SUPA CAREERS EVENT

18th January 2018

Dynamic Earth, Edinburgh

10:00 Registration

10:30 Welcome, SUPA Graduate School

10:35 Introductions (Speakers)

–Debbie Gunning, Leonardo

–Euan McBrearty, Research Fellow, University of Glasgow

–Colin Greenshields, Finance MI Developer (SAS), Co-operative Bank

–Gavin Cullen, Patent Assistant, Marks & Clerk

–William Taylor, UK Astronomy Technology Centre

–Ian Menzies, Education Scotland

–Michelle Murtagh, Coherent Scotland

–Alison O'Neil, Imaging Scientist, Canon Medical Research Europe

–Ross Leyman, Optos

11:00 Round table sessions commence

12:50 Close, SUPA Graduate School

13:00 - 14:00 Lunch and networking

Euan McBrearty, Research Fellow, University of Glasgow

Euan McBrearty is a Research Fellow within the Electronic and Nanoscale Engineering dept. at the University of Glasgow with over 18 years' experience in photonics research and satellite manufacturing. He joined the University of Glasgow in September 2017 to work within the quantum technology hub developing DFB lasers for atom cooling.

Euan graduated with a degree in Applied Physics from the University of Strathclyde in 1999. He worked for DERA and QinetiQ for over 7 years on a variety of cutting edge research programmes predominately in the photonics field. During his time at QinetiQ he was part of a team that developed a novel method of fabricating Quasi Phased matched GaAs crystals and went on to gain his Ph.D. in the subject.

He later joined Helia Photonics as their Senior Engineer developing high laser damage threshold facet coatings and other optical coatings for free space optics and fibre optics.

He then worked for Clyde Space as a project manager managing a variety of CubeSat and SmallSat missions with companies such as NASA, ESA and MIT.

Colin Greenshields, Finance MI Developer (SAS), Co-operative Bank

I completed a PhD in theoretical condensed matter and optics at Glasgow in 2015, with a scholarship from SUPA. There was a time when I couldn't imagine anything else but continuing in academia, however gradually a "normal" job began to appeal more and more – especially after attending a careers event similar to this one and learning more about the options available. I now work in the broad area of "data analytics", which involves organisations managing and making use of the ever-increasing amount of data they hold. Most of my colleagues have maths and physics degrees, although typically not PhDs. My particular role at The Co-operative Bank largely relates to implementing regulations (more interesting than it sounds!), and currently I am working on a project for the Financial Services Compensation Scheme, to compensate customers more quickly if the Bank ever becomes insolvent. As with much physics, my work involves a combination of IT and understanding the subject matter (which you can learn on the job).

Gavin Cullen, Patent Assistant, Marks & Clerk

I work as a patent assistant at a firm of patent and trade mark attorneys (Marks & Clerk). Day to day, I deal with a variety of different things to do with physics and patent law. I am also working towards becoming a fully qualified patent attorney.

Before this, I completed my PhD at the University of Edinburgh as part of the particle physics theory group and continued to work on related projects as a postdoc in the theory group at DESY, Zeuthen.

I'm very happy to discuss and answer any questions on (amongst other things): what a patent attorney does; how to become one; and any other questions you may have related to moving from academia to the "real-world".

William Taylor, UK Astronomy Technology Centre

I am an instrument scientist working at the UK Astronomy Technology, which basically means I'm a scientist who plays at being an engineer! To get to this point, I did a degree in Physics at Oxford, specialising in astrophysics in my final year. Following this I moved north to pursue a PhD at the Royal Observatory Edinburgh. My PhD was titled "Massive Stars and Miniature Robots" and made

a tenuous, if brave attempt to merge astronimcal research with development of new technology for astronomy. Following this I got a short term position at the UK Astronomy Technology and this migrated into a full time post when a new project began and they needed someone with my rather odd hybrid set of skills

Ian Menzies, Education Scotland

Ian Menzies is a Senior Education Officer within Education Scotland, the Executive Agency of the Scottish Government which has responsibility for quality and improvement in Scottish Education. He leads on supporting the science curriculum for 3-18 year olds and contributes to the development of STEM approaches nationally. In addition to these responsibilities, Ian leads on the Advancing Equality Workstream within Education Scotland's Developing Young Workforce Programme which seeks to tackle youth unemployment in Scotland by better preparing young people for the world of work. Ian originally trained as a Physics and Maths Teacher and spent time teaching in Zambia and Malawi as well as Scotland. Following his time in Africa, he also spent a number of years coordinating the school education programmes for one of Scotland's leading international aid and development agencies.

Michelle Murtagh, Coherent Scotland

In 2011, I graduated from University of the West of Scotland with a First class honours degree in Physics with Medical technology. From here, I then went on to study an MSc at Strathclyde University in High Power Radio Frequency Science and Engineering, finally going on to undertake PhD studies, in a different area…

During my doctoral studies, under the guidance of my supervisors at Macquarie University (Sydney, Australia) I studied the theory and learned experimental skills behind the development of ultrashort pulsed solid-state Raman lasers. My PhD research project centred around extending the wavelength reach of standard femtosecond Ti:Sapphire lasers, with some demonstration of nonlinear microscopy using these Raman lasers. During this time, I published in peer-reviewed journals and attended numerous conference and research days.

I joined Coherent Scotland as a Manufacturing Sustainment Engineer in April 2016, primarily providing production support and reviewing manufacturing processes. In August 2017, I moved upwards into development engineering in fiber lasers, becoming involved in new projects as well as sustainment work.

Alison O'Neil, Canon Medical Research Europe

I am an AI scientist at Canon Medical Research Europe (CMRE). Following an MEng degree in Electrical Engineering at Edinburgh University, I completed an engineering doctorate on medical image analysis through the Photonics CDT at Heriot-Watt University, sponsored by CMRE, finishing in 2016. My EngD focused on decision forests and atlas techniques for the detection and segmentation of anatomical structures in medical scans. I currently work as a research scientist on developing machine learning algorithms, primarily neural networks, for medical imaging and healthcare applications.

Ross Leyman, Optos

Debbie Gunning, Leonardo