Signalling Networks: From data to modelling
25 - 29 January 2016

TGAC
The Genome Analysis Centre™
BBSRC Greater Norwich Development Partnership

Trainees Biographies

Amal Aldarwesh, University of East Anglia (UEA), UK

Amal Aldarwesh is a lecturer of Pharmacology at King Saud University (KSU), Riyadh, Saudi Arabia. She received her Master's degree in Pharmacology in 2009 from college of Pharmacy, KSU and Master of bioethics from King Saud University from health Sciences, Riyadh in 2013. In April 2012 she joined University of East Anglia in UK as a PhD candidate in the field of Pharmaceutical cell biology. She is interested in ocular biology and how retinal ganglion cells die in response to glaucoma-like stressors including glucose and oxygen deprivation. In addition to teaching and research in the field of pharmacology, Ms. Aldarwesh is interested in the area of research ethics and misconduct.

Laura Barrio Cano, Institut Pasteur, France

Laura Barrio Cano, performed her PhD studies in the field of B cell dynamics with Dr Yolanda Carrasco (Spanish National Centre of Biotechnology, CNB-CSIC). Her most notable finding was the capacity of innate-type signals to modify B cell dynamics focusing on TLR4 stimulation by lipopolysaccharide, a cell-wall component of Gram-negative bacteria. The TLR4 cascade was analyzed in the context of B cell motility using a two-dimensional model of artificial planar lipid bilayers combined with real-time confocal microscopy. Effects on the integrin-based B cell adhesions and the Rho GTPases signaling pathways for actin rearrangement in B cell motility were further analyzed. During this time, Laura was research visitor at Dr Lennon-Duménil´s laboratory (Institut Curie, Paris); and she was involved in collaborative projects: 1) effects of mesenchymal stem cells on B cell dynamics (Ti-Genix, Madrid); 2) the role of p38γ/δ in B cell differentiation and function (with Dr Cuenda, CNB-CSIC, Madrid); and 3) the role of NKX2-3 transcription factor in B cell lymphomagenesis (with Dr Martínez-Climent, CIMA, Pamplona). As postdoctoral researcher, Laura has joined Dr Jost Enninga team (Institut Pasteur, Paris) where is analyzing the signalling cascades behind initiation and spreading of bystander responses during Shigella flexneri infection of epithelium.

Trainees Biographies

Witold Bauer, Medical University of Bialystok, Poland

Witold Bauer, graduated from Technical University with master of engineering in the field of bioinformatics. Working at the Centre for Clinical Research and Advanced Data Analyses, Medical University of Bialystok, Poland. I've just started my PhD studies at the medical academy 2 years ago; now I'm focusing not only on NGS but also other "omics" data.

Richard Borne, The Pirbright Institute, UK

I graduated from Aston University with a BSc in Infection and Immunity in 2013 and then studied for an MRes in Molecular Microbiology at the University of Exeter. My Masters project at Exeter led me to work with whole genome sequence data in an attempt to identify uncharacterised virulence factors of Vibrio parahaemolyticus, a major cause of foodborne illness worldwide. I am currently a PhD student in the Immunogenetics Group at Pirbright, registered with the University of Glasgow, studying cattle natural killer (NK) cell receptors. I will be using a number of molecular and next generation sequencing techniques, such as transcriptomics, ribosome profiling and proteomics in order to gain an understanding of how NK cells acquire their diverse receptor repertoires. This knowledge will then be used in the development of viral infection models which will allow the effect of receptor diversity on the immune response.

Trainees Biographies

Petronela Buiga, University of Manchester, UK

I am a first year PhD student in Molecular Cancer Studies at the University of Manchester, UK. I won a studentship which enabled me to work on a very exciting project, entitled "Systems Biology regulation of MAPK pathways: applications to cancer therapy", under supervision of Dr Lydia Tabernero, Jean-Marc Schwartz (University of Manchester/UK) and Dr Ari Elson (Weizmann Institute/Israel). I am a doctor of dental medicine and I also graduated a Master in Business and BA in Economics/Management. I won 4 international research scholarships at University of Oxford, King's College London, Leeds Dental Institute and IGBMC Strasbourg. I won 2 national research grants and published several research articles. In the same time I presented my research results in 30 oral and poster presentations at various medical, dental and engineering congresses in 7 countries.

Isabelle Camu, John Innes Centre, UK

Doing my PhD on tomato seed vigour at John Innes Centre. Work on physiologic and molecular effect of steeping.

Matheus Dias, Instituto Butantan, Brazil

I graduated in biomedical sciences in 2005 from the University Bandeirante of São Paulo (Brazil), and received my PhD in biochemistry from the University of São Paulo in 2012, studying the mechanisms underlying growth factor signaling and cell cycle control in Ras-driven malignant cells. Since 2013, I have been a postdoctoral fellow at the Instituto Butantan in São Paulo, where we are using an interdisciplinary approach, which includes computational modeling and/or simulation, to probe into the network subjacent of Ras signaling in malignant cells aiming to uncover potentially targetable vulnerabilities in Ras-driven malignant phenotypes.

Trainees Biographies

Zoltan Dul, King's College, UK

27-year-old PhD student studying at King's College London. Interested in Science. Specific fields:-- Dentistry: Pediatrics-- Biology: Bioinformatics, Computational Biology, Systems Biology, Network Biology Looking forward to get new information & knowledge in Science, while I will try to build new network of contacts.

Mikael Ejdebäck, University of Skövde, Sweden

I am an associate professor in molecular biology at University of Skövde, Sweden, where I teach molecular biology and biochemistry on study programmes in biomedicine, molecular biology and systems biology. Since my PhD studies in biochemistry (University of Gothenburg) I have an interest in protein-protein interactions. During my PhD studies I studied protein-protein interactions in the photosynthetic electron transfer chain by site-directed mutagenesis followed by measurement of electron transfer, crystallography and NMR. My post-doc research (Trinity College Dublin) focused on protein interactions in Toll-like receptor signaling pathways in immune cells and now at University of Skövde, Sweden, I study NOD-like receptor signaling pathways involved in inflammation. As an experimentalist I am very interested in tools and procedures that can be used for modelling signaling pathways and complement experimental data.
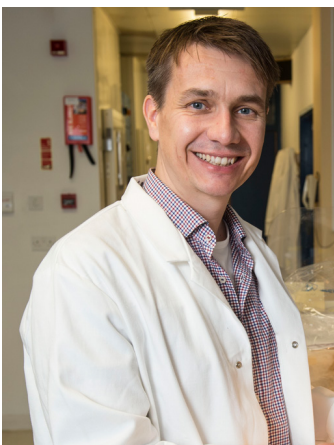
Trainees Biographies

Tyler McCleery, John Innes Centre, UK

Tyler McCleery models cell-level decision making in the context of genetic regulation and environmental signalling. He is particularly interested in lateral root branching in Arabidopsis thaliana, considering how environmental cues, such as local soil nitrate concentration, can tune genetically-programmed branching decisions. His modelling background includes Cellular Finite Element Models and Cellular Potts Models, and he is currently extending lessons learned from plant cell communication into Swarm Robotics.

Frank Menke, The Sainsbury Laboratory, UK

Worked on protein phosphorylation and signal transduction for most of my career. Started using proteomics to get a more comprehensive understanding of signalling networks. Developing targeted proteomics approaches to gain a better understanding of network biology. Interested in using modelling to understand data on new level.

Trainees Biographies

Pirasteh Pahlavan, University of Wuerzburg, Germany

I am a PhD student in Bioinformatics at the Leibniz-Institute DSMZ, enrolled at the University of Wuerzburg. My thesis topic is on 'plant-virus interaction in transcriptome level, comparing DNA and RNA viruses', the main focus is on system Biology of host during infection progress. Got my master degree in agricultural Biotechnology specified on gene silencing of plant viruses, which made me through Genetic engineering skills and look forward to attending at this course to proceed.

Željko Popović, University of Novi Sad, Serbia

I was born in Novi Sad (Vojvodina, Serbia) in 1983. I graduated (matura) from Grammar high-school in 2002, as the best student in generation 1998 and obtained BSc in General Biology in 2006 and MSc in Functional Biology in 2007 at the University of Novi Sad, Faculty of Sciences. In 2014 I defended PhD thesis in Molecular Biology at the University of Belgrade, Faculty of Biology. From 2009 I am employed at the University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology, currently as an assistant professor in biochemistry and molecular biology. My research is focused on molecular and biochemical aspects of animal dormancies, predominantly insect adaptations to low temperatures during diapause. I live in Novi Sad with my family- wife Vesna, daughter Jelena and son Stefan.

Trainees Biographies

Sharon Mithoe, Institute of Food Research, UK

I work as a research scientist proteomics/IFR and I work with large protein data sets. In the past I have set up proteomics approaches to study phospho proteins (MAPKs) and tyr phosphorylation and used the modelplant Arabidopsis thaliana for this work.

Nwayyin Mohammed, University of Buckingham, UK

Nawin is an assistant lecturer at the University of Sulaimani in Kurdistan region\ Iraq. She had her M.S.c in computer and statistics. Nawin had several academic and administration responsibilities. She was teaching third year students at computer science department and was assistant of vice head of the department for one year. Currently, Nawin is doing a split site PhD in Bioinformatics at the Clore laboratory- University of Buckingham.

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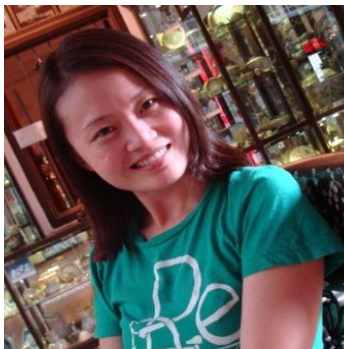## 25 - 29 January 2016

Trainees Biographies

Alberto Santos, Univeristy of Copenhagen, Denmark

I studied Computer Science Engineering at the Polytechnic University in Valencia, where I received my diploma in 2007, focusing on Software engineering. After several years of experience in the job market, I completed in 2013 a Master in Bioinformatics at the Pompeu Fabra University in Barcelona awarded with a Master grant of La Caixa Foundation. I have been working as a PhD student at the Novo Nordisk Foundation Center for Protein Research in the Cellular Network Biology department ever since. My research focuses on the analysis and interpretation of high-throughput data on phosphorylation-dependent signaling under different perturbations.

Fei-Yian Yoong, John Innes Centre, UK

I am a seed biologist who is interested in improving seed germination and resilience for agronomic purposes. I am currently working on Brassica oleracea seed vigour. I have and will be performing gene regulatory network analyses using transcriptome data from developing seeds at different developmental stages. Using network analysis approach, I am hoping to uncover interesting gene correlation across datasets.