring communities. The 27 attendees came from 20 different institutions in seven countries.

A press release - [Extra carbon dioxide good for plants but bad for our water supply](#) on **Colin Prentice** *et al* study [Reduced streamflow in water-stressed climates consistent with CO2 effects on vegetation](#) was published by Imperial College, 19 Oct.

As **Stephen Curry** hopes, pretty much everyone knows by now, Science is Vital is running a campaign to fight off the renewed [threat of cuts to the UK science budget](#) in November's Comprehensive Spending Review, which is scheduled for November. The flat-cast settlement of the past 5 years has been eroded by inflation. With the economy now growing again, we need to persuade the government that it is now time to be re-investing, not planning further stagnation or decline.

But we can only challenge this threat if, as in 2010, we make our voices heard. To do this, Science is Vital has launched an online campaign, which will culminate in a meeting at Conway Hall in London on Monday 26th October (also to be streamed online). We are also running a 'Dear George, Science is Vital...' campaign, asking people to send a message on a postcard to the Chancellor George Osborne to voice their concerns. The postcards can be created **for free** using our online form – you can even upload your own picture if you want to – and will be delivered by us to the Treasury. **Full details of the meeting and the postcard campaign are on the [Science is Vital website](#).**

The 3 finalist teams in the FoNS Make a Difference competition have all done excellent research over the summer developing their own ideas for innovations to improve Society's health and wellbeing. There are life sciences students in the final which takes place 6-8.30 Oct 26th in G16 SAF. [Find out more](#) of what last year's winning team have been up to (they started the competition as first year biochemists).

Professor Howard Morris officially opening the newly refurbished Mass Spectrometry Research Facility at the Astbury Centre for Structural Molecular Biology, University of Leeds, during his visit to receive an Honorary D.Sc. on July 15th 2015. In the foreground of the picture are (right) Professor Sheena Radford FRS, Director, and (centre) Professor Alison Ashcroft, Professor of Biomolecular Mass Spectrometry.



HEALTH AND SAFETY

A new [online system](#) for students and staff to record local inductions, procedural and equipment training, and College Learning and Development related health and safety training is now live! Maintain local health and safety training records; identify competence levels; gain approvals from those doing the training and Principal Investigators. The database of records also serves as a management tool for Principal Investigators to monitor and review the training of those in their groups on an ongoing basis.

Imperial College London Training Records - Home

Training Records | My Health & Safety Training Records | My Group Health & Safety Training Records

Welcome to the Health & Safety Training Records site

Please use this site to record/view:

- local health and safety training and inductions
- attendance at college or external health and safety courses

My Health & Safety Training Records
Add, edit or view records of the safety training you have received

My Group Health & Safety Training Records
View safety training records where you are named as Trainer, PI/Manager or Facility Manager

Help and Guidance
View screenshot guides on using this site

For any guidance on using the system please contact [Stefan Hoyle](#)

AND FINALLY...SOME GREAT **LAB NEWS**

Giorgio Gilestro's laboratory had their first lab retreat at the Isle of Wight.



Three days of brainstorming, science, cooking and hiking – great for teambuilding and it was a good occasion to think about strategic targets of the whole lab rather than of single projects.

&

Doryen Bubeck's lab entered the CRUK science bake-off. Their cake shows how pore-forming proteins (kit kats) come together to punch holes in cancer cells (pic and caption below).



Immune pores are ones of the first lines of defence deployed against cancer cells.