



"The precious thing about CSaP is it is incredibly simple, that's why the Civil Service likes it. We understand that there is somewhere in Cambridge you can go to have a sensible conversation with a load of academics about stuff that interests you. I can explain it in two sentences to anyone in the Civil Service, and they say 'that sounds good, how do I get involved?' That is absolute gold dust."

# **Chris Wormald**

Permanent Secretary, Department of Health and Head of the Civil Service Policy Profession

# The Centre for Science and Policy in 2016

In 2016 once again the Policy Fellowships programme formed the foundation for CSaP's work. Policy Fellows benefit from access to research and expertise directly relevant to their concerns. The experts who meet Policy Fellows learn more about the policy and political context for their research. And, over time, we are building a community that can work together to develop new policy approaches drawing on research that is better informed about the problems facing society.

CSaP's network thrives because it is animated by more than the instrumental value of its individual links. Members are motivated by a shared commitment to the ideals of research, reflection, and public service.

There is no doubt that governments are confronting tough policy challenges at a time when the foundations of political institutes are under considerable stress. The open and diverse networks that CSaP fosters are already contributing to building the resilient policy responses that will be needed in the coming years.

CSaP connects and convenes communities of policy professionals and experts. We deploy our simple and effective model to make a distinctive contribution to the conversation between government and academia.

# CSaP team



# Nicola Buckley

Associate Director Policy Fellowships

# Katie Collins Administrator

**Dr Robert Doubleday**Executive Director

# Dr Clare Moran

Policy Fellowships Coordinator

# Jackie Ouchikh

Head of Programmes

# **Dr Alice Vadrot**

Science and Technology Studies Coordinator

# **Policy Fellowships Programme**

Our Policy Fellows have benefited from over 6800 meetings with more than

1300 experts in the CSaP network since the programme launched six years ago.

"The CSaP Policy Fellowship was one of the best experiences I have had professionally. It was exhilarating to meet so many world-leading experts, which led to many tangible benefits for me, my department and my profession. I described the experience as 'oxygenating' and I definitely recommend the

scheme to others who are

interested in the science-policy

**Dr Gemma Harper**Chief Social Scientist. Defra

In 2016 we elected our 250th Policy Fellow to the programme. Our Fellows – including 33 Policy Leaders Fellows and 14 Junior Policy Fellows – have met with more than 1300

experts since the programme launched in 2011.

The benefits to both
Policy Fellows and the
experts they meet extend
well beyond the initial five
days of one-to-one
meetings. The
Fellowships programme
provides direct
connections to relevant
research and a unique
space to think and be
inspired by world-leading
academics. Not least.

Policy Fellows are members of a thriving network motivated by shared values of public service and commitment to evidence-informed policy.

Many of our Policy Fellows have continued to be active members of the CSaP network beyond their two-year Fellowships. So this year we introduced the Continuing Fellowship, an annual membership scheme which provides enhanced opportunities to engage with emerging research at Cambridge.

Our Policy Leaders Fellowship is tailored to the needs of Permanent Secretaries and Directors General, and their peers in other administrations and sectors. In 2016 Policy Leaders Fellows met three times to discuss conspiracy, democracy and trust; the future of cites; and the future of work.

The two-year Policy Fellowship programme continues to deliver enormous benefits. A survey of our Fellows shows that since the programme launched:



76%

were able to step back and see the bigger picture



79%

improved their network of contacts



93%

gained fresh perspectives on their current work



100% would recommend the programme to

others

# **Policy Fellow**

# **Hannah Rignell**

Head of Community Action, Office for Civil Society, Cabinet Office

"The biggest gift the Policy Fellowship has given me is space; time carved out of a busy policy job to think about the issues and build networks that will enable me to deliver up-to-date, well-informed policy advice for Ministers"



As Head of Community Action at the Cabinet Office, my policy questions were focused on a mixture of the existential questions that I find myself pondering in my more philosophical moments, and more practical questions which could directly inform policy development.

I met a vast range of academics during my CSaP Policy Fellowship. Economists, architects, anthropologists and engineers all had something to say about my policy questions. The interesting thing was that despite coming from very different disciplines, common themes emerged – for example, the role of technology in mobilising citizens, and the ongoing importance of place to identity.

In many cases, I was surprised by the two-way nature of the discussion. I had expected these illustrious, gown-ensconced Cambridge dons to impart their wisdom to me during our one-hour meeting. Some did work like this – but in many cases I was sharing what we have learnt from the community programmes we have run. I also acted as a broker, introducing the academics to other civil servants.

My Policy Fellowship has influenced my work directly and indirectly. As a result of requests during my Policy Fellowship meetings, we are due to publish the data we have collected on Community First and Community Organisers so that academics and other researchers can conduct new analyses.

Less directly, I've found myself precisely reciting some of the arguments I heard in my Policy Fellowship meetings in my day job, because I found them so convincing!

# Policy Fellows elected in academic years 2014/15 and 2015/16

10 Downing Street - Daniel Korski, Policy Adviser, Technology

10 Downing Street - Christopher Lockwood, Deputy Head of PM's Policy Unit

Cabinet Office - Laura Baynton, Head of What Works team, Implementation Group

Cabinet Office - Natalie Black, Deputy Director, Cyber Defence and Incident Management, OCSIA

Cabinet Office - Nigel Campbell, Chief Analyst, Implementation Unit

Cabinet Office - Rupert Cryer, Assistant Director, Policy Lab

Cabinet Office - Sophie Odenthal, Fast Streamer

Cabinet Office - Hannah Rignell, Head of Community Action, Office for Civil Society

Cabinet Office - Richard Sargeant, Director, Performance and Delivery, Government Digital Service

Cabinet Office - Andrea Siodmok, Head of Policy Lab

Cabinet Office - Simon Strickland, Senior Adviser, Strategy, National Security Secretariat

**Defra – Emily Miles**, Group Director, Strategy

Defra - Katherine Riggs, Head of Strategy & Implementation Unit

Defra - Stuart Wainwright, Deputy Chief Scientific Adviser, Strategic Evidence and Analysis

Department for Business, Innovation and Skills - Amanda Brooks, Director, Innovation

Department for Business, Innovation and Skills - Chris Carr, Deputy Director, Manufacturing, Services & Electronics

Department for Business, Innovation and Skills - Michael Talbot, Senior Strategy Lead, Centre for Connected and Autonomous Vehicles

Department for Communities and Local Government – Henry Demaria, Head of Deregulation

Department for Communities and Local Government - Scott Dennison, Deputy Director, Economics

Department for Communities and Local Government - Ricky Taylor, Senior Economic Adviser

Department for Communities and Local Government - Tom Tolfree, Chief Implementation Analyst, and Senior Government Economist

Department for Culture, Media and Sport - Paul Crawford, Chief Economist

Department for Culture, Media and Sport - Dominic Lake, Deputy Director, Arts, Libraries & Cultural Property

Department for International Development - Ellen Wratten, Head of Emerging Policy, Innovation & Capability

Department for Transport - Jessica Matthew, Deputy Director, Road User Licensing

Dstl - Louise Zemlik, Senior Analyst, Defence and Security Analysis

Foreign and Commonwealth Office - Emma Hennessey, Deputy Chief Scientific Adviser, and Head of Science and Innovation Team

Foreign and Commonwealth Office - Simon Sharpe, Head of Climate Risk Team

Government Office for Science - Andrew Greenway, Deputy Director, Horizon Scanning

Government Office for Science - Richard Sandford, Head of Horizon Scanning

**HM Treasury – Rachel King**, Head of Budget Project Management and Presentation

HM Treasury - William Hall, Senior Policy Adviser

HM Treasury - Alex Marsh, Head of Higher Education, Science and Innovation

HM Treasury - Victoria Robb, Senior Strategy and Policy Adviser

Home Office - Nick Jaques, International Adviser

Home Office - Niva Thiruchelvam, Head of Student and Short-term Migration Policy

Ministry of Justice - Scott McPherson, Director, Law, Rights and International

Bank of England – Seth Thomas, Senior Adviser

Cambridge City Council – Andrew Limb, Head of Corporate Strategy

Cambridgeshire County Council - Michael Soper, Research & Performance Team Manager

**Environment Agency – Doug Wilson**, Director of Scientific and Evidence Services

Food Standards Agency - Steve Wearne, Director of Policy

Greater Cambridge Greater Peterborough LEP - Neil Darwin, Chief Executive Officer

Greater London Authority - Catherine Glossop, Principal Policy Officer, Knowledge & Innovation

Greater London Authority - Shaun Lowthian, Senior Consultation and Intelligence Officer

**Greater London Authority – Jeremy Skinner**, Head of Economic Growth

Greater Manchester Combined Authority - Andrew Lightfoot, Strategic Director, Public Service Reform

Labour Party - Gabriel Huntley, Policy Adviser to Chuka Umunna, MP

Scottish Government - John Ireland, Deputy Director, Climate Change & Low Carbon Economy

Scottish Parliament - Jim Johnston, Clerk to the Finance Committee

UK Space Agency - Alice Bunn, Director of Policy, UK Space Agency

Welsh Government - Simon Brindle, Deputy Director, Legislation and Supporting Delivery, Social Services and Integration

Commonwealth Secretariat - Abhik Sen. Head of Policy and Research (Youth Affairs)

European Commission DG-Connect - Florent Frederix, Principal Administrator, Trust and Security

European Commission DG-Joint Research Centre - Koen Jonkers, Deputy Head of Unit, Innovation Systems Analysis

European Commission DG-Research and Innovation - Jose Jiminez Mingo, Principal Administrator

Accenture - Tim Cooper, Director of Research

Amey UK - Stephanie Eaton, Head of Research and Innovation in Social Justice

Angel Investor - John Taysom

BioBricks Foundation - Linda Kahl, Director, Legal Program

Coalition for a Digital Economy (Coadec) - Guy Levin, Executive Director

Oxygen House - Glenn Woodcock, Director

Places for People - Roger Wilshaw, Director, Policy Research and Public Affairs

Privitar - Guy Cohen, Strategic Relationships Manager

Raspberry Pi Foundation - Philip Colligan, Chief Executive Officer

BBC - James Heath, Director of Policy

Behavioural Insights Team - Katy King, Adviser

Eastern Academic Health Science Network - Karen Livingstone, Director of Partnerships & Industry Engagement

Friends of the Earth - Craig Bennett, Chief Executive Officer

Nesta - John Loder, Head of Strategy, Health Lab

Royal Academy of Engineering - Shaarad Sharma, Programme Manager (International)

techUK - Charlotte Holloway, Head of Policy and Associate Director

We would like to thank Pembroke College for continuing to welcome our Policy Fellows to Cambridge.

Affiliations shown are correct as at the time of election to the Fellowship

# **Policy Leaders Fellowship**

Our Leaders Fellows
participate both in one-to-one
meetings with leading experts
and in roundtable discussions.
The Fellowship meets once a
term in Cambridge, under the
chairmanship of former UK
Cabinet Secretary Lord
Wilson. In 2016 topics have
included conspiracy,
democracy and trust; the
future of cites; and the future of
work.

Policy Leaders Fellows as at 31 December 2016 are:

Director General. Economics

#### Sam Beckett

& Markets and Deputy Head, UK Government Economic Service Department for Business, Energy & Industrial Strategy

#### **Deborah Bronnert**

Director General, Economic & Consular Foreign and Commonwealth Office

### Nadia Calviño

Director General
Directorate General for
Budget
European Commission

### **Lindy Cameron**

Director General, Country Programmes Department for International Development

#### **Gareth Davies**

Director General, Business and Science Department for Business, Energy & Industrial Strategy

#### **Leslie Evans**

Permanent Secretary Scottish Government

## Sir Paul Grice

Clerk and Chief Executive Scottish Parliament

#### **Ed Humpherson**

Director General, Regulation UK Statistics Authority

## **Nick Joicey**

Director General, Strategy, International, Food and Farming Department for Environment Food and Rural Affairs

# Julian Kelly

Director General, Public Spending and Finance HM Treasury

## **Clive Maxwell**

Director General, Energy Transformation Department for Business, Energy & Industrial Strategy

# Jeremy Moore

Director General, Strategy Department for Work and Pensions

# John Pullinger

National Statistician UK Statistics Authority

## Antonia Romeo

HM Government Envoy to the US Communications Service Providers Cabinet Office

#### Jonathan Slater

Permanent Secretary
Department for Education

# Ashok Vaswani

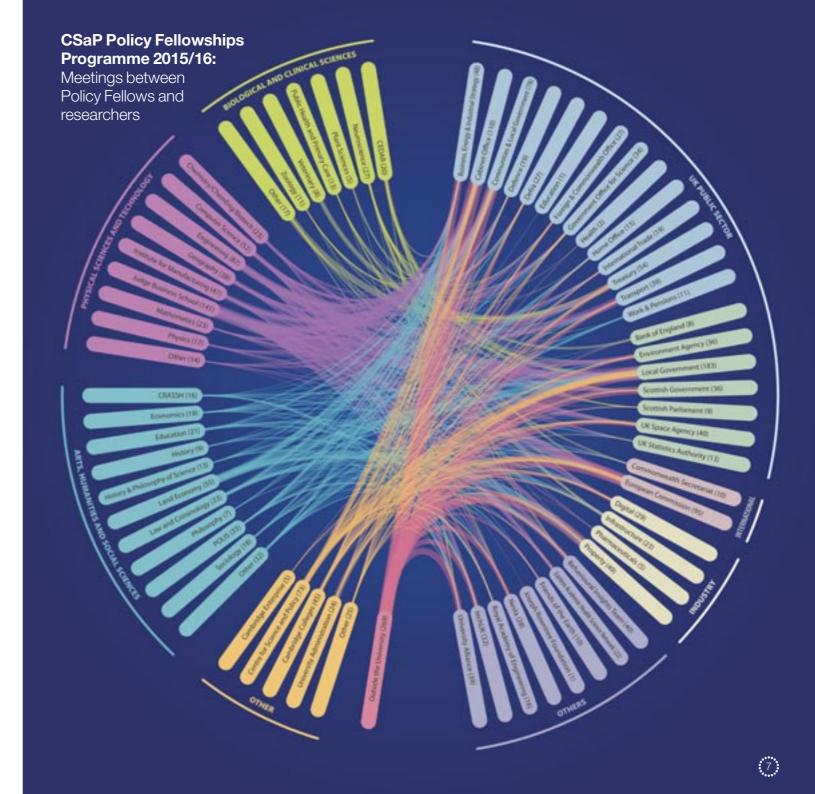
CEO Barclays UK

# **Peter Watkins**

Director General, Security Policy Ministry of Defence

## **Chris Wormald**

Permanent Secretary Department of Health and Head of the Government Policy Profession



"Cambridge University's Centre for Science and Policy is an excellent initiative, bringing together senior policy makers and academics to help generate new policy responses to complex social and economic challenges. Good policy making requires access to the best evidence base. CSaP Policy Fellows act as a bridge between the public sector and cutting edge research, helping to translate scientific insights into the heart of the policy making process."

**Sir Jeremy Heywood**Cabinet Secretary

universities; the futur cities; the future of w nspiracy, dem

# **Research and Policy Engagement**

CSaP helps academics to increase the policy impact of their research. We do this by drawing on our thriving network of Policy Fellows, and our tried and tested ways of bringing policy professionals and experts together.

#### Services to research

CSaP works with academics to build policy engagement into their research plans from the outset. We provide our know-how and networks to help researchers reach policy audiences.

In 2016, we recruited a number of Policy Fellows whose responsibilities and interests align with particular research projects at the University, such as in multilingualism, design thinking, and public health.

"Climate change policy has become more pressing and much more complex, with more actors involved, more techniques, and higher stakes. The opportunity to interact with a wide range of stakeholders to discuss the most relevant research, as well as to relay research results to a community of practice, is a major asset."

Professor Jorge Vinuales
Director, Cambridge Centre for Environment
Energy and Natural Resource Governance

#### **Policy Workshops**

Our workshops provide a forum to debate issues that are of direct relevance to public policy and to academic research agendas. These roundtable discussions bring together relevant stakeholders from government, business and civil society, in ways that directly inform and shape future research.

In 2016 we held nine Policy Workshops on topics ranging from genomic medicine to climate change.

## **Policy programmes**

A new initiative for 2017, CSaP's Policy programmes will focus on interdisciplinary research initiatives based at the University of Cambridge, where there is a clear societal or policy need for evidence and expertise. Topics under consideration include housing, mental health and policy aspects of artificial intelligence.

#### Working in partnership

Working with our partners we are able to offer policy professionals unique access to world-leading research across the UK and beyond.

#### In 2016:

- Our affiliate network of policy institutes at King's College London, Queen Mary University London, and the universities of Bath, Sheffield, and Southampton hosted visits for our Policy Fellows, and participated in Policy Workshops.
- Inspired by CSaP's Policy Fellowship, the Mercator Science-Policy Fellowship launched in Frankfurt in October, welcoming 18 new Policy Fellows.
- CSaP worked with KTH Royal Institute of Technology in Stockholm to share experiences, and explore opportunities for further collaborations.
- We delivered a series of themed seminars for HM Treasury, providing insights into the latest research from manufacturing to business rates.
- Partnering with the Centre for Diet and Activity Research, we delivered two professional development workshops on health and transport to civil servants in the Department for Transport.

## **Visiting Research Fellows**

CSaP's Visiting Research Fellows make a significant contribution to understanding how evidence, expertise and public policy interact, and how research expertise can contribute to better policy making.

Visiting Research Fellows meet with members of CSaP's extensive network of UK and EU policy makers and develop fruitful research links with Cambridge academics. Fellows also participate in a weekly science and technology studies workshop, convened by Dr Alice Vadrot.

In 2017, CSaP will host five Visiting Research Fellows during the Lent Term:

#### **Professor Richard Jones**

Professor of Physics, University of Sheffield

#### **Professor Charles Kennel**

Distinguished Professor and Director Emeritus Scripps Institution of Oceanography

#### **Dr Miles Parker**

former Deputy Chief Scientific Adviser, Defra

#### **Dr Alice Vadrot**

Visiting Erwin Schrödinger Fellow, Austrian Research Fund

# **Dr Steven Wooding**

Senior Research Leader, RAND Europe

CSaP's professional development activities provide researchers and policy professionals with an insight into the role of evidence and expertise in policy making.

Through our workshops, secondments and internships, CSaP has provided opportunities for early- and mid-career researchers and civil servants to learn how academic research contributes to policy making, and to gain experience of working at the intersection of research and policy.



# Making the transition from scientific researcher to scientific leader:

A workshop organised with Churchill College brought together researchers who have the potential to take up scientific leadership roles. The workshop highlighted the importance of getting involved and facilitating dialogue between leading researchers in their fields and government officials.

# Inspiring good practice for evidenceinformed policy making in transport and

health: Working with the Centre for Diet and Activity Research at Cambridge, we convened two workshops for civil servants from the Department for Transport, giving them a better understanding of what academia has to offer.

# Policy internships – developing knowledge & skills outside research:

This year we have hosted policy interns from the ESRC Doctoral Training Centre at Cambridge, the MRC Laboratory of Medical Biology at Cambridge, the University of Southampton, and the Open University. They have made a significant contribution to our work, in particular by organising workshops, and writing case studies, reports and news articles for our website.

# **Matthew McGuire**

PhD Student, Social Anthropology, University of Cambridge

"I found that working as a CSaP policy intern opened up a whole different world, and gave me the tools and confidence to make a decision about a career working in the Civil Service."



I had been thinking a lot about my future career and whether or not I wanted to pursue academia or look elsewhere. I found that working as a policy intern opened up a whole different world, and gave me the tools and confidence to take ownership of my future career.

It was at once exciting and daunting to be given the task of organising a workshop on the intellectual property issues surrounding the development of synthetic biology and genomic medicine.

This was a topic that was so outside anything I had studied before. Immediately I was inviting potential speakers, organising the schedule for the day, and liaising with academics at the Centre for Law,

Medicine and Life Sciences at the University of Cambridge. While it was a challenge, seeing my hard work pay off in a successful workshop was deeply satisfying.

Another very exciting project in which I became involved was interviewing Policy Fellows about the impact of the Fellowship on their work and other opportunities the Fellowship provided.

It was a truly amazing experience; one Fellow showed me around the Cabinet Office, where I was able to glance into Number 10.

After one such meeting, I returned to Cambridge and decided to apply for the Civil Service Fast Stream. I passed the first stages, and was invited to attend the assessment day.

Eventually I was offered a position, and after graduating from

Cambridge joined the Civil Service.

Without the responsibilities I was given in my time at CSaP, and my exposure to the world of government and policy, I doubt I would have been able to make this life-changing decision as easily.

Since my internship, everything else has fallen into place and I hope that given time, I will be able to return to CSaP as a Policy Fellow myself!

# Convening

CSaP organises seminars, workshops and lectures at which leading national and international figures deliver talks on topics that are of interest to our wider network.

#### **Policy Workshops**

In 2016 we continued to convene our network to address questions of mutual interest to policy professionals and experts. These workshops have proven highly effective in generating fresh perspectives and forging new connections. As the case studies in this report illustrate, our workshops are tailored to meet the specific needs of both policy professionals and academics, to provide new insights, and to help shape policy decisions.



#### Seminar series

Our annual seminar series on climate change hosted by Christ's College is organised in collaboration with Visiting Research Fellow, Professor Charles Kennel. In 2016, the series explored practical solutions to meeting the Paris 2015 commitments. Topics discussed included smart buildings, smart cities and sustainable innovation.

#### Dr S T Lee Lectures

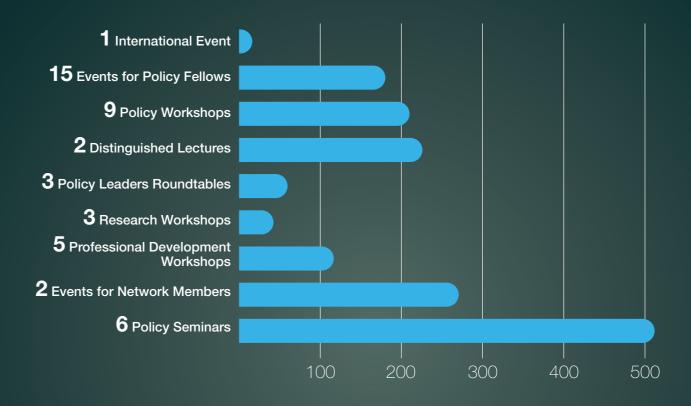
The ST Lee Public Policy lectures consider aspects of scientific, medical or technological research and developments that are likely to have significant implications for public policy over the next decade. Professor Dame Anne Glover delivered the 2016 lecture which examined effective mechanisms for delivering evidence-based decision making in the European Commission.

## Research workshops

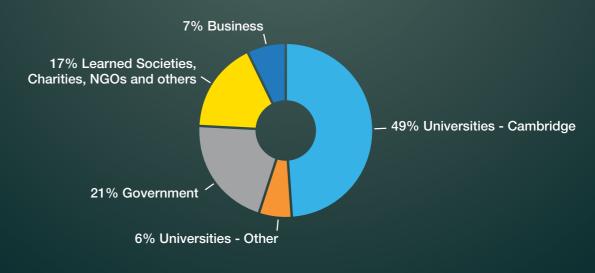
In March 2016, academics and policymakers from the UK, Japan and the Netherlands came together to discuss the contribution made to the field of science and policy studies by Professor Susan Owens' new book, Knowledge, Policy, and Expertise: The UK Royal Commission on Environmental Pollution 1970-2011.

In November, a roundtable discussion hosted by CSaP brought together experts from the humanities, and physical and social sciences to discuss the role of evidence and expertise following recent political events in the UK and US. Participants included Professor Sheila Jasanoff (Harvard Kennedy School) and Professor Richard Jones (Sheffield University).

# Number of participants by event type in 2016



# Breakdown of event participants in 2016





# Spotlight on... Innovation

Working with the Cambridge Centre for Law, Medicine and Life Sciences, a CSaP Policy Workshop on large bioresources in synthetic biology and genomics identified fresh topics and forged new relationships to inform future research.

And following a Policy Workshop on innovation in agriculture, stakeholders from industry and government are working with researchers from NIAB and the University of Cambridge to identify ways of adding value in agricultural supply chains that can result in better commercial and environmental outcomes.

INNOVATION | WORKSHOP

# Large bioresources in synthetic biology and genomics

Synthetic biology and genomics share an important feature - their development in both academia and commerce depends on the use of large, often publicly funded, bioresources such as BioBricks and the 100,000 Genomes Project.

Research in synthetic biology and genomics depends on the use of collections of tissue and data, commonly known as bioresources. Substantial amounts of time and money are being spent on creating these bioresources. Effective ways to share the tissue and data in these resources are needed in order to create the conditions for significant scientific advances and development of products.

Accordingly, the 'openness' of these bioresources - in other words, the ability for other researchers to access, use, and share them – is an important issue for the success of bioresource initiatives and the progress of synthetic biology and genomics.

There are, however, many different approaches to openness. Distributing material at low cost or without any restrictions does not necessarily advance the development and dissemination of new knowledge.

It is a significant challenge to develop a fitfor-purpose openness policy that balances the advantages of different approaches to openness. A CSaP workshop in September considered how time-limited rights of control, e.g. intellectual property rights, could provide a useful incentive for collaboration and innovation.

The workshop also addressed the challenge of determining practical approaches to promoting openness and innovation. In particular, discussion focused on reviewing openness policies adopted by large bioresources and eliciting ideas about access and intellectual property. The workshop identified relevant new partnerships and promising areas for future research.



# **Policy Fellow**

# Innovation in agri-tech: how can we improve the relationship between agriculture and science?

"The sandpit will help

research collaborations

researchers are exploring

food security challenges in

the most appropriate ways,

the groundwork for quick,

of research into practice."

effective responses to

catalyse connections, and lay

opportunities for the translation

Professor Dame Ottoline Levser

Director, Sainsbury Laboratory

Cambridge University

strengthen the interdisciplinary

network internally, and develop

nationally and internationally.

In doing so we will ensure that

The agri-tech landscape is complex and includes many different disciplines as well as diverse stakeholders. This diversity can inhibit innovation if communication between the relevant subset of actors is difficult, or if the

benefits of innovation are too thinly distributed to incentivise the necessary risk-taking.

The new Cambridge Centre for Crop Science (3CS) - a collaboration between NIAB and the University of Cambridge - has been set up to promote innovation and knowledge exchange in the agri-tech sector. To do this, 3CS will focus on a few key problems emerging from agricultural practice that are also able to inspire the scientific community.

> A CSaP Policy Workshop led by Professor Dame of the Sainsbury Laboratory Cambridge University and chaired by Lord Willetts, brought together senior researchers, policy sector representatives, to discuss the way agriculture.

Ottoline Leyser, Director makers, and agricultural forward for innovation in The workshop focused on the current relationship between agriculture and science, and identified a number of important challenges:

- a need for greater leadership from the farming community in articulating their agri-tech needs
- a need for two-way communication not only to make science more accessible to farmers, but to translate real-world challenges in the agricultural sector into problems that scientists can grapple with
- · a need for effective intermediary bodies that can build connections between 'coalface' agriculture and innovative science

One outcome of the workshop has been a commitment to bring together a multidisciplinary group of experts from the University of Cambridge with representatives from government, industry, Agri-Tech East, NIAB and the Cambridge University Potato Growers Association. A sandpit will be held in spring 2017 focusing on finding valueadded opportunities in the potato supply chain that can result in better commercial and environmental outcomes.

# Linda J Kahl

Senior Counsel and Director of Ownership and Innovation, The BioBricks Foundation

"This is the magic of the CSaP Policy Fellowship: it forges connections. Thanks to the CSaP Policy Fellowship, I've made many important connections with people, places and ideas that have helped me become more effective in working at the intersection of science, law and policy."



In my role as Senior Counsel and Director of Ownership and Innovation for the BioBricks Foundation, I work with members of the scientific research community, industry leaders, policy makers, legal professionals, and other stakeholders to promote the engineering of biology in the public interest.

As a CSaP Policy Fellow, I was introduced to impressive and accomplished individuals from a wide range of backgrounds who offered diverse perspectives, new ways of thinking, and frameworks from different fields that could support open innovation and social impact in the field of synthetic biology.

Through the Policy Fellowship, I was connected to a community of thought leaders working on an array of emerging technologies and the legal, ethical, and public policy challenges they present. One of the most important connections enabled by the Policy Fellowship was with the team leading the OpenPlant Initiative at the University of Cambridge and Norwich Research Park. Together, we are developing the Open Material Transfer Agreement (OpenMTA) that will enable individuals and institutions to share biomaterial resources on an open basis.

From assembling an Intellectual Property Working Group, to soliciting input on design goals for the OpenMTA, to finalising the legal text

and developing strategies for outreach and onboarding, our collaboration has proven uniquely valuable not only in testing the viability of the OpenMTA but also providing real-life examples of its successful use in biomaterials transfer across institutional and international boundaries.

I am grateful for the opportunity to be a CSaP Policy Fellow and highly recommend this programme to those wishing to become connected to dedicated and talented individuals working to make a positive difference in the world.



# Spotlight on...

# Privacy, Security and Trust

An RCUK initiative supported high quality research to help stakeholders address global security challenges.

A Policy Workshop held in June focused on the intersection of business and encryption, and concluded with the identification of priority research areas.

And a Policy Fellow from the European Commission gained new perspectives that will help shape cyber security research as part of Horizon 2020.

PRIVACY, SECURITY AND TRUST  $\mid$  **WORKSHOP** 

# Partnership for Conflict, Crime and Security Research

The Partnership for Conflict, Crime and Security Research supports collaboration by bringing researchers from across disciplines to work together to address current and future global security challenges. By creating opportunities for knowledge exchange between government, industry and the third sector, the Partnership aims to deliver impact beyond the academic community.

The Partnership for Conflict, Crime and Security Research is an initiative of the UK Research Councils that supports high-quality research with the aim of helping stakeholders address global security challenges. In 2013 CSaP Associate Fellow, Dr Tristram Riley-Smith, took up the new post of External Champion to the Partnership. In that role, he has helped facilitate the contribution that Research Council funded research has made to promoting the safety of individuals, communities and states.

Based at CSaP, Dr Riley-Smith has combined networking and advocacy with tools to support collaborative partnerships between academia, government, industry and the voluntary sector. For example, the Partnership has delivered policy workshops and published policy briefings on topics ranging from religious extremism to the regulation of drones.

A particularly significant contribution to enhancing the impact of research was made by establishing new academic placements in the National Crime Agency, Office of Security & Counter-Terrorism (OSCT), and BBC Media Action. These placements have played an

"The work of the External Champion to the Partnership for Conflict, Crime & Security has confirmed for us the benefits of taking an increasingly open approach in our relationship with research."

Office of Security and Counter-Terrorism
Home Office

important role in enhancing effective links between research and practice. For example, during her time at BBC Media Action, Dr Kate Ferguson provoked policy makers to question the idea that "counter narratives" can undermine extremist propaganda.

The Partnership's continued success in delivering real-world impact underscores the value of bringing together researchers with relevant stakeholders in industry and government.

# **Policy Fellow**

# The intersection of business, encryption and security

To coincide with debate in the House of Commons on the merits of the Investigatory Powers Bill, CSaP held a Policy Workshop on encryption. The Bill aimed to provide a framework for the UK government to access communications data in order to combat crime, terrorism and other threats to national security. The CSaP Workshop addressed the technical implications of the Bill for cyber security and its commercial implications for the UK technology sector's growing encryption business

Dr Ella McPherson, a Lecturer in the Sociology of New Media and Digital Technology at the University of Cambridge, led CSaP's Policy Workshop on the business of encryption. The purpose of the workshop

was two-fold. Firstly, to discuss how governments, corporations, and civil society are operating at the intersection of business and encryption. Secondly, to consider what contribution research could make to advance understanding about the economic, social and security aspects of cyber security.

The workshop, held under the Chatham House rule, brought together a diverse range of perspectives from the research, policy, and technology sectors. Beginning with an overview of the political landscape,

discussion focused on the impact of the IP Bill on citizens, businesses, and the economy and identified a number of priority research areas.

Some of the issues identified at the workshop included the cost of retaining and retrieving Internet Connection Records, the impact on consumer trust in technology companies, and citizen

trust in government. In addition to detailed discussion of trust, the workshop also focused on future research agendas that could shed light on the trade-offs and synergies between national security, the value of encryption for human rights and the value of encryption for the economy.

"The thought-provoking, high-level discussion at the workshop has informed a policy piece we are writing for human rights practitioners on the nature of and debate around encryption – as, in the digital age, encryption is key not only for human rights reporting but also for the exercise of particular human rights."

Dr Ella McPherson Lecturer in Sociology of New Media and Digital Technology University of Cambridge

Encryption is the mathematical manipulation of information to render it readable solely by the person intended to receive it. Encryption underpins the digital economy and therefore the development of encryption technologies represents a business opportunity, just as its underutilisation represents opportunities for cyber criminals.

# Florent Frederix

Principal Administrator, Trust and Security Unit, DG Connect, European Commission

"The Cambridge Computer Laboratory is without doubt the best place in the world to give visitors a preview of what the future will bring on cyber security."



Ensuring society-critical services, such as electricity, are protected against cyber attacks, and funding research into cyber security to ensure we are able to meet the demands of the future, are key areas for DG Connect. My work in the Trust and Security Unit focuses on developing an industrial cyber security strategy for Europe, alongside a responsibility for research and innovation projects in this domain.

The Centre for Science and Policy made access to state-of-the art research at the University of Cambridge possible, and tailored my Fellowship to meet the specific needs of my current job. For example, insights from meetings with academics at the Cambridge Computer Laboratory will help shape

cyber security research as part of Horizon 2020, the biggest EU Research and Innovation programme.

And meetings at Cambridge Judge
Business School provided access to
risk assessment studies on the
impact of cyber attacks on societycritical services. These studies can
be used as a repository of evidence
in future planning on cyber security.

The Policy Fellowship also brought with it access to the Cambridge cluster of technology companies involved in cyber security, considered by many to be the world's best. I have since invited these companies to join the European Public Private Partnership on Cyber Security, and hope that some of their entrepreneurial spirit will inspire other innovators in Europe.

Burning policy questions, such as the encryption debate following terrorist attacks in EU member states, are often the focus of policy workshops in Cambridge. I plan to remain actively engaged in these workshops whenever they touch on a European Commission policy topic on which I'm involved.

Most of all, I valued the access that the Policy Fellowship gave me to knowledge that isn't available elsewhere, not even in this age of information. My network of Cambridge contacts is much appreciated today and will no doubt continue to pay dividends beyond the two-year Fellowship.



# Spotlight on...

# Health, environment and the future of cities

A Policy Workshop exploring what the health and environment sectors have to learn from one another considered the lessons of history and examples of past successes, and concluded by identifying practical suggestions for future collaboration to cut across institutional boundaries.

And a seminar for our Policy Leaders Fellows discussed the benefits of increasing walking and cycling in urban areas, including reduced congestion, improved air quality and increased physical activity. HEALTH, ENVIRONMENT AND THE FUTURE OF CITIES | WORKSHOP

# What do the health and environment sectors in the UK have to learn from one another?

After decades of work to characterise health and environmental problems, there is no lack of recommendations for action. In both sectors however there are still challenges when dealing with issues which cut across institutional responsibilities, and which require new ways of engaging citizens to promote human and environmental wellbeing.

In 2016, CSaP partnered with Friends of the Earth, the Nesta Health Lab, and the Cambridge Institute of Public Health to deliver a Policy Workshop which explored collaboration opportunities at the intersection of health and the environment, with a particular focus on social movements.

The workshop focused on the advantages of drawing on an interdisciplinary approach to promote system-level change. In particular, participants discussed alternatives to direct campaigning and the communication of threats as an impetus to change. A range of lessons were drawn on as the workshop considered examples of successful engagement, when the wider public shared a sense of purpose. Discussion also covered the value of insights and techniques from behavioural science.

In terms of engaging social movements, there are certainly lessons from history that we could learn from. Social movements can be characterised as unruly 'bottom-up' reaction against 'top-down' policies – so there are inherent contradictions in using social movements to achieve narrow policy goals. However, a more organic alignment between policy goals and citizens' interests is likely to be necessary in order to tackle

"The CSaP workshop was a fascinating way to compare and contrast how social movements have been understood over time and across sectors. It gave us a very useful set of insights – from both academics and practitioners – that helped to shape our report Health as a Social Movement: the power of people in movements. The Nesta report was launched at the Royal Society of Arts in September 2016 as part of an NHS England programme on social movements in health."

Halima Khar Executive Directo Nesta Health Lat

some of the chronic challenges at the intersection between health and the environment.

The workshop concluded with a focus on how best to move forward, and a number of practical suggestions were made for future collaborative efforts. These included follow-up workshops on specific areas such as population-level changes in diets and air pollution; and combining expertise from the two sectors, for example, to look at the health benefits of access to nature.

# The future of cycling in the cities of tomorrow

Increasing walking and cycling in urban areas could bring a number of benefits to UK cities: reducing congestion, improving air quality and increasing physical activity.

Dr David Ogilvie, Centre for Diet and Activity Research (CEDAR), University of Cambridge, gave a talk to CSaP Policy Leaders Fellows in November, as part of a themed one-day visit to Cambridge on the future of cities. His

presentation focused primarily on the benefits that cycling in urban areas could bring to the UK population, which he explained extend far beyond air pollution reductions alone. If physical activity could be increased for the population as a whole, significant progress could be made with respect to many of the most common health conditions, and the UK would benefit hugely in terms of quality and years of life gained.

demonstration towns', Connect2 and the Cambridgeshire guided busway have removed barriers to local amenities and provided safer cycling spaces. This research is contributing bricks of evidence to a wall

that is steadily being assembled across the world and is showing the benefits of this kind of investment.

The discussion also touched on broader themes such as how to encourage the population to think about their health in later life and ultimately the role government should play in leading versus following public opinion to bring about the best quality of life for its citizens.

necessary dialogues beyond
academia that are helping to
bring this evidence into the
policy-making process."

Dr David Ogilvie
Centre for Diet and Activity Research,
Liversity of Cambridge

"Our independent evaluations

infrastructure such as the

Busway and new dedicated

cycling and walking routes in

these changes can encourage

people to get about on foot

and by bike. Working with

part of fostering the

CSaP has been an important

Cambridgeshire Guided

other UK cities show that

of new transport

Dr Ogilvie also highlighted what is known about the benefits of investing in new cycling-friendly infrastructure. In particular, government schemes such as 'cycling

# Jane Kennedy

Research Business Manager, Strategic Commissioning and Partnership Development, London Borough of Newham

"Conversations and connections established during my time as a Policy Fellow at CSaP helped me to improve council evaluations."



My role as Head of Research at a local authority already involves working closely with academia but my Fellowship helped develop a network within the University of Cambridge that complemented Newham Council's existing relationships with other higher education institutions.

Conversations at the start of my
Fellowship convinced me of the
value of participating in the CSaP
Policy Workshop on ageing, for
which I contributed a case study on
adult social care costs. I then used
the case study as the basis of an
exercise for a group of students on
the Cambridge Master's in Public
Policy course. The students worked

on the issue of how to generate cost savings in adult social care and I was able to feed back to them on their findings, proposals and presentations.

Another output of my Fellowship emerged from a meeting with Professor Alan Hughes of Cambridge Judge Business School. In discussion with Professor Hughes I gained a fresh perspective on the importance of having a theory of change (identifying preconditions necessary to achieve long-term goals) to underpin evaluations. The result of this activity was that every evaluation carried out within Newham Borough Council now has an explicit theory of change as its

basis, impacting positively on the development of professional practice, and on the quality and usability of data emerging from evaluations.

These activities are selected examples from the range of outcomes that have arisen during my two-year Fellowship. Others include continued engagement on public health, invitations to speak at conferences and attend events in central government departments, as well as involvement in grant funding bids. Overall, the Fellowship has helped me open up to new ideas, and formed the basis for me to think differently about the challenges and opportunities we face in Newham.



# Spotlight on...

# **Devolution, housing and growth**

Facilitating knowledge exchange between universities and local governments was a major theme of our work in 2016.

And a Policy Fellow from the Department for Communities and Local Government saw benefits from his meetings with researchers that had a real impact on government policies.

DEVOLUTION, HOUSING AND GROWTH | WORKSHOP

# Modelling the economic impact of business growth in the Cambridge Cluster

Efficient collection of data on businesses, employment and housing is hugely important for future modelling and planning, and could be used to attract investors in infrastructure. However, collecting this data requires effective communication between the relevant parties.

In January 2016, Dr Andy Cosh (Cambridge Judge Business School) presented his work at a CSaP Policy Workshop on the economic impact of business growth in Cambridge. The workshop brought together researchers at the University of Cambridge with Cambridge Ahead and representatives from local government.

The purpose of the workshop was to present data on businesses and start-up companies in Cambridge, and to think about how this data might be improved and utilised in the future. The place of Cambridge in the national economic and political landscape was a constant theme.

There is a perception in business that Cambridge is good at creating start-up companies that are then bought up by larger companies. More robust data would help to understand the factors underpinning Cambridge's success in creating high-tech businesses. This data would also enable a clearer understanding of the relationship between investment in transport, housing and other infrastructure in Cambridge and the wider UK economy.

The relationship of the data to social policy was flagged up as an issue. It is clear that business growth in Cambridge is attracting a highly educated workforce. However, it is less clear how this could be made beneficial to poorer and less highly-skilled populations.

In the future the convening power of the City Deal, incorporating the University of Cambridge, local authorities, and businesses, should allow more joined-up thinking on these issues.

There is also great potential for data on business growth to be used for modelling and planning of transport and housing, and the way citizens interact with the city.



# How can research inform decisions on infrastructure and housing policy?

With the prospect of devolution on the horizon, and the greater local power that it would entail, CSaP organised a series of Policy Workshops in 2016 on facilitating knowledge exchange between universities and local government.

Academic research has the potential to inform decisions on infrastructure and housing policy by providing evidence, and generating new ways of thinking about the challenges local governments face. At the same time, research could be better informed by listening to the issues faced by local authorities and other key stakeholders.

In 2016, Professor Michael Oxley, Director of the Cambridge Centre for Housing and Planning Research (CCHPR) presented his work at a CSaP Policy Workshop.

The workshop brought together researchers at Cambridge with local authorities, and the Cambridgeshire and Peterborough Local Enterprise Partnership (GCGP LEP).

Discussions focused on how to use emerging research more effectively to inform housing development and infrastructure investment.

Mark Reeve (Chairman of the GCGP LEP) discussed the importance of building more new homes as part of the devolution deal for the GCGP area. However, with a skills shortage in the building sector, and a need to bring together housing, infrastructure and jobs, Mark emphasised the importance of having access to high-level thinking.

The workshop identified a need to invest in major infrastructure to help improve transport links between the Fenland district in the north, and Cambridge in the south, in order to improve job opportunities for those living in more rural areas.

There was also a discussion on the importance of understanding the needs of existing and potential city residents, and ensuring that people are involved early in deliberation and decision-making.

Going forward, it will be essential to develop longer-term visions and ways of working together. In 2017, the Universities of Cambridge and Manchester will work in partnership to share policy-relevant knowledge, research and expertise in this area.

# **Tom Tolfree**

Senior Economic Adviser, Department for Communities and Local Government

"CSaP is a really important interface, helping me relate the questions I have to the wealth of knowledge available at the University of Cambridge and beyond. The academics I've met have had real impact on government policies."



My work focuses on housing and local economic development, an area which moves rapidly, so I'm never disappointed when I look at my Policy Fellowship schedule for the day and see academics from the Cambridge Centre for Housing and Planning Research (CCHPR).

As well as being up to speed with the policy agenda, I've been impressed by the depth of analysis which sits behind CCHPR's understanding of the policy issues that come up in our discussions. On each of the occasions we've met, they have prepared a short briefing note on my questions, highlighting key pieces of evidence.

These bite-sized analyses, supported by further discussion, have been incredibly valuable. I've even used extracts in reviews we've undertaken that have been sent to ministers. I was also happy to support a recent funding bid by CCHPR to the Economic and Social Research Council, given the impact this work will have on government policy in the future.

A fascinating discussion on 'fractional ownership' with Professor Jaideep Prabhu at Cambridge Judge Business School, turned out to have potential applications to housing that I would not have foreseen. And a discussion with Professor Bart Lambrecht, an expert on capital markets, gave me a fresh viewpoint on the different financing mechanisms in the housing market. In fact, these alternative perspectives provided some of my most illuminating conversations at Cambridge.

I've been pleased to find a lot in common with the researchers I've met, including our shared professional values of impartiality and independence, which really helps to build trust. I'm also pleased that my CSaP network has been able to grow in a fluid way: as a civil servant, my work changes on a regular basis, so it's helpful that the Fellowship lets me tweak my questions, and thus the academics I meet, as the priorities of my role change.



# Governance

CSaP's Management
Committee reports to the
Councils of the Schools and
to the University's Research
Policy Committee. The
Advisory Council advises on
CSaP's strategy and activities,
paying particular attention to
the views of stakeholders.

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Head of Department, Department of Politics
and International Studies

**Dr Robert Doubleday** (Secretary)

Executive Director

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#### **Lord Richard Wilson**

Cabinet Secretary (1998-2002)

#### **Chris Wormald**

Permanent Secretary, Department for Health

# Financial Report - Year to 31 July 2016

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In order to sustain our activities in the longer term, we are actively seeking other sources of funding – from trusts, Research Councils, private philanthropy and elsewhere – to supplement our income from Fellowship fees, event sponsorship and the University itself. For more information about event sponsorship opportunities and ways to support our activities, please get in touch.

	FY 2014 / 2015	FY 2015 / 2016
Income	417k	495k
Expenditure	584k	543k
Net income	(167)k	(48)k
Total funds brought forward as at 1 Aug	383k	216k
Total funds carried forward as at 31 July	216k	168k



# A note of thanks

CSaP would like to record its gratitude to all the members of the University and others who have given their time this year to support our programmes and events and to meet visiting Policy Fellows, including:

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