

Confirmed Speakers: Bioinformatics Business Workshop Event

From data deluge to delivering better crops

Tuesday 9th July 2013

Dr. Mark-Christoph Ott

Head of Bioinformatics, Bayer CropScience

www.bayercropscience.com

Talk title “Applied Bioinformatics for Plants”

Mark-Christoph is head of bioinformatics at Bayer CropScience in Monheim, Germany. Previous to this he was RD IT Project Coordinator Biology Systems, Bayer CropScience; Germany (2008 – 2009). He has also worked in roles as Associate Director, Scientific Data Management at Johnson & Johnson, Belgium (2005 – 2008); Consultant Research Projects at the Erasmus Medical Center, Rotterdam, Netherlands (2003 – 2005); Senior Informatics Scientist, OmniViz Inc. in Maynard, MA (2001 – 2005). Mark-Christoph gained his PhD at the University of Cologne, working on “In-vitro- and in-vivo-Studies of the extracellular matrix protein Laminin-5” under the supervision of Professor Paulsson.

Richard Holland

Chief Business Officer, Eagle

www.eaglegenomics.com

Talk Title “Introduction to Eagle Genomics Ltd”

Richard is a founder member of the Open Bioinformatics Foundation, the organisation that backs most of the key open-source bioinformatics programming toolkits such as BioPerl and BioJava. Richard was also lead developer on BioJava, the primary resource for Java developers working in bioinformatics, and he is first author on the original BioJava paper. Richard has been working in bioinformatics for over 9 years in both industry and academia in the UK, Singapore, and New Zealand.

Dr Martin Trick

Senior Scientist, Computational & Systems Biology, John Innes Centre

www.jic.ac.uk

Talk Title “Associative Transcriptomics powering crop improvement”.

Martin read Natural Sciences (Genetics) at the University of Cambridge in 1979, followed by a PhD in the Department of Genetics there, studying repetitive DNA sequences in Tsetse flies. He then had two successive postdoctoral positions - the first, in the same Department, on alcohol dehydrogenase genes in barley, the second at the Plant Breeding Institute on the molecular genetics of the self-incompatibility system in Brassica. In 1989 he took up a project leader position at the John Innes Centre in Norwich, later specialising in the synteny between the Brassica and Arabidopsis genomes, at the same time becoming increasingly interested in databases and computational methods. In 2001 he completed his migration to a fully in silico

approach by becoming senior scientist in what is now Computational and Systems Biology at JIC. He is presently engaged in the analysis of Illumina data for projects across all the science programmes at JIC.

Will Spooner

Chief Technical Officer, Eagle

www.eaglegenomics.com

Talk Title “Integration of 'omics data with the public reference”

William Spooner is a seasoned operational bioinformatician with a track record of delivering tools for high-throughput genomics research. Having worked previously on Ensembl, BioMart, Gramene and WormBase at the European Bioinformatics Institute, the Wellcome Trust Sanger Institute and Cold Spring Harbor, his current focus is on making life easier for users of open source/data in commercial settings. His strategic thinking is driven by the huge opportunities for data analysis in the life sciences provided by the near simultaneous arrival of NGS and cloud computing.

Prof. Chris Rawlings

Head of Department, Computational & Systems Biology, Rothamsted Research

www.rothamsted.ac.uk

Talk title “An Integrated approach to Mining QTLs for Functional Candidates Genes

Chris Rawlings started his Bioinformatics research career at the Imperial Cancer Research Fund in 1982 and from 1996 led Bioinformatics groups in the Pharmaceutical and Biotechnology sectors until joining Rothamsted Research in 2004. Chris now leads the Computational and Systems Biology department in Rothamsted which comprises over 30 staff and students engaged in research into, and application of, bioinformatics, mathematical modelling and statistics to problems in crop improvement and sustainable agriculture. His personal research interests are in the development and use of data integration techniques for supporting systems biology and for candidate gene discovery from multi-omics datasets (see www.ondex.org).

Dr Mario Caccamo

Head of Bioinformatics & Current Acting Director, TGAC

www.tgac.ac.uk

Talk Title “Next generation crop genomics”

Mario Caccamo is the Acting Director at The Genome Analysis Centre and has over 15 years' experience on algorithms research. His research is focused on the development of novel and efficient algorithms for genome assemblies and the analysis of large genomics datasets. Mario received his doctoral degree in computer science from the University of Aarhus (Denmark). Mario has previously worked at the Wellcome Trust Sanger Institute, contributing bioinformatics resources to facilitate genome projects for the model organism *Danio rerio*

(zebrafish) and *Sus scrofa* (pig). In these roles Mario gained experience in aspects of sequencing, assembly and annotation. Mario joined the European Bioinformatics Institute (EBI) in July 2007 to work in the development of the European Genome-phenome Archive (EGA).

Timothy Swaller

Director of Information Technology and Genomics, Ceres Inc.

www.ceres.net

Talk Title “Advancing Use of Genomic Data: Adding high performance to high-volume, integrated data access”

Tim Swaller directs Ceres’ information technology, computational biology and genomic efforts, including the commercial deployment of the company’s next-generation genome visualization software known as Persephone™. During his 14-year tenure with the company, he has helped build an integrated R&D platform consisting of genomics technologies, field and laboratory data management software and systems, informatics, and high-throughput laboratory pipelines. Most recently he has applied Ceres’ molecular genetics and informatics capabilities toward new discovery efforts, such as quantitative genetic analyses and genome-wide association studies to drive Ceres’ marker-assisted plant breeding programs. Prior to joining Ceres, he was a researcher at the Washington University Genome Sequencing Center in St. Louis, Missouri working on human and mouse genome sequencing. Swaller holds an MBA from the Anderson School of Management at the University of California at Los Angeles (UCLA).

Jonathan Mitchener

Lead Technologist, ICT, Technology Strategy Board (TSB)

www.innovateuk.org

Talk Title “The UK Innovation Agency – Opportunities for funding”

Jonathan is lead technologist for Information and Communications Technology (ICT) at the Technology Strategy Board (TSB www.innovateuk.org) where he helps drive investment and innovation amongst UK companies. A first class honours graduate in Computer Science from the University of Hertfordshire in 1988, he undertook a wide range of roles in more than twenty years with BT including research, systems deployment, and technology and management consultancy, before becoming their futurologist. Subsequently he ran his own business as an independent futurologist helping clients across all sectors understand the impacts of future disruptive change on their businesses. He has travelled widely to speak to, inspire and provoke a range of audiences on technology futures topics, and has also written for many journals and magazines and made media contributions (e.g. BBC). Jonathan covers the whole range of futures topics, but has special interests in ICT, and especially devices and gadgets. Although coming at things from a science and technology perspective, Jonathan also relates his work to economic, social and political contexts. He also uses his wide experience to help advise organisations on successful innovation, and currently formulates UK strategy for ICT at the TSB

Matthew Addis

CTO, Arkivum

www.arkivum.com

Talk Title “Strategies for data retention, sharing and reuse: costs, benefits and risks”

Matthew is CTO of Arkivum and previously worked at the University of Southampton IT Innovation Centre. Over the last decade, Matthew has worked with a wide range of organisations on solving the challenges of long-term data retention and access, including in the life sciences, aerospace, broadcasting and scientific sectors. By working with national archives and industry leaders across the UK and Europe, Matthew has investigated the issues of long-term data archiving, including preservation strategies, system architectures, total cost of ownership and how to mitigate the risk of loss of critical data assets. This resulted in IT Innovation spinning-out Arkivum Ltd, which provides data archiving as a service. Matthew currently works on risk-based approaches to digital preservation and data retention including how to meet regulatory compliance as well as keep data accessible.

Nick Skinner

Director and Lead Consultant, Poppyfish People Development Ltd

www.poppyfish.co.uk

Sandpit Session: Identifying Priorities

Nick has over twenty years experience of providing business guidance, change project leadership and decision making support to some of the UK's leading scientists in the fields of oncology and biotechnology, always with an emphasis on the human in the system. In 2012 Nick invested that experience into the creation of Poppyfish People Development. Poppyfish is all about creative approaches to organisational development, such as change management programmes, management development and coaching, organisational impact assessments and a range of leadership decision making exercises and people based business simulations. Most relevant to this audience is the Poppyfish ‘**Biodecision**’ workshop which is aimed at exploring the decision making processes involved in the commercialisation of intellectual property. Nick has also led a number of interactive Red Team exercises around building organisational resilience in the face of external threats. He has an MSc in People and Organisational Development from Roffey Park Institute and an MBA with distinction from the University of Hertfordshire, where he is also a visiting lecturer in the Business School.

www.poppyfish.co.uk