

## Scottish Crucible Alumni Network

### Examples of tangible impacts of undertaking Scottish Crucible programme

January 2018

#### Dr Katherine Duncan - Scottish Crucible 2017

Chancellor's Fellow and Lecturer in Drug Discovery

Strathclyde Institute of Pharmacy & Biomedical Science, University of Strathclyde

<https://www.strath.ac.uk/staff/duncankatherinedr/> email: [Katherine.Duncan@strath.ac.uk](mailto:Katherine.Duncan@strath.ac.uk); Twitter: @kate\_duncan

#### Dr Lucas Richert - Scottish Crucible 2017

Lecturer in Pharmaceutical and Mental Health History

Department of History, University of Strathclyde

<https://www.strath.ac.uk/staff/richertlucasdr/> email: [Lucas.Richert@strath.ac.uk](mailto:Lucas.Richert@strath.ac.uk); Twitter: @LucRichert



Both early career academics, Katherine Duncan (KRD) was one year into her Chancellor's Fellowship, while Lucas Richert (LR) was one year into his Lectureship when they attended the Scottish Crucible in spring 2017.

Since finishing the Scottish Crucible programme in July, KRD (PI) and LR (Co-I) have been successful in obtaining funding through The 2017 Royal Philosophical Society of Glasgow (<http://royalphil.org>) grant scheme (deadline October). This grant titled 'Marine Natural Products: Evolution and Adaption of a Discipline' is a three year award commencing in April 2018. This research will lead to the publication of the first book on the history of marine natural products. It will communicate scientific breakthroughs to a wider audience, thus aiding greater public understanding and furthering research within this area. The co-authoring of this book, by both a scientist and a historian within Glasgow, fosters a dialogue across disciplines. KRD and LR plan to submit further applications (i.e. to the Wellcome Trust) for further interdisciplinary research collaboration.



We have both benefited as new academics (principal investigators) within Scotland from greatly expanded networks, both in terms of research, policy, industry and academia:

- KRD has been selected for Homeward Bound 2018 as one of 80 women scientists from across the world to go to Antarctica in February 2018 for a global, women in science leadership programme. KRD will be interviewed for the BBC early in January about her marine natural products drug discovery research, a result of the visibility training received at the Scottish Crucible workshops. KRD is currently on a 4-week interdisciplinary SULSA (Scottish University Life Science Alliance)

funded early-career research fellowship to an internationally leading bioinformatics lab in the Netherlands, a multidisciplinary collaboration applied for after attending the Scottish Crucible.

- LR has been selected to participate in the AHRC's Engaging with Government programme in March, 2018. Lessons learned during the Scottish Crucible will be valuable as he undertakes this further training in the policy-making process. LR has also used lessons from Scottish Crucible's focus on public engagement to communicate about his research with readers of *The Psychologist* and *British Journal of Psychiatry*.

### Dr Poppy Lamberton - Scottish Crucible 2016

Senior Lecturer and Lord Kelvin Adam Smith Leadership Fellow  
Institute of Biodiversity Animal Health and Comparative Medicine, University of Glasgow  
<https://www.gla.ac.uk/researchinstitutes/bahcm/staff/poppylamberton/>  
Tel: +44 (0)141 3305571 | email: [Poppy.Lamberton@glasgow.ac.uk](mailto:Poppy.Lamberton@glasgow.ac.uk) | Twitter: @PoppyLamberton



I attended Scottish Crucible in spring 2016 when I had just moved to my new position. It provided an excellent opportunity to meet and collaborate with people across Scotland as well as guidance on new research aspects and interdisciplinary ideas. Since Scottish Crucible:

- As PI, I have been awarded an MRC GCRF Foundation Award, working with a social scientist, an anthropologist and an economist on the project '*Cultural, social, and economic influences on ongoing Schistosoma mansoni transmission, despite a decade of mass treatment, and the potential for change.*'
- I am a Co-I on a 3 year EPSRC grant: '*Novel Low Cost Diagnostic Tools and their Impact in Africa*', with Prof Jonathan Cooper who I met at the first Scottish Crucible networking event. Jon and I were also awarded an EPSRC project for £40,000, directly stemming from our crucible meeting.
- I now also have two new interdisciplinary PhD studentships, one with Social Sciences and one with Engineering (not with Jon, but with other new collaborators in engineering).
- I have recently been awarded an additional PhD funding by Medical Research Scotland, working with Omega Diagnostics, to develop a rapid point of care diagnostic for schistosomiasis. This PhD will be advertised soon. This will be my first industry collaboration and the knowledge on IP gained at crucible really helps with this.
- We also have a PhD advertised, with Lisa Boden (Scottish Crucible 2016) as primary supervisor, on the HIVE project which Crucible directly funded.
- I was more recently selected for BBC media training as part of the BBC Expert Women.

Some, if not all, of these have been helped by what I learnt at Scottish Crucible, and there are many more, less measurable, benefits that have helped me settle in so fast as a new PI in Glasgow.

### Dr Timm Krüger – Scottish Crucible 2016

Chancellor's Fellow, School of Engineering | University of Edinburgh  
Tel: +44 (0)131 650 5679 | [tim.krueger@ed.ac.uk](mailto:tim.krueger@ed.ac.uk) | [www.eng.ed.ac.uk](http://www.eng.ed.ac.uk)  
Personal website: [www.timm-krueger.de](http://www.timm-krueger.de) | Twitter: @TimmKrueger

The most tangible impact of Crucible was that we could turn our Crucible project into a funded PhD studentship. Bean, Filippo (both Scottish Crucible 2016) and I are now sharing a PhD student in the Precision Medicine DTP at Edinburgh University (<https://www.ed.ac.uk/studying/postgraduate/degrees/index.php?r=site/view&id=919>).



Without Crucible this would never have happened.

Crucible also helped me to sharpen my priorities and to appreciate that research disciplines grow together at an ever-increasing rate. I am currently involved in two project proposals that are more interdisciplinary (physics, engineering, medicine) than the projects I worked on before participating in Crucible. Scottish Crucible gave me more confidence in this respect.

### Dr Robin Sloan – Scottish Crucible 2015

Creative Industries Theme Leader and Programme Leader, Game Design and Production  
Division of Games and Arts, School of Design and Informatics, Abertay University  
Tel: 01382 308177 | [r.sloan@abertay.ac.uk](mailto:r.sloan@abertay.ac.uk) | [www.robinjss.co.uk](http://www.robinjss.co.uk) | @RobinJSS



I have won follow-up funding for the two Scottish Crucible projects I was involved with:

–Nine Incorporated Trades of Dundee (Robin Sloan and Adrian Saurin – Scottish Crucible 2015) - internship funding to develop “The Enemy Within” project for web.  
–University of Dundee/Wellcome Trust (Adrian Saurin and Robin Sloan) - funding to further develop and evaluate The Enemy Within project.

- BA/Leverhulme (Marisa Wilson, Emma Bond – both Scottish Crucible 2015 and Robin Sloan) - funding to continue our archive and game-design research as part of our Sugaropolis project.

Marisa, Emma and I have also had unsuccessful grants submitted to SGSAH and AHRC (Immersive Experiences call), but are hoping to build on this momentum with a network grant that we will develop in the new year.

To reflect on my SC experience, I've recently been promoted to the Creative Industries Theme Leader at Abertay University, which accounts for 1/3 of my workload. At Abertay we have four research themes, so my role involves leading our research and KE related to Creative Industries theme (the others being Society, Security, and Environment). I used my SC training and experience as the foundation for applying for this role.

I'm continuing to develop interdisciplinary proposals and collaborations going forward, particularly in the space of digital mental health. I feel my SC experience has prepared me for this complex research work across disciplines and involving diverse stakeholders. Currently this work involves: co-leadership of three connected PhD studentships that are tasked with researching game design to assist families whose wellbeing is adversely affected by cancer diagnosis; continued development of a VR mindfulness game, which I presented at Chi Play in October; and the Dundee and Me project (collaboration with a psychologist, creative writer, and two geographers) which seeks to research how our wellbeing is affected by the environment.

### Dr Heather May Morgan – Scottish Crucible 2015

Lecturer in Applied Health Sciences

Office: 1.072 Polwarth Building | University of Aberdeen | Foresterhill | Aberdeen | AB25 2ZD

Email: [h.morgan@abdn.ac.uk](mailto:h.morgan@abdn.ac.uk) | Telephone: +44 (0) 1224 437860

I would attribute these successes to my participation in the Scottish Crucible programme in 2015:

- GRANTHOLDER ON £1.5M NIHR EME STUDY: 2017
- CO-PI ON KNOWLEDGE EXCHANGE AND COMMERCIALISATION GRANT: 2016
- INVITED TO SIT ON GRANTS AWARD PANEL (APPLIED HEALTH RESEARCH) BY GERMAN GOVERNMENT: 2016
- INVITED TO BECOME TRUSTEE OF NEW NICOTINE ALLIANCE CHARITY: 2016
- AWARDED PRINCIPAL'S PRIZES FOR PUBLIC ENGAGEMENT WITH RESEARCH: (2015 – pre-SC) 2016 and 2017
- Co-founder of the newly formed [SAGES funded 'Pollinating Wellbeing'](#) forum
- Secured full time, permanent lectureship (at Aberdeen) after 5.5 years on short term research contracts
- Became lead for public engagement in our [Institute of Applied Health Sciences](#) in 2017 (suggested creation of role)
- Joined the board of the Open Data Institute's Aberdeen node [Open Data Institute's Aberdeen node](#) (invited)
- BBC TV and radio interviews, Sky News live appearance and first person piece in the Daily Mail - coverage of a research paper in July 2017.





## Dr Carol Emslie – Scottish Crucible 2014

Reader / Lead Substance use & misuse research group  
School of Health & Life Sciences, Glasgow Caledonian University  
<https://www.gcu.ac.uk/hls/staff/drcarolemslie/>  
email: [carol.emslie@gcu.ac.uk](mailto:carol.emslie@gcu.ac.uk) Twitter @SubMisuseGcu



Selection and participation in Scottish Crucible increased my confidence in myself as a research leader in the alcohol field, and gave me strategies to achieve my existing goal of communicating my research outside academia. The sessions which emphasised the importance of visibility both within and beyond the academic community and how to build on our status as experts with policymakers and the media were excellent and something I still think about and pass on to others. Being surrounded by such an impressive peer group in terms of energy, curiosity, friendliness, openness and intellect was a memorable and inspiring experience. As a mid-career researcher with young children working part-time, I had always been productive, but Scottish Crucible made me more focused, confident, willing to approach others to collaborate on projects and to go outside my comfort zone. I am now developing a Crucible programme at Glasgow Caledonian University (GCU).

Tangible examples of the effects of Scottish Crucible include:-

**Initiating mutually beneficial collaborations with charities** who have assisted with PPI work for grant applications, funded projects, helped produce colourful reports which reach a wider audience than academic papers (see link below), and organized the launch of our research to health professionals and policymakers at the Scottish Parliament

[http://www.gcu.ac.uk/media/gcalwebv2/gcunewsroom/publications/shaap-glass-report-\(web\).pdf](http://www.gcu.ac.uk/media/gcalwebv2/gcunewsroom/publications/shaap-glass-report-(web).pdf)

**Community & Public engagement** through sold out events at the Glasgow Science Festival (e.g. “Alcohol, music, technology & you”. “Can we harness the digital revolution to improve health in Scotland?”), GCU’s ‘Food for Thought’ event at Queens Cross Housing Association, and presenting to the University of Stirling Alcohol Discussion Public Involvement Group: “Alcohol and identity; does what and how you drink reveal who you are?”

<https://glasgowsciencefestival.wordpress.com/2015/05/14/alcohol-music-technology-and-you/>

**Media coverage, offering expert opinion and blogging for “The Conversation”.** Our recent work on how UK newspapers cover women’s binge drinking received extensive coverage (e.g. the Times, Herald, Independent, Scotsman, Guardian, Daily Mail, BBC news online). Writing a piece for The Conversation helped to increase the reach of this research, and I have encouraged many colleagues to do this too (as recommended by Scottish Crucible). I have also worked with the GCU Communications department to offer expert opinion on alcohol issues (e.g. on Minimum unit pricing) <https://theconversation.com/when-media-use-pictures-of-drunk-girls-in-alcohol-stories-were-being-misled-70714>

<https://www.gcu.ac.uk/newsroom/news/article/index.php?id=248571>

**Social media.** Our group (@SubMisuseGcu) has the most active research Twitter account at GCU (> 1800 followers). This allows us to interact with third sector groups, funders of research, policy makers, politicians, practitioners and the public as well as increasing the visibility of our group and our research.

**Increasing interdisciplinary discussion about alcohol research** through the organization of a symposium: How do different disciplines talk about alcohol? This event trended on Twitter (see <http://tinyurl.com/gvs85gi> for an overview) and was also disseminated via an accessible report:- <http://www.shaap.org.uk/news/new-shaap-report-responsible-thinking-bsa-alcohol-group.html>

## Dr Andrew Davie – Scottish Crucible 2012

Senior Lecturer  
Institute of Aquaculture, University of Stirling  
[andrew.davie@stir.ac.uk](mailto:andrew.davie@stir.ac.uk) | @adavie\_aqua



I attended Scottish Crucible in 2012 the same year I was awarded my first Lectureship position. While I found it challenging, I have to admit that I thoroughly enjoyed the experience and have been a firm advocate of the programme ever since. A notable benefit of the experience that is perhaps overlooked is the creation of a peer group across the Scottish academic community. As a probationary lecturer at the time, I found it very helpful to discuss with others, their experiences and progression and this cross institution, peer to peer support continues to this date.

The Scottish Crucible had a number of impacts on my research and performance as an academic. It really demonstrated to me the importance of building networks both cross discipline and cross institutions. In doing so, developing ways and means to find common languages to work towards a common goal has been a recurring theme in my research activities.

It also highlighted to me the importance of your visibility within the academic community but, perhaps more importantly, my visibility out with academia. I spend most of my time in industry-focused collaborative research projects; I currently run a number of significant projects co-funded by the Scottish Aquaculture Innovation Centre in collaboration with a range of Industry partners. In 2016, the consortia was awarded the Scottish Enterprise Life Sciences award for “Innovative Collaboration”. My approach to the management and running of these consortia is most certainly a reflection of the lessons learned in Scottish Crucible.

The discussions and exercises around media and public engagement were also very helpful, it changed my viewpoint and made me focus more consciously on this aspect of my output. In 2017 I filmed an episode for Channel 4 “Food Unwrapped” based on our cleaner fish research and again, it was Scottish Crucible training that made me approach this with greater confidence and focus with respect to the messages we wanted to be portrayed.

## Dr Colin Moran - Scottish Crucible 2012

Senior Lecturer in Physiology, Exercise and Nutrition Research Group  
Faculty of Health Sciences and Sport, University of Stirling  
<https://www.stir.ac.uk/people/11195>

Email: [colin.moran@stir.ac.uk](mailto:colin.moran@stir.ac.uk); Twitter: @DrMoran



Scottish Crucible is both an intensive and rewarding professional development programme and a network of open minded people. I attended Scottish Crucible in 2012 not long after obtaining a lectureship at the University of Stirling. My involvement changed my understanding of impact; it changed the way I think about collaborations; and, it gave me the confidence to think of myself as a leader in research and as an expert in research when dealing with the media. The Scottish Crucible is also an ongoing network of open minded individuals across disciplines and across Scotland. Alumni events, with an

increasing number of new members, provide excellent opportunities to meet, collaborate and discuss ideas with collaborative minded researchers from across Scotland.

Since attending Scottish Crucible, I have been involved in a number of projects directly influenced by my experience of, or connections made at, the Scottish Crucible:

- Through contacts made at Scottish Crucible, I formed a collaboration with a psychologist at the University of Glasgow and provide genetic expertise on the **Kinship project** – investigating how humans recognise kin. This work is worth ~£250K to the University of Stirling.
- Returning from Scottish Crucible, Craig Roberts, Andrew Davie (also of University of Stirling) and I realised that the research community at Stirling could benefit from a similar interdisciplinary programme. The **Stirling Crucible** was launched in 2014 proving very popular. We are currently advertising for our third intake of Stirling Cruciblists.
- I co-lead on research into the popular primary school physical activity intervention, the **Daily Mile**. Our research is the first to directly investigate the veracity of the anecdotally reported benefits of taking part in the Daily Mile. This has given me the opportunity to have direct links into government and media. The core research team was put together using connections made through the Stirling and Scottish Crucibles.
- As a direct result of this work, we developed a project with **BBC Terrific Scientific**. Terrific Scientific projects are required to be a mix of public engagement and research. Academics design research projects on unanswered research questions and design classroom material that allows primary school children to conduct the necessary experiments. Results are reported back for publication. Our Exercise Investigation had almost 12,000 children around the UK sign up.
- Through the popularity of the Daily Mile, I have been interviewed for TV (BBC, CBS, Catalan TV3), Radio (BBC) and national and international newspapers (The Times, France Ouest, The Guardian). I additionally have written on genetics for The Conversation and other online news outlets leading to radio interviews (BBC Scotland, Newstalk (Ireland) and 2SER (Australia)). I would not have been so prepared to **engage with the media** without Scottish Crucible.

The Scottish Crucible has been key in developing my own research network and I continue to recommend the programme to all early career researchers.

## Dr Rebecca Wade – Scottish Crucible 2009

Senior Lecturer in Environmental Science,  
School of Science Engineering and Technology, Abertay University  
<https://www.abertay.ac.uk/staff-search/dr-rebecca-wade>  
Email: [r.wade@abertay.ac.uk](mailto:r.wade@abertay.ac.uk) Twitter: @RebeccaCarrotte



I attended the first Scottish Crucible in 2009. I gained a huge amount from the experience and can honestly say that I have continued to be engaged with, and benefit from, the Crucible network in every year since I attended.

In 2009 I was a relatively new lecturer, working mostly with civil engineers, although my qualifications are in physical geography and landscape processes. I had always had a passion for interdisciplinary research, so

Scottish Crucible really appealed to me. This was an opportunity to explore a challenging and stimulating aspect of academia that inspired me to have an interest in science and society beyond my own research, and critically, to enhance the impact of my research.

During Scottish Crucible, I was exposed to people, opportunities, ideas, skills and networks that I would not otherwise have experienced. The ideas and relationships have persisted, and grown, I have met and collaborated with later participants/alumni, we have common ground BECAUSE of Scottish Crucible. Crucible training has helped me to increase the impact of my work via media (local newspapers, local radio and BBC Radio Scotland), and through public engagement via Science festivals, as a STEM ambassador to schools, and as coordinator of Café Science Dundee events, Women in Engineering day activities and the Dundee Women in Science Festival.

In terms of tangible outcomes from Scottish Crucible, I can trace the direction and influence of my subsequent research, my engagement with media and policy and some of my networks back to Scottish Crucible (SC) 2009.

- 2 Scottish Crucible funded interdisciplinary projects (Making space for water, biodiversity and people in Scotland's cities. With: Dr Jo Vergunst (Aberdeen), and: Is "grow your own" sustainable urban food production? With: Dr Christine Switzer (Strathclyde), Dr Tim George (Scottish Crop Research Institute), Dr Lisa Lee (Edinburgh), both leading to further proposals.
- SC collaboration gained me an invitation to contribute to The Institute for Advanced Studies programme Designing Environments for Life workshops, seminar at Scottish Government offices in Edinburgh and subsequent touring exhibition of art and design (2009-10).
- Ideas, skills and contacts from SC2009 fed directly into 3 RCUK cross-council Connected Communities projects I was developing. Submitted in 2009, all 3 projects were funded.
- In 2010 and 2011, we devised and hosted an 'Abertay Crucible' with cross-campus collaborative workshops. Successful project ideas led to funding for interdisciplinary projects.
- Involvement in a SC funded project led by Helen Bridle in 2012 (along with Janine Illian and Nimesh Moodie - SC 2009 & 2010) led to a Leverhulme proposal in 2013-14.
- Drawing on the policy and press engagement skills developed in SC I organised a policy briefing event at Scottish Government offices at Victoria Quay (about Urban flood management and diffuse pollution), and was interviewed live on BBC Radio Scotland Newsdrive (2013).
- In 2013 a 'cold call' from a poet (Lesley Harrison) who had read about my SC project with Jo Vergunst led to collaboration on a successful 'Projects for Scotland' proposal (2013 year of Natural Scotland) with outputs published 2014 and BBC Scotland Radio coverage in 2015.



- Around the same time I was working across disciplines with Artists, musicians and scientists on the ACES collaboration (funded by Creative Scotland), culminating in a public exhibition, art installation and science-inspired musical performance in Aberdeen.
- Subsequent projects and collaborations (including with SC alumni) have incorporated cross-disciplinary approaches, and 'crucible-thinking' in projects carried out across the globe from Scotland to Brazil and ranging from small-scale, local projects, to national RCUK funding bids, to international Global Challenge and Newton Fund research.

Scottish Crucible Directorate  
Centre for Academic Leadership and Development  
Heriot-Watt University  
Email: [ScottishCrucible@hw.ac.uk](mailto:ScottishCrucible@hw.ac.uk) Tel: +44 (0)131 451 3789  
<https://scottishcrucible.org.uk/>