



SAGES Innovation Programme

2017 – 2018

IMPACT REPORT | June 2018



THE UNIVERSITY
of EDINBURGH



Foreword

I am delighted to welcome you to the first report of our SAGES Innovation Programme, hosted and delivered by the team at the Edinburgh Centre for Carbon Innovation (ECCI). Postgraduate training, either a taught Masters, Masters by research or a PhD, has evolved considerably from the era of distant student-supervisor relationships, with researchers working in isolation from the 'real' world. Today, our researchers undertake focused training and are wholly engaged with innovation in its truest sense. Modern researchers are able to talk to the public, to business, and to their stakeholders about their research, its impact and its societal relevance. Innovation Centres, Doctoral Training Programmes and International Training Networks all embed this ethos and provide the structure for developing our future researchers. At SAGES, we are passionate about our science and committed to providing the very best opportunities for postgraduate training to our members.



Dr John Howe, SAGES Graduate School Convenor

Results

700+

businesses and organisations made aware of the SAGES programme



30+

attendees at workshops and events



11

students and lecturers attended workshop on delivering research for Government policy



17

organisations interested in working with SAGES students



5

SAGES students completed an internship



5

industry engagement events delivered



Introduction

ECCI successfully delivered the SAGES Innovation Programme, a pioneering career enhancement opportunity for SAGES PhD students, between October 2017 and June 2018. This impact report details the delivery and impact of key activities for both the students and the host organisations involved.

Aims of the SAGES Innovation Programme

- Focused engagement with business and policy (five placements): Match students with a wide range of entrepreneurs and end users, including Government policy teams, which work in SAGES priority areas.
- Training and skills in impact and innovation (five workshops): Help SAGES students understand UK innovation systems; and overcome lack of confidence by students when engaging with non-academic sector by delivering four skills and industry workshops.

SAGES Innovation Programme design

Industry placements

October – May 2018

The SAGES Innovation programme 2017/18 linked PhD students with the new generation of entrepreneurs on ECCI's Climate-KIC Accelerator programmes, innovative businesses based in the centre and ClimateXChange, Scotland's centre of expertise on climate change hosted by ECCI, for meaningful research work opportunities. Students' areas of business and research interest were matched as closely as possible. The programme worked with end users to ensure each placement was based on a clear need for qualified students to conduct research in a business or policy setting. Seventeen organisations contacted ECCI to express an interest in providing a student placement opportunity.

Workshops

December 2017 – May 2018

ECCI was tasked with delivering three workshops – and delivered five within budget. The training and skills module engaged SAGES students in impact and the UK innovation system via 'industry and innovation' workshops and CV / career development workshops that aimed to boost students' confidence and skills in engaging with the non-academic sector. The workshops provided an overview of the entrepreneurship skills required to set up a business, communicate research and skills effectively to industry and policy makers, and develop a professional profile to enhance future prospects.

Impact

Industry placements

The SAGES Innovation Programme matched PhD students with end users in industry and policy.

Students were surveyed at the start of the programme to gauge their level of business and policy experience and knowledge. Generally, the students surveyed felt they had a better awareness of their research within a policy context than a business context. The survey also highlighted the skills and training students needed to work with businesses, in particular business networking and engagement and the basics of

running a business. Over 94% of the SAGES students also felt they would benefit from support with communicating research to audiences outside academia.

Every student that applied to the programme was offered an internship relevant to their research interests with a business or policy-focussed host organisation. Not all placements could be filled due to individual PhD course commitments and timescales.



Student and organisation matching

Student Name	Organisation Name	Project	Dates
Penny How	Space Intelligence	Science Communicator – articles on deforestation and its relation to palm oil	April – May 2018
Harry Eggo	WHRL	Analyst – production of mathematical models for analysis of heat recovery	March – May 2018
Zermina Qayyum	East Africa Sisal Company	Researcher – analysis of businesses contribution to the SDGs	Feb – May 2018
Alexis Moyer	Carbomap	Researcher – mapping role on international projects	Feb – May 2018
Roseanne McDonald	ClimateXChange	Researcher – surveys and interviews on how information on SuDS are retained by local authorities	Feb – May 2018

Feedback from students

100% of students learned beneficial new skills during the SAGES Innovation Programme. 100% found the internship useful for their future career prospects.



‘[I gained new skills] writing up research findings in a policy context and producing a non-scientific style report. [The internship] opened up a different type of career opportunity outside academia, e.g. policy work.’



‘I learned how to download and work with Sentinel-1 data...and radar data in general. [Without the internship] I likely would not have [gained] industry or policy experience.’



‘[The internship] provides perspectives on careers outside of academia.’

Feedback from businesses



The intern’s skill-set and previous experience was very well suited to our business activities and became a great asset to the company.



The student had some skills and experience that I didn’t have and they were able to contribute effectively to the project.



We could not have been more pleased with the skills and knowledge that [our student] added to the team.



A great process to integrate academic and private business insights.

Workshops

Using its experience and knowledge of skills requirements, ECCI delivered five workshops - ranging from business networking opportunities to entrepreneurship skills, communicating research to policy-makers and career enhancement opportunities.

Workshop	Dates
Industry Meet 'n' Greet: Dragon's Den & Christmas Social	Tuesday 5th December 2017
Making Your Research Matter, run by ClimateXChange	Friday 8th December 2017
ECCI Spring Social & Workshop 'How to build your professional brand on LinkedIn'	Friday 30th March 2018
Impactful CV Skills: Communicating your PhD skills to Industry & Policy	Thursday 10th May 2018
Innovation & Business Skills Training	Thursday 17th May 2018

Making Your Research Matter workshop

All 11 students that attended the workshop agreed that it had helped them gain a better insight into end user requirements and increased their knowledge of communicating research to different audiences.

Workshop Attendees



The tour of parliament was particularly interesting and helped make the 'connection' between science and the setting within which decisions are made.



Very good – provided food for thought on how to present research for all and how to make it easy to access.



This has made me think differently about how I should and will present my research.



The workshop and tour of parliament was engaging and thought-provoking and made me think about how I can interact with policy. It was inspiring.

Conclusions

ECCI has successfully delivered the SAGES Innovation Programme for the first time, with positive feedback on the placements and workshops from both students and businesses. Students in particular are quick to realise the benefits of industry and policy engagement to their academic careers.

However, ECCI has identified a number of key learning points. These include engaging with students at the start of their PhD programme so that what they learn on the programme can be integrated into their study, and working with supervisors to support placements and provide flexibility around internship timescales.

This successful model can now be adapted and built on, with potential to expand the offering to other larger corporates and policy organisations. ECCI's partnership with Climate-KIC, the EU's biggest public-private partnership for action on climate change, also provides exciting opportunities for students to engage with innovators and business to explore real world impact.



