



innogen

Innogen Institute Annual Report 2018-2019



THE UNIVERSITY *of* EDINBURGH



1 Background

Established in 2002 as the ESRC Centre for Social and Economic Research on Innovation in Genomics, as a collaboration between the University of Edinburgh (UoE) and the Open University (OU) and as part of the ESRC Genomics Network, Innogen's goal was to build an internationally respected centre to enable social scientists and the ESRC to take a leading role in policy, public and innovation related debates on the social aspects of the life sciences.

In its first 12 years, the Innogen Centre received £7M core funding from the ESRC, £3M in institutional support, and £14M in external funding for 140 projects with international collaborations in 30 countries, resulting in over 900 publications, over 200 media reports and 400 knowledge facilitation activities.

Building on the success of the ESRC Innogen Centre, in 2014 the two host universities supported the establishment of the Innogen Institute (Institute for Innovation Generation), developing new methods and approaches to match the evolving opportunities arising from new scientific discoveries across an expanding array of advanced innovative technologies.

This document covers activity from April 2018 to March 2019 and demonstrates how the Institute continues to develop and ensure long-standing sustainability and growth, both academically and financially¹.

1.1 Mission

The Innogen Institute is a collaboration between the University of Edinburgh and the Open University that aims to produce high quality research to support the delivery of innovation that is profitable, safe, inclusive and societally useful, building on fundamental and applied research in science, medicine, engineering and social science.

1.2 Aims

- To build and consolidate new social science approaches and methods to meet the challenges of supporting innovation in the 21st century in developed and developing countries.
- To develop an integrated programme of research, consultancy, advice and teaching, in support of responsible, sustainable innovation that contributes to economic growth in the UK and abroad.
- To develop close collaboration across all colleges of the University of Edinburgh and all faculties of the Open University to ensure the Institute's work is optimally informed about scientific and medical developments and the innovation opportunities that arise from them, and to contribute to the delivery of impact from their research.

1.3 Objectives for 2019 - 2020

- To maintain and grow the body of social science and interdisciplinary knowledge on innovation through new and extended programmes of research.
- To extend the Institute's activities to cover a broader range of advanced innovative technologies, as scientific research opens up new opportunities that are relevant to the Institute's expertise.
- To strengthen links with OU Scotland and other relevant institutions.
- To build and consolidate the Institute's international collaborations around the world.
- To maintain and grow the effective collaboration between Innogen Institute staff located in the University of Edinburgh and the Open University to maximise the benefits arising from the skills located in each institution.
- To build the Institute's doctoral and masters level teaching and CPD programmes to support researchers and practitioners in industry, academia, policy, regulation and engagement.
- To continue to increase Innogen's impact on practice and policy, through documented uptake and use of Innogen Institute research outputs and advice.

¹ This report includes only items relevant to the period 1st April 2018 and 31st March 2019 but some items included in last year's Annual Report took place after the cut-off point of 31st March 2018. These cases have been included again in this year's report.

- To continue constructive engagement with stakeholders through effective communication and knowledge exchange.

2 Innogen Institute Structure

2.1 Innogen Institute Management

The Innogen Institute Management Team includes the Innogen Director, the Deputy Director, and Co-Directors from both The University of Edinburgh (UoE) and The Open University (OU) covering the Institute's areas of interest. The Management Team meets monthly to make strategic and operational decisions relevant to the work of the Innogen Institute. It also meets periodically with Innogen Institute Members to support planning of the Innogen programme of work (teaching, research, policy initiatives, publications and communications) and to ensure effective implementation of activities and initiatives.

The Management Team includes:

- **Prof Theo Papaioannou** (OU) Innogen Director
- **Dr Geoff Banda** (UoE) Innogen Deputy Director
- **Prof Joyce Tait** (UoE) Innogen Co-Director
- **Dr James Mitra** (UoE) Innogen Co-Director
- **Prof David Wield** (OU) Innogen Co-Director, Global Innovation
- **Professor Maureen Mackintosh** (OU) Co-Director, Economics
- **Dr Stuart Parris** (OU) Innogen Co-Director, Economics
- **Dr Peter Robbins** (OU) Innogen Co-Director, Internal Liaison and Administration
- **Dr Niki Vermeulen** (UoE) Innogen Co-Director
- **Dr Dinar Kale** (OU) Innogen Co-Director
- **Dr Farah Huzair** (UoE) Innogen Co-Director

2.2 Innogen Institute Membership

There are four categories of Innogen Institute affiliation:

Members are drawn from UoE and OU permanent faculty or contract-based researchers who actively participate in Innogen Institute teaching, research, publications, knowledge exchange and capacity building.

Associates are chosen to enhance the Institute's international innovation and development mandate and are drawn from Innogen Institute Visiting Fellows, academic staff at universities in the UK and abroad, industry, policy and other stakeholder communities.

Students supervised by Innogen members who advance, enrich and diversify the work of Innogen and who are expected to be core contributors to the Institute's activities, outputs, and culture.

Advisers are individuals with an interest in the work of the institute who are invited to make a particular contribution in a specific area based on their capacity and skills.

A list of the Innogen Institute's current affiliates can be viewed at www.innogen.ac.uk/people/

2.3 Staffing Changes

In September 2018, Professor Theo Papaioannou was appointed Director of the Innogen Institute and Dr Geoff Banda took the role of Innogen Deputy Director at the University of Edinburgh as Professor Joyce Tait stepped down from leading the University of Edinburgh side of Innogen.

Dr Ann Bruce stepped down from the Innogen management team from January to September 2019 to go on research leave.

Dr Farah Huzair has been on maternity leave from December 2018 until September 2019.

3 Achievements in 2018-19

3.1 Income Generation

The following grants were held by Innogen Institute members in the period April 2018-March 2019:

- Responsible Research and Innovation in the Engineering of Mammalian Systems. Joyce Tait, Jane Calvert. BBSRC, EPSRC & MRC. Total grant £13,2M, Innogen Institute contribution £507,861 (Nov 14 – Oct 19).
- Effectiveness of Policies and Interventions. Mark Winskel. UK industry, commerce and public corporations £120,142 (Oct 16 – Sept 20).
- GE3LS (Lead University of Alberta) Pig Disease Antimicrobial Resistance. Ann Bruce, £27,500, RES0030284 (Jun 15 – May 19).
- Implantable Microsystems for Personalised Anti-Cancer Therapy (IMPACT). Joyce Tait. EPSRC. Total grant £5.2M; Innogen Institute contribution £171,774 (May 13 – May 18).
- Integration of Power Transmission Grids (InGrid): Researching Integration of Power Transmission Grids - Prospects and Challenges at National and European Levels in Advancing the Energy Transition. Ronan Bolton. Norwegian Research Council, £131,281 (Jun 15 – Jun 18).
- TRANSGENE: Medical Translation in the History of Modern Genomics. Miguel Garcia-Sancho. EU government bodies, £1,110,154 (Oct 16 – Sept 21).
- Reframing Energy Demand: Innovation for Sustainable Heat. Ronan Bolton and Mark Winskel. EPSRC. Total grant £726K, Innogen Institute contribution £290,481 (Dec 14 – Jun 18).
- Security at the Margins (SeaM): Spaces and strategies for negotiating security in urban South Africa. James Smith. ESRC, £141,895 (Nov 15 – Nov 18).
- UK Energy Research Centre Phase 3, Mark Winskel. ICL and EPSRC. Total grant £13.5M, Innogen Institute contribution £264,704 (Mar 14 – Apr 19).
- Diagnostic Innovation and Livestock (DIAL) Led by University of Exeter, Innogen PI Ann Bruce. ESRC. Total grant £1,715,098; Innogen Institute component, £550,836 (2017 – 2021).
- The role of livestock in food system resilience in remote, upland regions. In collaboration with SRUC (Scottish Rural College) (Principal Investigator) £909,531 (2017–2021).
- How to link industrial and social innovation for inclusive development: lessons from tackling cancer care in Africa. Maureen Mackintosh, Dinar Kale, Geoffrey Banda. GCRF Inclusive societies, £13,869 (Oct 18 – Sept 21).
- Bioeconomy, pharmaceuticals and the global economy. David Wield, Joanna Chataway, Rebecca Hanlin. ESRC and OU (Jan 14 – Jan 20).
- UKERC - CXC Studentship. Mark Winskel (Sept 15 – Feb 19).
- Responsible Innovation Standard. Joyce Tait, Innovate UK/British Standards Institution (BSI), £22,000. Innovate UK (Jan 19 – Sept 19).
- Developing 'Alternative Practices' for Responsible Research and Innovation in the UK and Japan. Niki Vermeulen, Jane Calvert, Steve Sturdy and Koichi Mikami. ESRC, £32,449.00 (Jan 19 – May 20).

3.2 Member Publications

Kale, D., & Wield, D. (2019). In search of the missing hand of "collaborative action": evidence from the Indian medical device industry. *Innovation and Development*, 9(1), 1-23.

Papaioannou, T., & Srinivas, S. (2019). Innovation as a political process of development: are neo-Schumpeterians value neutral? *Innovation and Development*, 9(1), 141-158.

Papamichail, G., Rosiello, A., & Wield, D. (2019). Capacity-building barriers to S3 implementation: an empirical framework for catch-up regions. *Innovation: The European Journal of Social Science Research*, 32(1), 66-84.

Mittra, J., Mastroeni, M., Haddow, G., Wield, D., & Barlow, E. (2019). Re-imagining Healthcare and Medical Research Systems in Post Devolution Scotland. *Sociological Research Online*, 24(1), 55-72.

Mastroeni, M., Mittra, J., & Tait, J. (2019). Political influences on biotechnology-based innovation for European agriculture. *Technology Analysis and Strategic Management*.

Sanchez, M. G. S., & Myelnikov, D. (2019). Between mice and sheep. *Studies In History And Philosophy Of Science Part C: Studies In History And Philosophy Of Biological And Biomedical Sciences*, 75, 24-33.

Lyll, C., & Tait, J. (2019). Beyond the Limits to Governance. *Research Policy*, 48(5), 1128-1137.

Mittra, J., & Zoukas, G. (2019). Unpacking the Concept of Bioeconomy. *Science & Technology Studies*.

Kale, D. (2018). From small molecule generics to biosimilars: Technological upgrading and patterns of distinctive learning processes in the Indian pharmaceutical industry. *Technological Forecasting and Social Change*, Volume 145, 370-383.

Papaioannou, T. (2018). *Inclusive Innovation for Development: Meeting the Demands of Justice through Public Action* (p. 116). Routledge.

Papaioannou, T., Watkins, A., Kale, D., & Mugwagwa, J. (2018). Politics of innovation and development: The role of industry associations in integrating political, bureaucratic, industrial and health systems in India and South Africa. *Development Policy Review*, 36(S1), 0531-0551.

Banda, G., Tait, J., & Mittra, J. (2018). Evolution of regenerative medicine business models. *Clinical Therapeutics*, 40(7), 1084-1094.

Bruce, A., Stetkiewicz, S., Burnett, F., Ennos, R., & Topp, C. F. E. (2018). Perception vs practice. *Crop Protection*, 112, 96-102.

Ikegwuonu, T., Haddow, G., Tait, J., Murray, A. F., & Kunkler, I. H. (2018). Horizon scanning implanted biosensors in personalising breast cancer management. *Health Science Reports*, e30, 1-9.

Adeola, O., Ngoasong, M. Z., & Evans, O. (2018). The Gender Question and Family Entrepreneurship Research. In *Knowledge, Learning and Innovation: Research Insights on Cross-Sector Collaborations* (pp. 159-176). Springer.

Seale, C., Lane, A., High, C., Macken-Walsh, Á., & Reynolds, M. (2018). Reaping the rewards of learning within agricultural knowledge systems: An account of a PhD learning system. In *13th European IFSA*

symposium - Farming systems: facing uncertainties and enhancing opportunities. International Farming Systems Association.

Singh, N., High, C., Lane, A., & Oreszczyn, S. (2018). Building agency through participatory video: insights from the experiences of young women participants in India. *Gender, Technology and Development*, 21(3), 173-188.

Boojihawon, D. K., & Ngoasong, Z. M. (2018). Emerging digital business models in developing economies: The case of Cameroon. *Strategic Change: Briefings In Entrepreneurial Finance*, 27(2), 129-137.

Levidow, L., & Papaioannou, T. (2018). Which inclusive innovation? Competing normative assumptions around social justice. *Innovation and Development*, 8(2), 209-226.

Mackintosh, M., Mugwagwa, J., Banda, G., Tibandebage, P., Tunguhole, J., Wangwe, S., & Njeru, M. K. (2018). Health-industry linkages for local health: reframing policies for African health system strengthening. *Health Policy And Planning*, 33(4), 602-610.

Mackintosh, M., & Tibandebage, P. (2018). Starting from here: Challenges in planning for better health care in Tanzania. In *The Routledge Companion to Planning in the Global South*. Abingdon, UK: Routledge (Taylor and Francis).

Mackintosh, M., Tibandebage, P., Njeru, M. K., Kungu, J. K., Israel, C., & Mujinja, P. G. M. (2018). Rethinking health sector procurement as developmental linkages in East Africa. *Social Science & Medicine*, 200, 182-189.

Maleki, A., Rosiello, A., & Wield, D. (2018). The effects of the dynamics of knowledge base complexity on Schumpeterian patterns of innovation: the upstream petroleum industry. *R&D Management*, 48(4), 379-393.

O'Flynn, T., Macken-Walsh, Á., Lane, A., & High, C. (2018). Farmers doing it for themselves: how farmer-inventors are frustrated by their interactions with the Agricultural Knowledge and Innovation System. In 13th European IFSA symposium - Farming systems: facing uncertainties and enhancing opportunities. International Farming Systems Association.

Tamminen, S. & N. Vermeulen (2019). Bio-objects: new conjugations of the living. *Sociologias* 21 (50): 156-179.

Vermeulen, N. (2018). 'The choreography of a new research field: Aggregation, circulation and oscillation'. *Environment and Planning A*: 50(8): 1764-1784.

Vermeulen, N. & W. Bijker (2018). Ways of Knowing and Doing STS: Niki Vermeulen Talks with Wiebe Bijker. *Engaging Science, Technology, and Society* 4, 352-365.

Tait, J., Banda, G. and Watkins, A. (2018) Proportionate and Adaptive Governance of Innovative Technologies (PAGIT): Case Study: Responsible Governance of Innovative Technologies, Final Report. Innogen Institute Report to the British Standards Institution. <https://www.innogen.ac.uk/reports/1302>

3.3 Achievements and research impacts

[Innogen looks back on impact and forward to post-Brexit strategy](#)

7 March 2019

The [Innogen Institute](#) celebrated its 16th anniversary with a conference at The Open University on 28 February, entitled Looking Backward and Forward. The event, now available to watch on the OU's [Stadium](#) platform.

[New Innogen website launched](#)

21 February 2019

Geoffrey Banda and Theo Papaioannou participate in UCL Workshop “Rethinking Global and Local Policy Rationales in Pursuit of Good Health and Well-Being for all by 2030”

22nd January 2019

[Dr Ann Bruce gives evidence to the Scottish Affairs Committee on the future of Scottish agriculture post-Brexit](#)

28 January 2019

On the 28th January, Innogen member and senior lecturer on innovation in sustainable food systems at the University of Edinburgh, Ann Bruce, was part of a panel of agricultural experts that gave oral evidence to the Scottish Affairs Committee on how Scotland’s agricultural sector should be supported post-Brexit.

[Innogen co-director Dr Niki Vermeulen receives two prestigious awards in 2018](#)

29 November 2018

Dr Niki Vermeulen, Senior Lecturer in the History and Sociology of Science at the School of Social and Political Science, has been awarded the 2018 Outstanding Mentor Award by The University of Edinburgh Graduate School and the University’s Tam Dalyell Prize for excellence in engaging the public with science during the 2018 Edinburgh International Science Festival.

[Participation in World Antibiotic Awareness Week](#)

28 November 2018

Innogen researcher Vera Mugittu contributed to the Antimicrobial Resistance panel discussion at Muhimbili University of Health and Allied Sciences in Dar es Salaam, Tanzania, during World Antibiotic Awareness Week.

[Innogen co-director identified as an outstanding Mover and Shaker in Biobusiness](#)

2 November 2018

The contribution of Joyce Tait to healthcare innovation has been recognised in this year’s BioBeat report.

[Innogen research contributes to UK plans for future governance of innovation](#)

27th September 2018

As a member of the Council for Science and Technology, Joyce Tait led the initiative that resulted in a series of responses by the UK Government to transform the governance of innovative technologies, based on the results of Innogen Institute funded projects, particularly the PAGIT projects with the British Standards Institution.

See The Council for Science and Technology's letter to the Prime Minister on reforming the governance of technological innovation here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750786/cst-reforming-the-governance-of-technological-innovation.pdf

And the response from the Business Secretary Greg Clark here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750370/beis-reforming-the-governance-of-technological-innovation.pdf

3.4 External Appointments

Geoffrey Banda

Member, African Union/NEPAD Working Group on developing Research for Health and Innovation Policy for the African Union;
Member, African Union/ NEPAD Technical Working Group, Fund for Pharmaceutical Development (FAPD);
Member, Advocacy Advisory Committee, African Vaccine Manufacturing Initiative UNIDO Expert Group Meeting;
Member, Steering Committee, Tackling Infections for the Benefit of Africa (TIBA) Research Consortium

Farah Huzair

Steering Committee member, BBSRC-funded crop genome editing resource, John Innes Centre

Andy Lane

Board member, Buckinghamshire and Milton Keynes Environmental Partnership

Maureen Mackintosh

Panel member, Medical Research Council, Antimicrobial Resistance in a Global Context funding panel;
Chair, ESRC Roundtable discussion of the role of social science in the Health Systems Research Initiative, April;
Lead expert on Appropriate Incentives, UNIDO Expert Group Meeting on Practical Approaches for Government Incentives, Mobilizing Affordable Financing and Access to Technology for the Pharmaceutical Industry in Africa, Vienna, September

Theo Papaioannou

Associate Editor, Journal of International Development;
Member, Editorial Advisory Board, International Journal of Technology Management;
Member, AsSIST-UK (Association of Science, Technology and Innovation) Special Advisory Group;
Member, NESTA Informal Steering Group on Innovation Policy

Stuart Parris

Member, Advisory Board, School of Economics Finance and Accounting (EFA), Faculty of Business and Law, Coventry University

Peter Robbins

Co-investigator, H2020 project to stimulate sustainability transitions in European agriculture through better understanding the roles played by farm advice in farmer decision-making. (European Commission)

Miguel Garcia-Sancho

Member, Editorial Board, Endeavour (Journal);
Member, Editorial Board, Theoria (Journal)

James Smith

Member, Economic and Social Research Council (ESRC);
Trustee, Practical Action;
Committee(s) Member, League of European Research Universities;
Chair, international advisory board, Centre for Tropical Livestock Genetics and Health

Joyce Tait

Member, Prime Minister's Council for Science and Technology;
Member and Chair of Governance Subgroup, Synthetic Biology Leadership Council, UK
Member, UKRI/BBSRC Transforming Food Production Advisory Group

Member, Life Sciences Scotland Triple A (Animal Health, Aquaculture and Agribusiness) Subgroup, Life Sciences Scotland
Member, Roslin Foundation Board;
Member, EPSRC Peer Review College;
Member, UK Higher Education Funding Bodies Interdisciplinary Research Advisory Panel;
Member, Governing Board, Industrial Biotechnology Innovation Centre;
Member, Editorial Board, Engineering Biology Journal.
Member, ESRC UK Innovation Caucus.

Niki Vermeulen

Visiting researcher, Centre for Science and Technology Studies (CWTS), Leiden University;
Member, Royal Society of Edinburgh Young Academy;
Member, Innovation Caucus;
Member, Scottish Marine Science Strategic Delivery Group (SMSSDG);
Editorial board, Palgrave Communications and EASST Review.

David Wield

Research Assessor, Carnegie Trust for the Universities of Scotland;
Fellow, ESRC Peer Review College;
Member, UK Innovation Caucus;
Editorial Board, Technology Analysis and Strategic Management;
Editorial Board, Intl Journal of Technology Management and Sustainable Development;
Member, ESRC Centre on Constitutional Change;
Member, Global Development Academy;
Member, then Chair: Academy of Finland Panel on Strategic Research Concerning Adaptation and Growth;
Member, REF 2021 sub-panel C22, UK Research and Innovation (UKRI).

4 Teaching and Capacity Building

4.1 PhD Students

Innogen research staff continue to offer supervision for postgraduate study across a breadth of areas relating to social science and humanities aspects of the life sciences and the bioeconomy. In 2018-19, the following students were studying for their PhDs or submitted their thesis during that period:

Charlie Whetham
Raktim Ray
Gauri Misra
Federico Vigano
(Prof. Theo Papaioannou)

Sam Beechener
Tair Mukhamadiyev
Abel Villa
Giorgos Zoukas
Juliet Kariuki
Tara Wight
(Dr Ann Bruce)

Anna Couturier

Sara Valencia-Cadavid
Rosalind Attenborough
(Dr James Mittra)

Owais Anwar Golra
Matjaz Vidmar
Jin Ding
George Papamichail
Sara Valencia Cadavid
Abel Osvaldo Villa Rodríguez
(Dr Alessandro Rosiello)

Matjaz Vidmar
Ros Attenborough
Rodrigo Liscovsky
Fiona Coyle
Laura Volkmer
Kate Bowell
(Dr Niki Vermeulen)

Pallavi Joshi
Andrew Mkwashi
(Dr Dinar Kale)

4.2 Masters Level Teaching

Innogen members, play leading roles in the development and delivery of the following programmes:

MSc in Management of Bioeconomy, Innovation and Governance (MSc BIG), The University of Edinburgh.

This programme is an innovative and dynamic postgraduate qualification designed to meet the increasing demand for skilled people in the growing global bioeconomy. The MSc BIG responds to a number of key challenges, including: developing sustainable innovation in a responsible manner; identifying and exploiting value throughout innovation ecosystems; and bringing new technologies to existing and emerging markets. MSc BIG graduates are taught how to use customized methods to deal with complex issues ranging from foresight and innovation systems analysis, strategic decision making in companies, value chain analysis and business model development, product and process regulation, to ensuring 'responsibility' in research and innovation. Students also have the opportunity to write their dissertations on collaborations through work-based placements with organizations or companies involved in the bioeconomy.

MSc BIG welcomed its inaugural class in 2012 and to date has successfully graduated over 30 students, many of whom have gone on to take strategic roles in the bioeconomy.

Masters in Development Management, The Open University (Distance learning).

This post-graduate degree addresses the needs of development managers, as well as other professionals who work in development contexts, locally and globally. The Masters in Development Management programme promotes a better understanding of the complex processes labelled 'development', with a particular focus on dealing with conflict and on building the institutions that make development sustainable. The degree culminates in a research project which enhances both the students' research skills and understanding of a development management problem.

The Open University's Masters Programme in Development Management has more than 400 registered

students and has graduated over 1,000 mid-career professionals from more than 100 countries.

5 Forward Plan, 2019 - 2020

5.1 Funding Opportunities

The Innogen Institute is well placed to meet the long term opportunities arising from the current funding environment. The framework of methods and approaches that we have developed has proved flexible and adaptive in the face of shifting innovation opportunities raised by new scientific discoveries and societal needs and by the reorganisation of research funding in the UK, particularly the increased emphasis on interdisciplinary research in UKRI and the very large sums being channelled into innovation-related translational research through the Industrial Strategy Challenge Fund (ISCF) and the Global Challenges Research Fund (GCRF).

The following collaborations are also leading to new funding opportunities:

- the five-year Edinburgh University Synthetic Biology Research Centre (SynthSys Mammalian) that links two of our key areas of interest, synthetic biology and regenerative medicine
- the SynbiCITE Innovation and Knowledge Centre, based in Imperial College, supporting innovation in synthetic biology (Joyce Tait has a 5% staff role on this programme)
- Edinburgh Global Academy for Agriculture and Food Security (Joyce Tait has a 20% staff role on this programme)
- Edinburgh Plant Science Network
- UK Energy Research Centre

The Open University is supporting the Innogen Institute through its Strategic Research Area fund and supports a programme in International Development and Social Innovation with £2.5m over five years (2015-2020).

Our expertise across a broad range of important current innovation policy priorities, our proven record in delivering excellent reports on time, and our interdisciplinary expertise makes us partners of choice in projects led by others within Edinburgh University and also nationally and internationally. We receive many more invitations to collaborate, and opportunities to lead major proposals, than we have the staff resources to accommodate.

5.2 Teaching

We are continuing successfully to promote the Masters in Management of the Bioeconomy, Innovation and Governance, and the associated teaching provisions in collaboration with the Universities of Glasgow and Strathclyde. Also, we will continue to develop and promote CPD offerings based on the Master's programme.

5.3 Innogen Management

The following are management team's objectives of the Innogen Institute for 2019-20.

1. To maintain and grow effective collaboration between Innogen Institute staff located in the University of Edinburgh and the Open University and with other institutions internationally;
2. To build the Institute's teaching programmes to support researchers and practitioners in industry, academia, policy, regulation and engagement
3. To continue to increase Innogen's impact on practice and policy, through documented uptake and use of our research outputs and advice
4. To engage constructively with all stakeholders through effective communication and knowledge exchange
5. To improve communications through a regularly updated website and effective use of social media.