2016-2017

Wild Geese
GradLink Mentoring Programme

School of
Physics
Programme Launch

Order of Events

6:40 pm
Students and Mentors arrive

6:55 pm
Welcome from the Head of School, Alumni Office, Careers Advisory Service

7:15 pm
Mentors share their career experiences

8:15-9:00 pm
Mentors and students meet informally

Students must complete the GradLink Mentoring Application Form and drop them into the “Mentor Matching” boxes before leaving this evening.

Thank you!

Thank you to our Alumni Mentors, staff and students for their time, support and enthusiasm.
What is Mentoring?

Mentoring is an interactive learning and educational experience, between alumni and students, to assist students in their personal and career development.

Mentoring in the School of Physics

The mentors are alumni who have worked for a number of years and at the School’s request have agreed to share their experience and guidance. The mentees are students of the School interested in learning from the mentor’s experiences and being advised, guided and informed by them. This year, Gradlink is run in conjunction with the Junior Sophister Wild Geese programme which is run by Prof Werner Blau in the School of Physics.

How does the programme work?

During the programme launch, each graduate will give a brief introduction. A reception will be held following this, where students will have the opportunity to speak with mentors one to one or in small groups and to ask questions. At the end of the event students will be asked to fill out a mentor matching form and to indicate a first, second and third choice mentor etc. Students will be matched with a mentor and depending on demand, 1-3 students will be matched to each mentor.

What happens next?

Step 1: Students will be matched to their mentor at the Mentor Matching Workshops on the 5th December (1-2.30 pm).

Step 2: Mentors will be introduced by the Global Officer to their mentees via email.

Step 3: Students will arrange the first meeting with their mentors for January 2017. Two follow-up meetings are recommended between February and June 2017. Meeting space will be made available in the Global Room, Trinity College Dublin on one evening per month to facilitate these meetings.

To facilitate meetings, the Global Room has been booked on the following dates:

- February 1, 2017 from 6-9 pm
- March 1, 2017 from 5-9 pm
- April 5, 2017 from 6-9 pm
- May 3, 2017 from 5-9 pm

The Global Room is located in the Watts Building (beside Academic Registry).

Topics of interest to mentees in the past included:

- Researching and exploring particular job roles and sectors
- Review a CV/LinkedIn profile
- Practice job interviews, networking
- Introductions to other professional colleagues
- Finding jobs or postgraduate courses
The School of Physics

The School of Physics is one of eight Schools in the Faculty of Engineering, Mathematics and Science. The study and teaching of physics at Trinity College has a long and distinguished history and has included figures such as Hamilton, Lloyd, Fitzgerald and Walton, all of whom made important contributions to physics. Ernest T. S. Walton was the first Irish-born recipient of a Nobel prize in Science (1951). The Sami Nasr Institute for Advanced Materials, completed in 2000, houses the central part of the School today. The building provides excellent modern facilities for teaching and research for a very lively community of over 200, including over 25 academic staff, more than 50 postdoctoral fellows and over 100 graduate students, representing ten nationalities from three continents.

The School of Physics currently offers four undergraduate degree courses; Physics or Physics and Astrophysics (through Science TR071), Nanoscience; Physics and Chemistry of Advanced Materials (jointly taught with the School of Chemistry) and Theoretical Physics (jointly run with the School of Maths).

Mentoring Programme Contacts:

School of Physics
Niamh McGoldrick, GradLink Co-ordinator and Global Officer
Tel: 01 896 3463, Email: physalum@tcd.ie

Careers Advisory Service
Cliona Hillery, Careers Advisor
Tel: 01 896 1255, Email: hillerc@tcd.ie

Alumni Office
Dominique Twomey, Alumni Relations Executive
Tel: 01 896 8522, Email: twomeydo@tcd.ie

*Niamh is your first point of contact for questions regarding GradLink mentoring
## Careers Advisory Service

### Services on Offer

<table>
<thead>
<tr>
<th>MEETING ALUMNI &amp; EMPLOYERS</th>
<th>POSTGRADUATE STUDY</th>
<th>CAREER GUIDANCE</th>
<th>JOB SKILLS WORKSHOPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Careers Talks</td>
<td>• Personal Statements for Postgraduate Study workshop</td>
<td>• Confidential one-to-one meeting with your Careers Consultant</td>
<td>• Career Planning</td>
</tr>
<tr>
<td>• Employer Fairs</td>
<td>• PG Study talks on applying and finding funding</td>
<td>• CVs to impress</td>
<td>• Interview Success!</td>
</tr>
<tr>
<td>• Recruiter in Residence</td>
<td></td>
<td>• How to get the most out of LinkedIn (includes Networking)</td>
<td></td>
</tr>
<tr>
<td>• Employer led workshops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• GradLink Mentoring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Coffee Chats</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINDING JOBS</th>
<th>ONLINE</th>
<th>GUIDANCE TOOLS</th>
<th>CLASS WORKSHOPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Short-term, part-time, work experience &amp; internships (WE&amp;I), Graduate jobs advertised daily online</td>
<td>• Up to the minute jobs, funding events &amp; careers information</td>
<td>• Web-based tools to help sort through your options and focus on what suits you</td>
<td>• Discipline specific session with your Careers Consultant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POSTGRAD FOCUS</th>
<th>CAREERS WEEK</th>
<th>DROP IN CV/LINKEDIN CLINIC</th>
<th>PRACTICE INTERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Practical tips on applying for postgraduate courses</td>
<td>• Career Talks in a range of sectors &amp; Employer Skills Sessions</td>
<td>• Weekly drop-in clinics</td>
<td>• Book a practice run for your next interview</td>
</tr>
</tbody>
</table>

### Careers Advisory Service

**Opening Hours:** 9:30am - 5:00pm, Monday – Friday  
**Closed:** 12 noon – 1pm on Wednesdays  

2nd Floor, 7-9 South Leinster St.,  
Trinity College, Dublin 2  

T: 01 896 1721/1705  
E: careers@tcd.ie  
W: www.tcd.ie/careers
Graduate Profiles

Name: Roger Sweetman
Job title: Lecturer
Organisation: Maynooth University
Profile:
I am a Lecturer in Business Information Systems in Maynooth University where I teach social media marketing and contemporary project management. I am also a doctoral researcher with Lero, the Irish centre for software research. I have widespread industry experience in the financial and IT sectors. Prior to joining academia, I worked as a software design engineer with a number of ambitious companies in the RAID storage and processor design sectors. I also have extensive public sector experience, and have worked across a number of different environments.

Name: Brian Buckley
Job title: Senior Architect, Data Analytics
Organisation: Vodafone Ireland
Profile:
I graduated from TCD in 1992 and joined British Telecom at their research campus in Suffolk, UK as a Systems Analyst. I moved to Cambridge in 1995 where I worked with Nokia UK for a few years as a Software Engineer and then some really interesting spin-outs from Cambridge University such as Ionia and IP.Access Ltd. I returned to Ireland in 2002 working with Iona, Lucent, AOL, Sage, HMH and now Vodafone. Big Data Analytics is my current specialisation.

Name: Arlene O'Neill
Job title: Assistant Professor
Organisation: School of Physics, TCD
Profile:
After graduating with a degree in applied physics from DCU, I completed a PhD with Prof Jonathan Coleman in nanoscience. After my postdoctoral research, I started as a STEM Communication, Education and Outreach officer in CRANN. Since 2014, I am an Assistant Professor in the School of Physics, where I am also the co-founder and Director of the Trinity Walton Club, an educational program to support and equip tomorrow scientists, engineers, mathematicians, technologists, innovators and entrepreneurs.

Name: Niall McLaughlin
Job title: Physicist
Organisation: Blackrock Clinic
Profile:
I graduated with a degree in experimental physics in 2011, and then completed an MSc in medical physics, jointly run between Trinity and St James’s Hospital. After graduating in 2012, I began working in specialty insurance with Ironshore Europe Ltd working as a portfolio business analyst. Since March 2015, I have been working in the Blackrock Clinic as a medical physicist, dealing with areas such as radiation protection, personnel dosimetry, quality assurance of diagnostic imaging systems, and the preparation / delivery of radiopharmaceuticals.
Name: James Doyle  
Job title: Commercialization Manager  
Organisation: AMBER Centre, SFI Research Centre, TCD  
Profile:  
I have over 15 years of professional explorations in the high tech world, translating advanced material solutions to diverse industrial markets including healthcare, electronics, automotive, aerospace and renewable energy. Along the way, I've co-authored over 20 international peer reviewed papers, listed as inventor on several patents, co-founded a medical device start-up company and successfully supported over €6 million in funding for commercial research projects in the last 18 months.

Name: Marion Palmer  
Job title: Higher education  
Profile:  
I graduated in physics in 1977 and went to King's College London where I became a physics teacher. I taught in London for three years and then in three different schools in Dublin until 1997. I completed the Masters in Education at Trinity in 1988, where I researched Leaving Certificate science subject choices. I worked for the NCCA in 1997-98 as an Education Officer. In 1998 I joined the Dun Laoghaire Institute of Art Design and Technology as a lecturer, became Head of Department in 2007, completed an EdD at Queens University Belfast in 2009 and retired in 2016.

Name: David Long  
Job title: Early-Career Leverhulme Fellow  
Organisation: University College London  
Profile:  
Originally from Dublin, I completed my BA. Mod (Physics with Astrophysics) in 2007. I worked for a summer at NASA’s Goddard Space Flight Centre outside Washington D.C. before starting a PhD in Solar Physics at TCD in September 2007. During my PhD I was awarded a Predoctoral Fellowship at the Harvard-Smithsonian Centre for Astrophysics in Cambridge, Massachusetts. After defending my thesis in 2011, I joined the Solar Physics Research Group at Mullard Space Science Laboratory the same month. I’m currently at MSSL, where my research focusses on the initiation and early evolution of solar eruptions. I also teach part of the Solar Physics course at UCL and supervise PhD students and am part of the instrument team for the Extreme Ultraviolet Imager onboard the forthcoming Solar Orbiter mission.

Name: Friedrich Wetterling  
Job title: Director  
Organisation: Tomometrics Ltd  
Profile:  
I am an electrical engineer by training (M.Sc, Technical University of Ilmenau, Germany) and received my PhD from the School of Physics at Trinity College in 2010 after completing the development of a new sodium MRI technology and having elucidated a new way to detect tissue viability in stroke patients. I have recently established my own scientific consultancy business supporting start-ups and research groups in their efforts to develop new products for medical diagnostic purposes.
Name: Sophie Murray  
Job title: Research Fellow  
Organisation: School of Physics, TCD  
Profile: I graduated with a B.A. in Physics and Astrophysics in 2007, completed an MSc in Space Science at University College London, and then returned to TCD for a PhD in Solar Physics. From 2013-2016 I worked as a Space Weather Research Scientist at the UK Met Office, where I transitioned basic research to operational space weather forecasting. I am currently working with the TCD Astrophysics Research Group, researching the causes of solar eruptions and developing space weather services for Ireland.

Name: Justin Lawler  
Job title: CTO  
Organisation: Qualflow Systems ltd  
Profile: After finishing my PhD in 1993, I won a Marie Curie Individual Fellowship to carry out research in the University of Nijmegen (Netherlands). I returned to Ireland in 1996 (DCU) before moving to the private sector to work for IBM from 1997 until 2000. I then joined an Irish startup (Scientific Systems) that developed process control systems for the semiconductor industry. I worked as the technologist responsible for US clients in California and Oregon. In 2005 I left to start a new company (Qualflow Systems) as the CTO, developing products for the beverage dispense and control sector.

Name: Barry Murphy  
Job Title: Research Fellow  
Organisation: School of Physics, TCD  
Profile: I earned a B.A. in Physics & Computer Fellow Simulation from TCD in 2009, and joined the Applied Physics Research Group as a PhD student later that year. Since completing my PhD, I have worked as a research fellow where my current research is focused on the growth of graphene on low-cost substrates of industrial relevance and the vicinal surfaces of silicon crystals. My main expertise is in Scanning Tunneling Microscopy (STM) and Ultra-High Vacuum (UHV), as well as the simulation of physical systems by Density Functional Theory (DFT). I am now working on a commercialisation project funded by Enterprise Ireland and Science Foundation Ireland, which focuses on monitoring and analytics of power distribution grid assets, and we hope to launch commercially in the next 12-18 months.

Name: Rodney Birch  
Job title: IT Consultant  
Organisation: Orby Technologies  
Profile: After an MSc in Computational Physics, I joined IBM as a graduate software developer. Eight years later I joined a smaller software company which grew from 20 to 120 people. The company was bought by a US multi-national where I continued my career into technical management. 2010 was a watershed in my career where I changed to become a self-employed consultant. This required me to quickly learn a new set of non-technical skills in entrepreneurship, marketing, sales and company finances.
Nick Sparrow
**Job title:** Director of Development
**Organisation:** Trinity College Dublin

**Profile:**
I left physics, joined KPMG and qualified as a chartered accountant. I went on to spend a year in Libya in the state oil refinery, and then returned to Ireland and set up my own consultancy designing and installing financial systems. I joined Belvedere College as an administrator where I managed a major building programme and a fundraising programme. Since coming to Trinity in 2000, I work as the Director of Development where I am responsible for alumni engagement, development and the forthcoming Trinity campaign.

Philip Lyons
**Job Title:** Data Scientist
**Organisation:** Core Media Ireland

**Profile:**
I am currently a Data Scientist in Core Media. I was awarded both a B.A. in Chemistry and Physics of Advanced Materials followed by a PhD in Physics from Trinity College Dublin. I completed my PhD under the supervision of Prof Jonathan Coleman for my work in understanding the optical and electrical behaviour of state-of-the-art transparent and flexible electrodes based on 1-Dimensional nanostructured networks. These materials are currently featured in the latest generation of flat panel displays. I have also worked as an industrial researcher (Medtronic) and as a mediator with the Science Gallery.

David McCloskey
**Job Title:** Assistant Professor
**Organisation:** School of Physics, TCD

**Profile:**
I completed my undergraduate studies in Theoretical Physics in 2008. I completed my PhD and postdoctoral research in nanophotonics and nanoscale thermal transport with Prof John Donegan. I have also had the chance to do research in the Institute of Photonic Sciences (ICFO), Barcelona, the Fresnel Institute Marseille, and Massachusetts Institute of Technology (MIT) in the US. During my research I have also worked on projects with MNCs such as Western Digital and Alcatel Lucent. In 2016, I became an Ussher Assistant Professor in Physics.

Shane Duane
**Job Title:** Business Analyst
**Organisation:** Avolon

**Profile:**
I graduated with a degree in Theoretical Physics from Trinity in 2012. I completed my PhD and During my degree I worked as a research intern in NUIG where I wrote software to model quantum walks with Dr Michael McGettrick. I have also worked as a research intern in CRANN. Since April 2014, I have worked in aviation, first with the Apollo Aviation group and then with Avolon (since July 2016) which is one of the world’s global aircraft leasing firms.
Name: Maurese Gaugan
Job Title: Risk Consultant
Organisation: Ernst and Young
Profile:
I am a risk consultant and internal auditor working within the Advisory department at EY, Dublin. I have successfully completed the CAP2 level of the Associate Chartered Accountant (ACA) qualification with the Institute of Chartered Accountants Ireland and have begun my FAE studies in October 2016. I graduated from Theoretical Physics at Trinity College Dublin. I have also worked as a research intern with Met Éireann and as a tutor for Kumon, an afterschool math and reading programme for 3-16 year olds.

Name: Derek McHugh
Job title: Stochastic Analyst
Organisation: Zurich Life Assurance plc
Profile:
I graduated from Trinity with a BA Mod in Theoretical Physics, Mathematics, Physics, Computer Programming in 1999, followed by a Master’s Degree in High Performance Computing in 2000. In 2005 I completed my PhD in Mathematical Physics in Maynooth University. I have previously worked as a Marie Curie postdoctoral fellow in the Research Center for Quantum Information Bratislava, and in the University College Dublin as a Lecturer in Mathematical Physics (2007-2008), and as a Research Information Officer (2008-2012). I am currently a physicist turned Data Scientist. I have strong expertise in project development and team management, and am interested in analytical and management roles within innovative and research-led organisations.

Name: Rebecca Feeney Barry
Job title: Senior Consultant
Organisation: Element Energy
Profile:
I graduated from Trinity in 2013 with a BA in Physics with Astrophysics. I then went on to Imperial College London where I finished my Master’s degree in Optics and Photonics in 2014. In 2015 I started working as a Consultant in Element Energy, where I worked mainly in the Energy Systems and Markets team, particularly in the areas of demand side response and energy storage technologies. I am currently still working at Element Energy as a Senior Consultant.

Name: Aaron Meagher
Job title: Senior Data Scientist
Organisation: Web Summit
Profile:
I graduate from Trinity College Dublin with a BA in Theoretical and Mathematical Physics in 2008, followed by a PhD in in the Foams and Complex System research group in 2012, where I finished with the Bradley Prize for best PhD dissertation in physics. I then went on to work as a Physics Researcher in TU Berlin, where I did postdoctoral research into the 3D analysis of aqueous foams and generation of ordered metallic foams for the aeronautical industry. Currently, I am working as the Senior Data Scientist in Web Summit, where I am responsible for network analysis, construction of automated ads platform, development of analytical techniques, amongst other things.
Name: Martin O'Toole  
Job title: Technology Development Engineer  
Organisation: Globalfoundries  
Profile:  
I graduated from Trinity with a BSc in Physics and Chemistry in Advanced Materials, followed by a Master's in Nanoscience. I worked as an intern in IMEC in 2001; the next year I started work as a researcher in CRANN. In 2007 I joined Intel as a Quality and Reliability Engineer for 3 years. Since 2011 I have been working for the semiconductor company Globalfoundries in New York state as a BEOL Integration Engineer.

Name: Richard Morrin  
Job title: Financial Officer  
Organisation: International Finance Corporation (World Bank Group)  
Profile:  
I graduated with a degree in Theoretical Physics in 2002. I then completed the M.Sc. in High Performance Computing in the School of Mathematics before joining the Lattice QCD group there and completing my PhD. I then moved to Washington D.C. to join the Treasury Quantitative Analysis group with IFC. The main responsibility of our group is to ensure accurate valuation of all our financial instruments and derivatives. During my time in Trinity, I was actively involved with both the Boxing and Athletics clubs; serving as captain of the former and secretary of the latter. I hold Chartered Financial Analyst; Financial Risk Manager; Energy Risk Professional; and Investment Performance Measurement professional certifications.

Name: Lennon O'Naraigh  
Job title: Assistant Professor  
Organisation: School of Mathematics and Statistics, UCD  
Profile:  
I am an applied mathematician by training, interested in the application of any mathematical tool to any problem of practical interest, especially the difficult ones. I was an undergraduate at Trinity College Dublin, and I later obtained my Ph.D. at Imperial College London, under the supervision of Jean-Luc Thiffeault. I started a lectureship at University College Dublin in January 2010. Before joining UCD, I spent two years as a postdoc in the Department of Chemical Engineering, Imperial College London.

Name: Neal Ó Riain  
Job title: Community Manager  
Organisation: Pivago  
Profile:  
I am originally from Carlow, and did my undergraduate degree and PhD in Astrophysics at Trinity College, Dublin. My PhD research topic was stellar astrophysics, making mathematical and computational models of the atmospheres of stars. During my time in academia I was heavily involved in science engagement and education, including starting Student2Scientist, a science education initiative funded by Google and SFI, aimed at introducing computing centrally in the Irish STEM curriculum. I am now based in London, working as the Community Manager at Pivigo, a data science training and consulting company.