



INSTITUTE OF ADVANCED STUDIES

Institute of Advanced Studies

2013-2016

Institute of Advanced **Studies** Team





Sue Gilligan



IAS Administrator

Director Institute of Advanced Studies

Deputy Director and Manager





Professor of Social History



Eugenia (Éva) Valsami-Jones

Chair in Environmental Nanoscience



Professor of Environmental Engineering



Professor of Leadership and Enterprise Development



Professor of Restorative Dentistry

Introduction

1900 the visionary civic leader and British statesman Joseph Chamberlain brought Birmingham's academic institutions together to create the University of Birmingham as 'A school of universal instruction, not confined to any particular branch of knowledge but taking all knowledge into its province.' Chamberlain recognised that knowledge did not reside solely in isolated disciplines but that knowledge and its pursuit should transcend those disciplines.

In the years since, the University of Birmingham has grown into one of the most comprehensive Universities in the UK, and the physical co-location of the different disciplines on the Edgbaston campus gives Birmingham a unique capability to address today's major global challenges that fall between and across disciplines; The Birmingham Institute of Advanced Studies (IAS) was launched in 2013, by Vice-Chancellor, Professor Sir David Eastwood, and founding IAS Director, Pro Vice-Chancellor Professor Malcolm Press, to further nourish and enhance our intellectual environment and to promote and foster interdisciplinary endeavour.

The IAS is a key part of Birmingham's research environment, showcased here in this, our first, activity report. Over twenty leading international academics have already visited The Institute as Distinguished Visiting Fellows and around one hundred interdisciplinary workshops have taken place, bringing together not only our own and external academics but a wider community of stakeholders including health providers and patients, carers, athletes, policy makers, artists and funders, to create new thinking around important challenges. Workshops have drawn on knowledge from across all academic Schools and Colleges and, complemented by public lectures and engagement events, which have allowed Birmingham to both develop new lines of research and strengthen our external profile. Events around key societal themes have anticipated and positioned staff for wider national and international opportunities and we have initiated collaborations that have led to large grants, publications and policy influences.

New links have been forged with partners around the world through the University-Based Institutes for Advanced Study (UBIAS) network. These links allow us to explore novel ways to foster creative intellectual environments and valuable opportunities for new research collaborations.

Sue Gilligan, IAS Deputy Director and Manager, has shaped and planned the work of the Institute and IAS Administrator Sarah Jeffery has organised and supported all our events and activities. They are regularly nominated by academic colleagues for our University Professional Services Awards, and won Best Support for Research 2015.

Our five IAS Associate Directors provide a key sounding-board for new ideas and how to implement them.

Mike Hannon IAS Director

About the Director

Mike is Professor of Chemical Biology at Birmingham. His prize-winning research lies at the interface between chemistry and the life sciences, focused on metal complexes in biology and medicine as both imaging agents and therapeutics. He is President of the Society of Biological Inorganic Chemistry, an international learned society with over one thousand members, and will co-chair the European Biological Inorganic Chemistry conference in Birmingham in 2018. Mike was appointed IAS Director in April 2015, after seven years experience in creating and supporting interdisciplinary research as founding Director of two award-winning, interdisciplinary research training Centres at the interface between physical sciences and biomedicine. He has a particular interest in the ways people from different countries, cultures, and disciplines create stimulating intellectual environments that promote paradigm-shifting research.



Distinguished Visiting Fellows

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Distinguished Visiting Fellows

The Institute of Advanced Studies Distinguished Visiting Fellowship (DVF) Programme brings to Birmingham outstanding academics from global leading institutions around the world to enable research collaborations and the enrichment of campus life.



PROFESSOR SAID SIDKI University of Brasilia (UnB), March-June and April 2016

Professor Sidki is one of the most prominent Brazilian algebraists, founder of the biannual Escola de Algebra and is a Member of the Brazilian Academy of Sciences.

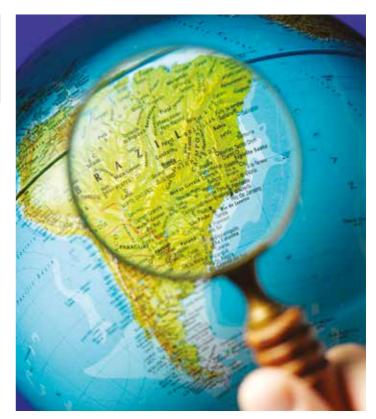
Said's collaboration with Sergey Shpectorov and Justin McInroy (University of Bristol), focused on a problem in Group Theory, which was proposed by Said some thirty years ago and has stimulated him to think and write about the problem from different perspectives. The work has resulted publications in the Journal of Algebra and Math. Zeitschrift.



Professor Sergey Shpectorov

Said's public lecture 'Higher Education in Brazil: Evolution and Challenges' was a fascinating insight for staff and students into Higher Education of a rapidly developing economy and the seven million higher education students in Brazil's public and private universities. This lecture was circulated widely and broadcast at UnB.

After Said's first visit, Sue Gilligan accompanied a delegation to Brasilia where she met with the Institute of Exact Sciences chaired by the Director Norai Rocco.





Professor Adalbert Evers

ADALBERT EVERS Justus Liebig University in Giessen, March and April 2014

Adalbert Evers is Professor for Comparative Health and Social Policy at the Justus Liebig University in Giessen; he works there in the Institute for Political Sciences at the Department for Social and Cultural Sciences and in the Institute for Household Economy and Consumer Research at the Department for Agrarian Sciences, Ecology and Environmental Management.

During his time as an IAS Distinguished Visiting Fellow, Professor Evers gave lectures, presenting concepts and results from his research project, WILCO,



Hosted by Professor Pete Alcock Third Sector Research Centre

(Welfare Innovations In Local Welfare Systems in Support of Social Cohesion) at the Cooperative Research Unit at the Open University, Edinburgh University Business School and the ImPRovE Mid-term Conference in Antwerp.

Professor Evers gave an IAS public seminar 'Building from the bottom: How is social innovation transforming social policy?'



The time spent by Professor Evers, as an IAS Distinguished Visiting Fellow was of great value. As a leading figure in the international third sector research field his visit was instrumental in helping to strengthen our international reputation and in broadening collaborative research activity, in particular within Europe.

Pete Alcock



PROFESSOR MICHAEL BIEHL Professor of Computing Science, University of Groningen, April–June 2014

Michael Biehl is an internationally leading expert in the fields of Scientific Computing and Machine Learning. His current research focuses on the design of efficient similarity-based methods for classification, clustering and visualization of complex and high-dimensional data sets, systems science approaches to biomedical large-scale data. The visit served to enhance inter-disciplinary interaction, created broad exposure to cutting edge bioinformatics strategies as innovative research tools, explored Michael's significant expertise regarding multi-disciplinary integration of bioinformatics and the exchange of ideas on how to enhance embedding of bioinformatics to facilitate highly synergistic multi-disciplinary interactions and the generation of translational outcomes of systems science.

In collaboration with Wiebke Arlt, Professor Biehl has applied novel machine learning approaches to steroid metabolome data from



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Professor Wiebke Arlt

patients with adrenal tumours. He also interacted with the Centre for Translational Inflammation Research (CTIR; Dagmar Scheel-Toellner, Karim Raza, Chris Buckley), applying his methods to outcome prediction and early diagnosis of chronic inflammatory disease. Links were also established with Peter Tino from the School of Computer Science, through a strong interest in machine learning, modelling techniques and their inter-disciplinary applications. Collaborative projects are now under way with the Systems Science for Health Initiative, the NIHR Trauma Centre and MRC/ARUK Centre for Musculoskeletal Ageing.

Professor Biehl is not only a cutting edge computer scientist but an outstanding communicator of science, which has enabled him to overcome boundaries and engage in truly productive inter-disciplinary collaboration and during his visit IAS hosted two an interdisciplinary workshops 'Data analysis, machine learning, and modelling in the bio-medical domain' and 'Intelligent computation meets bio-medical research: recent developments in computational biology'. 7



PROFESSOR JEFF MCMAHAN Rutgers and now University of Oxford. May and June 2014

Professor McMahan is White's Professor of Moral Philosophy at the University of Oxford and visited as part of the IAS 'Saving Humans' theme.

leff McMahan studied at Oxford and Cambridge and works in normative and applied ethics, political philosophy, and legal theory. Published work includes 'The Ethics of Killing: Problems at the Margins of Life' (Oxford University Press, 2002) and 'Killing in War' (Oxford University Press, 2009). He has several other books forthcoming from Oxford University Press, including a collection of essays called 'The Values of Lives', a book on war intended for both academic and non-academic readers called 'The Right Way to Fight', and a sequel to his 2002 book called 'The Ethics of Killing: Self-Defense, War, and Punishment'.



Professor Heather Widdows

During his time with IAS, Professor McMahan gave a keynote lecture, 'Proportionate Defense,' at the 5th Braga Meeting on Ethics and Political Philosophy, University of Braga, Portugal; a public Lecture, 'How to Think About the Morality of War.' Stockholm Centre for the Ethics of War and Peace, Stockholm University; made a presentation 'Human Dignity, Assisted Suicide, and Euthanasia,' at a conference on Analytic Bioethics in Europe, University of Ghent, Belgium, and even managed to do some writing, 'Liability, Proportionality, and the Aggregation of Harm,' Saba Bazargan and Samuel Rickless, eds., The Ethics of War (New York: Oxford University Press).

In Birmingham Jeff gave the opening lecture, 'Proportionate Defense,' at a 'Saving Humans' conference on The Ethics of War and Intervention and a public lecture 'The Ethics of Humanitarian Intervention, with comments on Syria'.



DR ELIZABETH GARDINER John Curtin School of Medical Research at the Australian National University, May and June 2014

Dr Elizabeth Gardiner is Associate Professor at John Curtin School of Medical Research at the Australian National University and at the time of her visit was an NHMRC Senior Research Fellow at the Australian Centre for Blood Diseases, Monash University, Melbourne, Australia. Her core expertise is in the biochemical and molecular analysis of immunebased platelet disorders.

Dr Gardiner has expanded her studies of platelet receptor regulation



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Professor Steve Watson

to examine how uncontrolled platelet activation as seen in human autoimmune-based diseases such as immunothrombocytopenia (ITP) and heparin-induced thrombocytopenia (HIT), influences surface levels of both platelet receptor GPVI and the related ITAM-containing FcgRlla receptor levels.

Dr Gardner's visit made a number of significant contributions to both the Platelet and Translational Inflammation Groups, as well as establishing the basis of a funding application between Steve Watson and Mike Tomlinson in Biosciences.

We were extremely fortunate to bring over a leading figure in platelet research through the IAS. We benefited considerably from the in depth knowledge and expertise of Dr Liz Gardiner, she did a wonderful job in nurturing the students and postdoctoral researchers, and building links with other groups in the University. This has enabled us to establish new methods in and to map out several new collaborative grants with colleagues in the Colleges of CMDS and LES.

Steve Watson



Professor Jeffrey Boore

PROFESSOR JEFFREY BOORE University of California Berkeley, May–July 2014

Professor Boore is a world recognized genome biologist returning full time to academia, after many years at the US Department of Energy's Joint Genome Institute (JGI, Lawrence Berkeley National Lab). Jeffrey is also Founder, Owner, and Chief Executive Officer of Genome Project Solutions, Inc. He holds a Ph.D. in Biology from the University of Michigan and a B.S. in Biology from Penn State University. He retired at the rank of Lt Colonel after more than 20 years in the US Air Force and Air National Guard.

At JGI, he was instrumental in guiding the transition from human genome sequencing to being a comparative



Professor John Colbourne

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genomics facility and in establishing the 'Community Sequencing Program', which allocates \$20 million per year to genomics projects. Jeffrey has led 22 grant-funded projects totalling over \$12 million, overseen numerous whole genome sequencing projects, authored over 100 scientific publications, delivered over 230 scientific presentations, and served on numerous advisory boards and panels, including those to the National Science Foundation, US Department of Agriculture, National Evolutionary Synthesis Center, and National Institutes of Health.

As well as developing further research collaborations with Professor Colbourne's group, Professor Jeff Boore gave an IAS public Lecture 'What can we do with the genomics data deluge?'



DR NADINE AKKERMAN University of Leiden, May–July 2014

Dr Akkerman is internationally recognised as an outstanding researcher, regularly publishing on early modern literary and historical studies. Volume 2 of Dr Akkerman's three-volume Oxford University Press edition of 'The Correspondence of Elizabeth Stuart, Queen of Bohemia' was published in 2011, with Volumes 1 and 3 scheduled to appear in 2014 and 2015. Dr Akkerman's is the first complete edition of Elizabeth Stuart's letters: the edition not only presents a fascinating portrait of a pivotal cultural, political and religious figure in early modern Europe, it also provides a mass of new information related to Elizabeth's



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Dr Hugh Adlington 9

correspondence with a far-reaching network of powerful statesmen and women, politicians, diplomats, churchmen and scholars.

During the visit, the late Professor Lisa Jardine and Dr Akkerman held a lively public discussion on the cultural and historical significance of Elizabeth Stuart, 'Challenges for Early Modern Women's History' and Nadine also gave a keynote address at a one-day international colloquium, Shakespeare Institute.

IAS was also delighted to support the publication of *'Rival women at the Court of The Hague'*, written by Dr Nadine Akkerman to accompany the exhibition on Elizabeth Stuart and Amalia von Solms at the Historical Museum of The Hague.

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Dr Nadine Akkerman's tenure as a Distinguished Visiting Fellow was an extremely productive one for the University. Scholars working on current research projects in manuscript studies, literary editing, Shakespeare, women's studies and early modern politics all benefited from consultation and research meetings with Dr Akkerman. Hugh Adlington



RUSSELL DEATH Massey University, July-November 2014

Climate change is expected to increase the future occurrence of extreme hydrological events, such as severe droughts with potentially devastating effects on ecosystems, yet to date most ecological research effort has centered on the impacts of gradually shifting 'average' conditions, not extremes. Droughts are difficult to study in natural systems because they are, by definition, infrequent. Experiments have been advocated recently as useful tools to explore the ecological impact of climate extremes, and research at the University of Birmingham is at the leading edge of this new trend. During his visit, Dr Death a world leading ecohydrologist facilitated significant advances in these key areas. Russell is a senior figure in the field of disturbance ecology with high-level expertise in the artificial intelligence modelling approaches that allowing colleagues to make the leap to a more predictive science.



Professor David Hannah

The team undertook research to determine how extreme hydrological events, floods and droughts affect the ecology of river systems. Whilst in Birmingham, Russell hosted a very successful IAS workshop which led to the development of a new modelling toolkit to predict drought impacts in rivers at spatial scales and timeframes relevant to water managers and policy makers. This work greatly enhanced the management relevance of our work in Birmingham. He also gave a number of seminars on the theme of water management issues 'down under', highlighting what we in the UK can learning from New Zealand experience. The visit also led to a major position paper on the effects of extreme climatic events on riverine ecosystems, and an interesting commentary on emerging themes in water environmental management.

Dr Death also gave an IAS Public Seminar 'Predicting the Effect of Drought on River Ecology'.



Mark Ledger

The IAS Fellowship succeeded in enhancing our global position as a centre for hydrological research on drought and hydrohazards, helping us to better link the pure and applied elements of water science research, and also strengthened our international links and profile in this rapidly evolving field

Mark Ledger





DR JOSEF RUPPENHOFER Hildesheim University, July and August 2014

Dr Ruppenhofer, a researcher in the department of information science and Natural Language Processing at Hildesheim University, Germany, works on corpus linguistics and computational linguistics, with a special interest in the development



Professor Susan Hunston

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of lexical resources. Beginning with his graduate studies at UC Berkeley, Dr Ruppenhofer has been intensely involved with the FrameNet project and Frame Semantics, a key theoretical cornerstone of FrameNet. More recently, he has focused on sentiment / subjectivity analysis with the goal of extending the FrameNet resource with information relevant for sentiment analysis. Hosted by Professor Jeannette Littlemore

The expertise of Dr Ruppenhofer's hosts at the University of Birmingham in the areas of metaphor and metonymy on the one hand, and evaluation on the other, facilitated key directions for joint research, such as an investigation of patterns of sentiment and figurative language in political discourse. Discourses of political conflict were the focus of joint analysis efforts interacting with



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Professor John Barnden

work on political conflict here in Birmingham with the Institute for Conflict, Cooperation and Security.

Dr Ruppenhofer's visit coincided with the IAS Workshop 'Figurative language: its patterns and meanings in domain-specific discourse'



PROFESSOR SHARON ROBINSON University of Wollongong, October-December 2014

Professor Sharon Robinson is a plant ecophysiologist and climate change biologist. After completing her PhD at University College London in 1990, she held postdoctoral positions at Duke University (USA) and the Australian National University before her appointment as a Lecturer at the University of Wollongong. Sharon is currently a member of the United Nations Environment Programme Environmental Effects Assessment Panel (UNEPEEAP), the Australian Research Council College of Experts, the Australian Antarctic Science Advisory Committee and an Editor for the journal Global Change Biology. She first visited Antarctica in 1996 and has since been on expeditions to Casey, Davis, King George Island and Macquarie Island. She is a custodian for the only Antarctic State of the Environment Indicator concerned

with Antarctic vegetation and her research group has provided the first evidence that climate change is affecting East Antarctic terrestrial communities. Professor Robinson's research examines how plants respond to climate change with an integrated systems approach using molecular to ecological techniques. Most recently this includes developing techniques to map plant health and productivity from unmanned aerial vehicles (UAVs).

During her time in Birmingham Sharon finalised her report for the UNEP EEAP, United Nations Environment Programme, 'Environmental effects of ozone depletion: 2014 assessment: Interactions of ozone depletion and climate change', wrote for the Conversation and is now writing regularly with moss biologists Juliet Coates and Dan Gibbs (Biosciences)

Professor Robinson also gave an IAS lunchtime seminar, 'Monitoring temporal and spatial change in Antarctic terrestrial communities'.



PROFESSOR GERNOT STROTH University of Halle, February and March 2015 and March 2016

Gernot Stroth is an internationally leading algebraist who is acclaimed for his incisive contributions to the finite simple group classification. The mathematics behind the classification of the finite simple groups represents one of the major achievements of mathematicians over the last sixty years. Current advances focus on understanding the local structure of groups and how that structure influences global properties.

Stroth's most recent work with Meierfrankenfeld (Michigan, USA) and Stellmacher (Kiel, Germany) is a monumental contribution to



our understanding of the subject. In addition to research successes, Stroth has also contributed to the mathematical community, from 1996 to 2001 he served on the executive committee of the Deutsche Mathematiker-Vereinigung (the major professional society for German mathematicians) and from 2000 to 2001 he served as its president. Stroth has been an editor of the Journal of Algebra since 1985 and is an editor of the book series Mathematik Kompakt'.

Since Professor Stroth's visit a joint paper with Chris Parker, which was researched and written during Stroth's IAS tenure, 'A 2-local identification of' has appeared on-line.



PROFESSOR KATIA RUBIO University of São Paulo, February–April 2015

Professor Rubio is Associate Professor at the School of Sports and Physical Education at the University of São Paulo. Graduating in Journalism at Cásper Líbero College (1983), she then went on to graduate in Psychology at Catholic Pontific University of São Paulo (1995). She obtained a Masters in Physical Education at University of São Paulo (1998) and a Ph.D. in Education at University of São Paulo (2001).

Katia was also president of Brazilian Sport Psychology Association (2003-2007) and editor of Brazilian Journal of Sport Psychology (2004 – 2012). She is member of the Brazilian Olympic Academy and she lectured at the International Olympic Academy (Olympia – Greece) in 2012 and 2013.



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Dr Jonathan Grix

A leading expert on the Olympic Games and Olympians in particular, Professor Rubio has the largest collection of in-depth life histories of Olympians (Brazilians) globally. Combining insights from history, sport psychology and politics, Katia made significant contributions to the research of the Sport Policy Centre and took part in an IAS Workshop, 'Looking Forward to Clean Sport: The Future of Education-and Detection-Based Deterrents to Doping' and gave an IAS public seminar 'Memory and History: Understanding contemporary Olympism in an individual and social context'.

The IAS DVF programme provided us with a focussed period of research where we could work intensively on our projects related to the finite simple group classification. This allowed us to complete months of research in a matter of weeks. Without the support of the DVF programme, our work on this research would not yet be completed.



DR CAROLINE ESSERS Radboud University Niimegen. May and June 2015

Dr Essers is an Assistant Professor of Strategic Human Resource Management at the Radboud University Nijmegen, Faculty of Management and Associate Professor Entrepreneurship at VU University Amsterdam. Caroline's research focuses at the social dynamics of entrepreneurship, such as the identity constructions of female migrant entrepreneurs and their networking.

She uses diverse perspectives in her research on entrepreneurship, such as postcolonial feminist theory and



Professor Monder Ram OBE

social constructivist approaches like the narrative/life-story approach.

Her work has been published in the Organization Studies, Organization, Human Relations, Gender, Work and Organization, British Journal of Management, Entrepreneurship and Regional Development, and International Journal of Entrepreneurial Behaviour & Research. She is an Associate Editor for Gender, Work and Organization, and is organizing the stream on Critical Entrepreneurship Studies (CES) on the Critical Management Studies (CMS) conference for the fourth time this year.

Dr Caroline Essers exceeded our expectations from the Distinguished Visiting Fellowship scheme. She participated enthusiastically in a range of scholarly activities, including: seminars and workshops; the mentoring of early career researchers; the development of research bids; and the preparation of articles. Our work with Dr Essers continues, and we have plans to collaborate on major European research bid. I am grateful to IAS for introducing us to the DVF initiative and facilitating a productive and enduring research collaboration with an excellent European scholar.



PROFESSOR MICHAEL APPLE John Bascom Professor. University of Wisconsin, Madison, May and June 2015

Michael W. Apple is widely recognised as one of the world's leading critical educators. His reputation is built on an exceptional body of scholarship that extends from the 1970s to the present day. Professor Apple's standing is equally strong in numerous parts of the world, including North America, Europe, South America (especially Brazil and Argentina), South Africa and Asia (particularly China). His truly global impact can be gauged by the many translations of his books and by the constant international demand for his services as a speaker and collaborative progressive educator.

As John Bascom Professor he holds one of the most prestigious university-wide chairs at the University of Wisconsin, Madison: In addition to more than 300 journal articles, Professor Apple has authored and edited more than 40 books, many of them translated



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Professor David Gillborn

into additional languages, including many landmark publications.

Professor Apple was named as one of the 50 most influential writers in education in the 20th Century. He has won numerous awards, including a Lifetime Achievement Award from the American Educational Research Association (AERA) and the UCLA medal for Distinguished Academic Achievement. Several universities have honoured him internationally and had two books (Ideology and Curriculum and Official Knowledge) named in a list of the most important books of the 20th Century.

Professor Apple views Birmingham as a key site for the development of critical perspectives on the intersections of class, race and gender in the late 20th Century and is extremely supportive of the work of the Centre for Research in Race & Education. His visit played a crucial role in raising the profile of critical educational research at Birmingham, helping to cement its growing reputation as an internationally important centre for such work.

Monder Ram



DR DEBBIE HEMMING Scientific Manager, Vegetation-Climate Interactions group, Met Office Hadley Centre, February–May 2015 and April–May 2016

Dr Hemming is Scientific Manager for the Vegetation-Climate Interactions group within the Met Office Hadley Centre. Her group is focussed on improving the understanding and modelling of vegetation in the climate/earth system. Debbie's background integrates ecosystem research and climate/earth-system modeling, with the focus of improving understanding of ecosystem functioning and the potential impacts of environmental changes on ecosystem services. She completed a PhD on 'Stable isotopes in tree rings: Biosensors of environmental change' at the University of Cambridge Plant Sciences department, followed by post-doctoral research on vegetation-climate interactions in arid systems at University of Arizona, USA, and Weizmann Institute of Science, Israel.



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Professor Rob MacKenzie

Since joining the Met Office Hadley Centre in 2004 her work has focussed on large-scale Earth System Modelling and its application to climate risk management, contributing to and leading on a wide range of national and international projects. During this time she spent 8 months working at the UK Department for Environment, Food and Rural Affairs (Defra) and Climate Change Committee Secretariat providing climate science advice during the passing of the UK Climate Change Bill. She also led the World Meteorological Organisation's Task Team on Climate Risk Management between 2011 and 2014. Currently, she is on the Steering Group for the UK Biodiversity Impacts of Climate Change Observation Network (BICCO-net), and is a Review Editor for the Intergovernmental Science-Policy Platform for Biodiversity and **Ecosystem Services (IPBES)** report that is currently in preparation on 'Modelling impacts of drivers on biodiversity and ecosystem functioning'. She has over 50 peer-reviewed publications,



including contributing author to the 4th Assessment Report of the Intergovernmental Panel on Climate Change, and led on many non peer-reviewed reports for customer projects.

For BIFoR, Debbie studied the ratio of carbon to nitrogen (C:N) in the leaves of mature trees, as the leaves develop through the growing season. Leaves have high protein content when young, and rely on stores of last-year's carbohydrates for energy until the photosynthetic apparatus is re-established and fresh carbon can be drawn into the plant. The measurements Debbie has made with BIFoR identify the plants' priming for summer growth, and are an important 'known unknown' in the climate/Earthsystem models the Met Office runs for UK input into climate

negotiations. Debbie's measurements strongly connect to the core objectives of the BIFoR FACE facility and form the backbone of the characterisation of the woodland before beginning to apply extra carbon dioxide to the system. Colleagues in Birmingham who have benefitted directly from Debbie's visit include Rob MacKenzie, Francis Pope, Zongbo Shi, James Bendle (GEES); and Scott Hayward (BioSciences). Those who benefited through interdisciplinary dialogue include: lain Johnston (BioSciences); Frank Uekötter, Corey Ross (History); and Louise Hardwick (Modern Foreign Languages). Debbie has brokered key research relations not just with her own agency, the Met Office, but also with key groups at Exeter University, Swansea University, and the Centre for Ecology and Hydrology.



Professor Ellsworth

PROFESSOR DAVID ELLSWORTH Hawkesbury Institute for the **Environment (HIE) Australia** April–September 2015

Professor Ellsworth was also hosted by Professor Rob MacKenzie, School of Geography, Earth and Environmental Sciences, (GEES) Director, Birmingham Institute of Forest Research (BIFoR) and Professor of Atmospheric Science.

The Birmingham Institute of Forest Research (BIFoR) is forging close links with other world-leading institutes of forest research, including the Hawkesbury Institute for the Environment (HIE). Close links between BIFoR and HIE are especially important because these two institutes will run the only examples of forest-scale Free-Air Carbon Dioxide Enrichment (FACE) experiments for the next decade. Professor David Ellsworth leads the HIE forest-FACE experiment and is a leading environmental biologist with a worldwide reputation. During his visit David had substantial input into the design of the BIFoR FACE experiment; developed a complementary research agenda between HIE and BIFoR and began collaborations for joint BIFoR-HIE European funding proposals. David's engagement with key academic and non-academic stakeholders in BIFoR was invaluable to help build the perception of the two forest-FACE facilities as a single, globally leading, experimental facility. Talks and seminars during the visit included:

'Research engagement with Australians: the ARC view'. Part of a series of talks given by Australian researchers at the University of Birmingham, organised by University of Queensland Research Office and University of Birmingham's EU and International funding team.

'Effect of drought and elevated CO₂ on volatile carbon emissions for Eucalyptus in a peri-urban forest' IUFRO Conference 'Global Challenges of Air Pollution and Climate Change to Forests', Palais de la Méditerranée in Nice (France).



IAS public seminar, 'Mature trees and climate change - why have they been overlooked and why are they important?'

'Forest FACE and P limitations - is there a constraint on CO₂ fertilisation?' Justus von Liebig University, Giessen Germany.

'Can subtropical woodland respond to elevated atmospheric [CO_]? An Australian free-air experiment'. Sheffield University





Professor Becky Loo

PROFESSOR BECKY LOO University of Hong Kong, June 2015

Professor Becky Loo was hosted by a cross-disciplinary group, Professors David Dickinson, Joanne Duberley, Chris Rogers, Miles Tight, and Dr Phil Jones, working alongside Professor John R. Bryson from Birmingham Business School.

Professor Loo is one of the foremost Asian scholars working in the area of infrastructure, transportation and urban transformation. She is Director of the Institute of Transport Studies, Professor of Geography and Associate Dean of the Graduate



School at The University of Hong Kong. Her current research interests focus on sustainable transport, e-technologies and society and she has been working on understanding infrastructure in high-density cities.

During her visit Professor Loo worked with Birmingham academics on different aspects of sustainable urban transportation and intermodal integration and encouraged cross-disciplinary research between the Colleges of Social Sciences (Business School), Engineering and Physical Sciences (Civil Engineering) and Life and Environmental Sciences (Geography).

I must compliment the University of Birmingham on the establishment of IAS to support excellence in research and foster active research exchange both within the University and internationally. This initiative has been unmatched by many other leading Universities and has attracted me to visit your esteemed University. The IAS has the potential to be a real leading edge of the University of Birmingham. Professor Katja Goebs

PROFESSOR KATJA GOEBS University of Toronto, June and July 2015

Professor Katja Goebs is an Associate Professor of Egyptology in the Department of Near and Middle Eastern Civilisations at the University of Toronto and in Birmingham, worked closely with the Birmingham Memory Group.

Katja's research focuses primarily on the history of Egyptian religion and the institution of the kingship with a special interest in 'myths' of the kingship and the shared iconography of gods and kings, etc. Professsor Goebs is one of the leading scholars in this field of research and her recent publications, for instance 'Crowns in early Egyptian Funerary Literature: Royalty, Rebirth, Destruction' have pushed the borders of the discipline. Systematic religious studies in Egyptology are well established but research on the relation between the king and myth including rituals is more recent, which benefit from an interdisciplinary and broad methodological approach.

During her visit, Professor Goebs developed close collaborations with



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Dr Martin Bommas

her areas of interest exploring new evidence for the existence of ancient Egyptian myths related to kingship which have been identified recently by M. Bommas, Das ägyptische Investiturritual, 2013, and a leading expert in myth and mythography, Professor Ken Dowden. The Birmingham Memory Group, run by Dr Joanne Sayner offered a well-established platform for the evaluation of memory related research ready to accommodate this new research focus.

Professor Goebs gave a fascinating and thought provoking public lecture 'Psychology of Egyptian Myth' which bridged the gap between Science and the Humanities and participated in a workshop with colleagues from the UK, Europe and USA, 'Memory Myth and Performance'.



Becky Loo



PROFESSOR GEOFF ELEY University of Michigan, June and July 2015

Geoff Eley is the Karl Pohrt Distinguished University Professor of Contemporary History, as well as being a faculty member of the German Department, at the University of Michigan.

Geoff Eley is an internationally renowned scholar with broad research interests including German and British history, global history, the European Left, nations and nationalism, citizenship, social theory, and the relationship of history to theory and the social sciences.

In a varied and active month Professor Eley's visit was timed to coincide with a major conference on 'Rethinking Modern British Studies' at which he gave a keynote address; he gave a public lecture as part of



Professor Matthew Hilton

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the as part of the Vice-Chancellor's Distinguished Lecture Series; participated in an IAS conference 'Making Resources Speak: Themes and Methods of the New Materialism' and even gave a very well received talk on German history to a student audience at King Edward VI Sixth Form College in Stourbridge.

Geoff also spent time in discussion developing an essay for the published volume from a 2014 conference edited by Kieran Connell and Matthew Hilton, 'Cultural Studies 50 Years On' (Rowman and Littlefield International) and 'Conjuncture and the Politics of Knowledge: The Center for Contemporary Cultural Studies (CCCS), 1968-1988' and also planned a new and updated edition of 'Forging Democracy: The History of the Left in Europe, 1850-2000' (Oxford University Press, 2002). I was able to enjoy wide-ranging conversations with a large number of colleagues and students, whether socially in larger groups or one on one. I was hoping for exactly this level and variety of active intellectual exchange when I originally accepted the invitation. The accompanying sociability in the form of existing and newly created friendships, opportunities for enjoyable and enlightening conversation, dinners and lunches, a generally warm and welcoming climate is for me also an essential ingredient.

Geoff Eley



PROFESSOR HUGH CRAIG University of Newcastle, Australia, July and August 2015

Renaissance literature expert Professor Hugh Craig is a man of letters. But the computational stylist is equally a man of numbers. Hugh is the Director of the Centre for Linguistic and Literary Computing at the University of Newcastle, Australia. He has been an advocate of computer-assisted analysis of language in literature since the controversial field began to emerge in the 1980s and has devoted decades of research to proving that statistics can help us analyse and appreciate literary texts. Hugh's work is based largely on frequency data and has led to several breakthrough findings in regard to Shakespearean works. Using computational techniques he found that Shakespeare was the likely author of a number of scenes from the play 'The Spanish Tragedy' that had previously been attributed to the



playwright Ben Jonson. The results are presented in his 2009 co-edited book 'Shakespeare, Computers and the Mystery of Authorship'. Professor Craig's research builds on the work of the centre's founder, Emeritus Professor John Burrows, who was the first to establish that simple function words such as 'he', 'and', 'but' and 'if' were rich in stylistic information when analysed using computational techniques. In a novel cross-disciplinary exercise, he employed the expertise of Professor Pablo Moscato, who heads the University's bioinformatics program, to assist in the analysis of texts. The pair undertook a joint project comparing the structure of language in Shakespeare's plays and poems, which returned interesting evidence of a vast disparity in style between the two literary disciplines.

Craig also linked with University speech pathology researchers to study how computational linguistics Professor Craig's visit to Birmingham enabled him to share his expertise with the Behn project more readily and fully than would have been possible by email or Skype; he was able to meet other members of the Behn project, and also to advise on the drafting of a successful major Research Grant application: a collaborative application with Loughborough University, which has subsequently been approved by the AHRC. This was an exceptionally successful and visit which has already helped to generate important foundational work for the Behn edition and should herald several years of research collaboration between Professor Craig, Dr Wright, and Dr Evans.

Gillian Wright

can be applied in the health sphere. Professor Craig's visit supported Dr Gillian Wright and Dr Mel Evans in preparatory work towards a new Cambridge edition of the Works of Aphra Behn and worked closely mentoring colleagues in the techniques of computational stylistics. Professor Craig and Dr Evans identified, designed and are now developing a pilot study on drama doubtfully attributed to Behn.

Professor Craig was the keynote speaker at a one-day IAS colloquium on attribution and stylistics, '*Authorial* Attribution: Traditional and Non-Traditional Approaches in the Digital Age' in which colleagues from the Departments of English Literature and Language, the Shakespeare Institute, Aston University, Bangor University, Loughborough University, and the University of Sheffield took part, and which was live-streamed on the internet. He led a training session for postgraduates and staff on computational stylistics, and took part in numerous informal conversations with staff in English Literature, many of whom work on issues of attribution.



PROFESSOR MARTHA FINEMAN Robert W. Woodruff Professor of Law at Emory University September and October 2015

Martha Fineman is an internationally renowned scholar of the highest standing, whose work addresses complex and boundary-transcending themes of human vulnerability and resilience.

Professor Fineman paid an extremely productive visit to the University of Birmingham in Autumn 2015. During her visit she delivered a well-attended public lecture 'Vulnerability and Resilience' which discussed the relevance of her work on vulnerability theory and how states should promote resilience in global and local contexts. She also participated in an international and interdisciplinary Institute of Advanced Studies research workshop entitled 'Employing Vulnerability Theory: Challenges and Opportunities?' with Birmingham Law School (BLS) in conjunction with the Centre for Law and Social Justice at the University of Leeds. This attracted participants and speakers from the USA, UK and Europe, spanning

disciplines including Law, Social Policy and Philosophy. Doctoral students in Birmingham Law School also organised an author meets reader session with Professor Fineman, where she commented directly on presentations of their theses and she also held follow up meetings with them about their doctoral research. Birmingham colleagues and Postgraduate Researchers also participated in an afternoon round panel session at the University of Leeds on 'Vulnerability & Disability Theory' organised by Professors Michael Thomson (Leeds) and Marie Fox (Birmingham).

The visit cemented existing and nascent research links and collaborations between the University of Birmingham, Emory, Lund and Leeds and follow up events include a research workshop hosted by the Gender@BLS Research cluster on '*Power*, *Vulnerability and Care*' in February 2016 which engaged with themes from Martha Fineman's pioneering work. Birmingham Law School held a staff work in progress seminar in January 2016 which discussed a paper entitled '*The Poodle* Problem: Exploring the Paradox of Professional Independence in Large Law Firms' by Emma Oakley and Steven Vaughan which originated from the workshop that has taken place during Professor Fineman's visit.

A panel organised by Fox (UoB) and Thomson (Leeds) has been accepted for the Law and Society Association Annual Conference in New Orleans, June 2016 on the theme of 'New Corporeal Humanisms: Law & Social Change I & II' which will explore the emergence of a new humanist discourse in feminist theory beginning with the body and its vulnerability. It will address how in an ontology shaped by political aspirations and theory, these models centre corporeality and our shared vulnerability to suffering and harm as a way of figuring a new ethic of responsibility and how theories of vulnerability, precarity, capability, corporeal altruism, social flesh, provide a means of articulating the responsibilities of the state to its citizens, distant (and not so distant) others, and non-human beings. The papers by legal scholars from the UK and US address how the new corporeal humanisms have been responded to in legal studies. They seek to test the utility of these theories for legal projects for social change.





PROFESSOR BOB MCKELVEY November 2015

Professor Robert (Bob) S. McKelvey was hosted by Professor Sabine Lee, History

During his fellowship Professor McKelvey worked with Professor Lee to develop the study of the history of wartime gender-based violence and children born of war.

Obtaining his undergraduate degree from Harvard University in 1966 Professor McKelvey then graduated from Dartmouth Medical School in 1974. He completed his general psychiatry training at the Cambridge Hospital, Cambridge, and Massachusetts in 1977 and his child and adolescent psychiatry training at McLean Hospital, Belmont, and Massachusetts in 1979. He is board-certified in Psychiatry and Child and Adolescent Psychiatry and is a Fellow of the Royal Australian and New Zealand College of Psychiatrists. He is especially interested in the care of persons from other cultural traditions, an outgrowth of many years of clinical and research involvement with refugees from Southeast Asia,

and particularly Vietnam. Prior to entering medicine, he served as a Captain in the US Marine Corps during the Vietnam War and it was that experience that stimulated his interest in both medicine and cross-cultural psychiatry.

Professor McKelvey has written two books based on his personal experiences as U.S. Marine Corps civil affairs officer during the Vietnam War: 'The Dust of Life: America's Children Abandoned in Vietnam' and 'A Gift of Barbed Wire: America's Allies Abandoned in South Vietnam'.

Professor McKelvey also has a strong interest in youth suicide prevention and has received a grant to develop a training program in the diagnosis and treatment of adolescent depression and suicide in conjunction with the Department of Paediatrics.

Professors Lee and McKelvey have received a Wellcome Trust Seed Award for a pilot study relating to Children born of the Vietnam War who settled in the US or remained in Vietnam respectively.



PROFESSOR MARTIN GROSSMANN December 2015 and June 2016

Professor Grossmann is the former Director of the Institute of Advanced Studies, University of São Paulo (IEA USP) and full Professor of the School of Communication and Arts at USP. He was the director of Centro Cultural São Paulo from August 2006 to May 2010 and deputy director of USP's Museum of Contemporary Art (MAC) from 1998 to 2002. He is the creator and coordinator of Fórum Permanente: Between Public and Private, a mediation and cultural action platform. Martin has a degree in Fine Arts from Fundação Armando Alvares Penteado (FAAP) and holds a Master's from USP's School of Communication and Arts (ECA) and a PhD from the University of Liverpool. He is the creator and coordinator of the first USP website (USP Online, 1995-1998).

Grossmann's research discusses the transition of material culture to a culture in virtuality, the relationship between contemporary art, its agents and institutions, the processes of artistic and cultural mediation and the development and maintenance of information systems for art and culture.

During his visits here Martin will be developing his current research project 'Stranger's Guide to the Paradoxical Museum' an outline of which he presented at a public seminar in December 2015, and will also develop synergies and research collaborations with The Barber Institute: Ironbridge International Institute for Cultural Heritage; The History of Medicine Unit; University Cultural Collections and colleagues in the Centre for the Study of Cultural Modernity and the Department of Art History, Curating and Visual Studies.



DR THERESA BLUME German Research Centre for Geosciences (GFZ), Potsdam. March–May 2016

Dr Theresa Blume was hosted by Professor Stefan Krause and the Birmingham Institute of Forest Research (BIFoR).

Dr Blume is leading the Hillslope and Ecohydrology research group within the Section of Hydrology at the German Research Centre for Geosciences (GFZ), Potsdam. The work of her group has been at the forefront of developing distributed environmental sensor networks for ecohydrological monitoring in particular in forested watersheds. As a leader of the **TERENO** observatory NorthEast Germany (TERENO is a network of Terrestrial Environmental Observatories in Germany similar to the CZO network in the US) and a PI on the DFG Research



Hosted by Professor Stefan Krause

Unit on 'Catchments As Organized Systems (CAOS)'. With an extensive monitoring network in Luxembourg she is pioneering the design and development of sensor networks and the use of novel sensing approaches that allow us to start understanding the non-linear dynamics in water, solute and energy fluxes and interactions at the interface between aquatic systems and forest ecosystems. This spans from vegetation influences on subsurface storage, to runoff generation processes, connectivity analyses and groundwater-surface water interactions.

Dr. Blume's expertise linked directly to a recently awarded NERC Pilot project with Professor Krause as well as his research group's activities within the INTERFACES ITN and the UoB BIFoR which facilitated Dr. Blume's research activities.



PROFESSOR EÓIN KILLACKEY Associate Director, Research and Head of the Functional Recovery Research program at Orygen, the National Centre of Excellence in Youth Mental Health, University of Melbourne.

The main activity for Professor Killackey's first visit in April 2016, hosted by Professor Stephen Wood (Professor of Adolescent Brain Development and Mental Health) was to give a keynote address at the IAS workshop '*Transitions in mental health: Individual, social, cultural, and political*'



Hosted by

Professor Stephen Wood

Professor Killackey is widely known for his research in helping young people with mental illness recover well, with a particular focus on physical and vocational outcomes. The visit allowed the development of existing collaborations with Professor Wood concerning the role of social cognition in maximising the success of vocational interventions and the exploration of new possibilities around physical health with clinical-facing colleagues at the University of Birmingham.

The DVF programme allowed me to bring an expert to Birmingham who could catalyse a conversation about research plans with colleagues across various disciplines. Without that, I don't doubt that the conversations would have happened but they would take longer to bring to the same level.

Stephen Wood



PROFESSOR MICHAEL HERZFELD Harvard. Ernest E. Monrad Professor of the Social Sciences Director, Thai Studies Program, Asia Center, Curator of European Ethnology, Peabody Museum Harvard University May and June 2016

Michael Herzfeld was educated at the Universities of Cambridge (B.A. in Archaeology and Anthropology, 1969), Athens (non-degree program in Greek Folklore, 1969-70), Birmingham (M.A., Modern Greek Studies, 1972; D.Litt., 1989); and Oxford (Social Anthropology, D.Phil., 1976). Before moving to Harvard, he taught at Vassar College (1978-80) and Indiana University (1980-91) (where he served as Associate Chair of the Research Center for Language and Semiotic Studies. 1980-85. and as Chair of the Department of Anthropology, 1987-90). Lord Simon Visiting Professor at the University of Manchester in 1994, he has also taught at the Ecole des Hautes Etudes en Sciences Sociales (1995), Paris, at the Università di Padova (1992), the Università di Roma 'La Sapienza' (1999-2000), and the University of Melbourne (intermittently since 2004), and has held a visiting research appointments at the



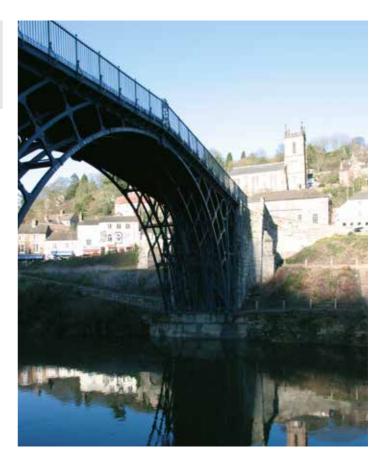
Hosted by

Professor Mike Robinson

Australian National University and the University of Sydney (1985), at the University of Adelaide, and at the Université de Paris-X (Nanterre) (1991).

Major lectures include the inaugural **Distinguished Lecture in European** Anthropology at the University of Massachusetts, Amherst (1996), the Munro Lecture at the University of Edinburgh (1997), the Journal of Anthropological Research Distinguished Lecture at the University of New Mexico (2001), the Einaudi Lecture at Cornell University (2004), the keynote address to the Association of Social Anthropologists of the British Commonwealth (2008), three lectures hosted by the Korea Research Foundation (2009), the Kimon Friar Lecture (Deree College, Athens, 2009), and the Eilert Sundt Lecture (University of Oslo, 2009).

In addition to participating in an IAS workshop, '*Resisting Global Hierarchies of Value in Cultural Heritage: No Escape?*' Professor Herzfeld gave a very well attended and received public seminar 'Deploying Culture and History in the Age of 'Asian Values': Material Debates on Heritage in Thailand and Elsewhere'



Michael's cross-disciplinary work continues to provide a rich and inspirational resource for all scholars engaged with deepening our understandings of the cultural heritage field. For staff and PhD students working with the Ironbridge International Institute for Cultural Heritage at the University of Birmingham we were delighted to have him as Distinguished Visiting Fellow and are indebted to the Institute of Advanced Studies for inviting him.

Mike Robinson



Professor Nile Green

PROFESSOR NILE GREEN is the William Andrews Clark Professor of History at the University of California Los Angeles, USA.

Professor Green joined us at the University of Birmingham as an Institute of Advanced Studies' Distinguished Visiting Fellow in June 2016, hosted by Dr Simon Jackson, History.

A world-renowned historian of global and colonial South Asia, Islam and the Middle East, Professor Green is distinguished both by his ability to straddle early modern and modern history, and by the way his work is informed both by anthropological approaches and globally networked approaches, notably to Muslim diaspora.

Green is author of seven monographs, most recently 'The Love of Strangers: What Six Muslim Students Learned in Jane Austen's London' (Princeton: Princeton University Press) and Terrains of Exchange: Religious Economies of Global Islam (New York: Oxford University Press, 2015), a double



Hosted by Dr Simon Jackson

publication suggestive of the reach of his scholarship and interest in interdisciplinary exchange with cognate disciplines such as comparative literature and theology. He has also written articles in the leading journals of his fields: American Historical Review. Past & Present, the Journal of Global History, Comparative Studies in Society and History, and the International Journal of Middle East Studies, among many others. He is director of the UCLA Program on Central Asia; serves on the Association of Asian Studies' South Asia Council: on the Executive Committee of the American Institute of Afghanistan Studies; and on the editorial boards of the South Asia Across the Disciplines book series and, formerly, the International Journal of Middle Fast Studies.

During Professor Green's visit, IAS hosted a multi-disciplinary workshop, 'The Global Middle East in the Age of Speed' and Nile gave a public lecture, based on his recent book 'The Love of Strangers: What Six Muslim Students Learned in Jane Austen's London'.



PROFESSOR GLENN COHEN Harvard Law School 22–29 June 2016

Professor Cohen was hosted by Professor Jean McHale of the Birmingham Law School and the Centre for Health Law Science and Policy.

Professor I. Glenn Cohen is a full professor of Harvard Law School who while still being a young scholar has blazed a trail in the area of health law and bioethics. Professor Cohen works at the cutting edge of health law and bioethics and has engagement with a range of issues critical to national and international priorities and cross-disciplinary boundaries in relation to the interface between law, bioethics and health and social care.

During this visit Professor Cohen delivered a public lecture showcasing some of his recent research and also participated in a day long IAS interdisciplinary workshop 'Patient Mobility and Globalisation'.





Workshops

IAS workshops, which are one or two days in length, are multi-disciplinary, aiming to bring together expertise from across the breadth of our University to address major cross-cutting ideas that are important, relevant and timely.

Human Brain Health

WORKSHOP LEADER

Dr Andrew Bagshaw, School of Psychology, Reader in Imaging Neuroscience, Director of the Birmingham University Imaging Centre

In December 2015, this workshop developed plans for a Centre for Human Brain Health at the University of Birmingham. This represented an opportunity to combine the considerable and varied expertise in brain science across the University and in the local area. The Centre will bring together researchers in the colleges of Life and Environmental Sciences (LES), Medical and Dental Sciences (MDS), Engineering and Physical Sciences (EPS) and Social Sciences (CoSS) with clinicians from the Queen Elizabeth Hospital and the Barberry National Centre for Mental



Health to create a coherent and inclusive presence in brain science. The workshop investigated how the Centre might be structured, identifying core themes that the work of the Centre could be organised into, and the mechanisms, equipment and facilities that will be needed to encourage and develop research collaborations.

Loss, Recovery, Reclamation: Re-thinking the Modern World

WORKSHOP LEADER Dr Kate Smith, Lecturer in Eighteenth-Century History

Recent interventions in debates on climate change, by post-humanist scholars such as Timothy Morton and Donna Haraway, have placed renewed focus on questions of extinction, loss and absence. Such discussions have highlighted how individual and group responses to loss have important, and imminent, ramifications for contemporary society. They also indicate the pressing need for a fuller understanding of historical responses to different types of loss. Seeking to address questions of extinction, loss and absence, this workshop created a community of scholars from different disciplines, career stages and institutions to interrogate processes of preservation, reclamation, reinvention and repair across time. Participants were asked to consider how responses to loss and absence might be identified in their own disciplines and challenged them to examine the spaces and moments in which the insights of others could prove productive.



In Collaboration: Arts and Science

WORKSHOP LEADERS

Professor Bill Chaplin, Professor of Astrophysics, Birmingham Professor Geoffrey Crossick, University of London and Director AHRC Cultural Value Project Professor Barry Smith, Director Institute of Philosophy, University of London and Leadership Fellow AHRC Science in Culture Theme

The workshop began with a keynote presentation from Martin J Kemp, Emeritus Research Professor in the History of Art at Oxford University who has written and broadcasted extensively on imagery in art and science from the Renaissance to the present day. Leonardo da Vinci has been the subject of books written by him, including Leonardo (Oxford University Press 2004) and he has published on imagery in the sciences of anatomy, natural history and optics, including The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat (Yale University Press). He was trained in Natural Sciences and Art History at Cambridge University and the Courtauld Institute of Art, University of London. He was British Academy Wolfson Research Professor (1993-98). For more than 25 years he was based in Scotland (University of Glasgow and University of St Andrews). He has held visiting posts in Princeton, New York, North Carolina, Los Angeles and Montreal. He has curated a series of exhibitions on Leonardo and other themes, including Spectacular Bodies at the Hayward Gallery in London, Leonardo da Vinci: Experience, Experiment, Design at the Victoria and Albert Museum in 2006 and



Seduced: Sex and Art from Antiquity to Now, Barbican Art Gallery, London, 2007. He was also guest curator for Circa 1492 at the National Gallery of Art in Washington in 1992.

Professor Kemp's keynote on the process of collaboration, focussed on how this works when individuals from very different disciplines and backgrounds come together, be that by design or by chance. The talk set the context for a series of discussions involving all participants centred on brief presentations by collaborating artists and scientists. Nominated rapporteurs reflected on the presentations, and in the final phase of the workshop there was a roundtable discussion to further tease out the key issues and dynamics at play.

The key issues explored were:

- What are the processes that shape how arts-science collaborations are initiated and fostered, and what is needed to ensure they develop and prosper?
- How do arts-science collaborations actually work? How can they develop new ways of thinking in each discipline?
- What environmental, institutional and sociological barriers are there to such collaborations. to such collaborations?

Arts and Science: In Collaboration', brought together artists, scientists, and interested academics from around the UK (and beyond), and from within the University, to discuss the challenges and opportunities presented by art-science collaborations. In addition to providing superb organisation and logistics, the IAS team were instrumental in ensuring we had key representation from interested stakeholders across the University, and participation from representatives from other Institutes of Advanced Study in Europe. Without their enthusiastic, skillful and knowledgeable support, the workshop would not have been the great success it was. The many delegates who came from outside Birmingham left with a very strong impression of the University and its commitment to supporting and encouraging dialogue in the interdisciplinary domain. **Bill Chaplin**



Making Resources Speak: themes and methods of the New Materialism

WORKSHOP LEADERS Professor Corey Ross and Dr Frank Uekötter (Department of History)

Resources are receiving growing attention across the humanities. Scholars have penned ambitious calls for a 'new materialism' and criticized a free-wheeling cultural history; the recent boom of commodity prices and fears of resource exhaustion (peak oil, peak phosphorus, peak uranium, etc) have highlighted the dubious neglect of Western societies as to their resource base.

There is also a growing disaffection with traditional, production-centered views of resources. Today's scholars seek to look into production and consumption, into cultural meanings, labour problems, and environmental repercussions. However, recent publications show a notable disconnect between those who theorize about a "new materialism" and those who actually study specific resources.

The workshop explored paths towards theoretically informed but empirically grounded studies and provided a platform for reflections on the proper place of the material among the range of social actors. Presentations combined familiar fields of research with reflections on methodological underpinnings. While resources have received growing attention in recent years, this was the first interdisciplinary conference that specifically sought to put methods and approaches of the new materialism to the test.



A Body of Crime: Conceptualising the Dead

WORKSHOP LEADER Dr Imogen Jones, Birmingham Law School

The deceased body occupies unique socio-cultural, historical, and ethico-legal spaces. This legacy means that the treatment of the body after death can be controversial; so much so that certain acts done to the deceased body trigger the involvement of the criminal law (eg, organ retention, the prevention of burial, and necrophilia). Moreover, the dead can become part of the criminal process when they are used as criminal evidence (i.e. for forensic purposes). The aim of the workshop was to bring together an interdisciplinary group to examine the socio-cultural, ethical, and historical factors which have impacted on the formation of the relevant legal offences and processes.

The group considered how ethical arguments regarding the treatment of the dead body should influence the relationship between the deceased and the criminal law. Such an examination is important because hitherto this confluence of areas has received scant attention. By bringing together those who approach the deceased body from different perspectives, enabled a mapping of the current landscape, identification of pressing challenges, and evaluation of whether the current criminal legal frameworks deal with the deceased body appropriately.

The workshop featured presentations by experts from within and outside the University, spanning the fields of medical and criminal law, history, philosophy, medicine, forensic pathology, and criminal justice officials. This workshop was funded by the Wellcome Trust and organised by the Institute of Advanced Studies.

Charities and their Publics

WORKSHOP LEADERS

Professor Saul Becker, Pro-Vice Chancellor and Head of the College of Social Sciences and Sukhvinder Kaur-Stubbs, MD of Engage-Us, which supports cross sector integration of public services across health, housing and social care.

Expectations that individuals have of the services around them are changing. Technology has enabled citizens to be better informed of the 'choices' available and, consumer empowerment programmes strengthen recourse to redress when minimum standards are eschewed. Moreover, rising demographic demand set against the cold economic climate, has intensified outsourcing by local authorities. Private companies and spin-outs continue to dominate this 'social market'. While most people don't appear to mind whether public or private sector provides – they do however, want to know that values remain integral to the business model.

This context poses particular challenges for charities. Generally, charities continue to enjoy high levels of trust with their 'publics' – their volunteers, members, staff, donors and users/ customers/clients and the latter group in particular, maintain high levels of gratitude. On the one hand, this provides opportunities for charities to participate more fully in local provision and to imbue the social market with their values. On the other hand, sustaining a culture of dependency, especially among the most disadvantaged and those at risk of vulnerability, run counter to the call for respect and dignity advocated by the sector.



This roundtable brought together a postdisciplinary team of experts, academics and practitioners to understand how the sector relates to its publics and, the way in which they can ameliorate both short and long-term circumstances for the 'beneficiaries'.



WORKSHOP LEADERS

Professors Hilary Sommerlad, Birmingham Law School and Professor Mark Exworthy Health Services Management Centre Professor of Health Policy and Management Exploring the dimensions of change in the professions and the implications for education and training: an inter-disciplinary approach

The assumptions underpinning the global knowledge economy thesis which has dominated strategic thinking on the role of higher education would appear to assure the role of universities such as Birmingham in preparing their graduates to enter high status and well-rewarded. However, much of the recent work in labour market analysis and the sociology of work unsettle these assumptions. Changes in public policy and market conditions in Health and Social Care, the Law and Education (among other parts of the public sectors) have disrupted established professional boundaries, and the relationship between private and public sectors at the same time that increasing participation in higher education has led to substantial changes in the socio-demographic composition of aspirant professionals.

This series of workshops identified scholars on professions across campus and established a cross-university research network/consortium on professional transformation, building research capacity and the group have since secured to hold an ESRC Festival of Social Sciences event: Professions in Crisis.

Music and Alabaster

WORKSHOP LEADER

Professor Andrew Kirkman, Music

Scholars, museum professionals and musicians explored the interaction of the sounding and the visual in the English late Middle Ages, with a particular emphasis on polyphonic music and Midlands religious alabasters and their devotional contexts in the long fifteenth century (c.1380-1520).

While scholarship has traditionally addressed these artistic phenomena in isolation, each originally relied for its full meaning on the context provided by the other, and on the larger spatial and devotional setting. The evanescent - audible, olfactory, gestural - was expected, in specifically tailored ritual circumstances, to act on the permanent - in the form of carefully assembled images within appropriate architectural spaces - to create a heightened atmosphere of mystical meaning. Music of the period is widely recognised as a phenomenon of major international influence; by contrast, attention to alabaster carving, coevally a focus of large-scale international interest and trade, has been limited and closely circumscribed. The project thus offered an important cultural parallel which will function as a showcase for national and local patrimony as well as a potential boost in (national and international) profile for important, but neglected, regional collections.

Accessing the shared meaning of these phenomena has traditionally been hampered by the fact that it is almost never possible to recover all elements necessary to enable an exact historical match between audible and visual elements. Historical documentation is suggestive, but limited. This discussion took a different view: while precise archaeological and archival knowledge offers valuable signposts, these phenomena operated within a context of typology and exemplarity that allowed for a wide range of musical-visual juxtapositions within any given context. This typological frame, based on contemporary functionality, allowed historical insights from the combination of its component elements.

Since the workshop in December, 2014 Andrew Kirkman and Philip Weller from the University of Nottingham have won a grant from the Birmingham-Nottingham Strategic Collaboration Fund. This has been used this to begin a collaboration with the Burrell Collection (Glasgow) and Nottingham Castle Museum, with a view to developing online and museumbased displays of individual alabasters in their collections, along with thematically linked motets, explanations and so on. A first visual/musical display was mounted In May 2016 in Beaumaris, Wales, and further displays are planned in the coming year. A symposium is being planned for Birmingham in November 2016, with a recording (by the Binchois Consort) and further symposium at Nottingham planned for 2017. In addition to panned further grant applications, Professor Kirkman is in discussion with Routledge with a view to publishing papers arising from the symposia.

Hypoxia and Hypoxia-Inducible Factors in Disease

WORKSHOP LEADERS

Dr Daniel A Tennant (Cancer Sciences) and Professor Jane McKeating (Immunity and Infection).

The cellular response to low oxygen (hypoxia) is central to our survival as multicellular organisms, both in normal physiological processes and in response to trauma and disease. However, we understand only a fraction of how this response is co-ordinated.

Hypoxic phenotypes are observed in diverse pathologies including cancer, diabetes, cardiovascular disease, obstructive sleep apnoea and inflammatory diseases like rheumatoid arthritis. Indeed, even standard clinical procedures that rely on cessation or reduction in the blood supply, such as surgery or organ transplantation, elicit a hypoxic response in the tissue. Recent studies show that several viral pathogens hijack the hypoxia signalling network and this may play an active role in viral-associated pathologies and provide new therapeutic targets. The cellular phenotype elicited by hypoxia represents a common link between all of these diseases.

The workshop promoted the development of new ideas between research groups into strong funding applications and developed a new understanding of hypoxia biology and disease pathogenesis. Russia's Place in the World in the last 100 years: Culture, Society and Environment

WORKSHOP LEADERS

Dr Rose Whyman (Department of Drama and Theatre Arts); Dr Jeremy Morris (Department of Modern Languages: Russian Studies); Dr Richard Connolly (Centre for Russian, European and Eurasian Studies); Dr Natalya Rulyova (Centre for Russian, European and Eurasian Studies)

This inter-disciplinary workshop brought together expertise from across four colleges in the University, building capacity in the area of Russian studies and extending current research agendas through collaboration. Researchers are now developing new dialogues, in collaboration with scholars from other UK universities and from Russia. Keynote lectures and panels addressed the topics of Russian Culture and Literature: the poetic word, Dwelling in Russia-Geopolitical concerns, and Russian Society and Environment/Russia as People and Place, finding connections and resonances.





Dogs, Owners and Responsibility: Law in the Doghouse

WORKSHOP LEADER

Professor Marie Fox, Birmingham Law School

The past decade has revealed a crisis in human relationships with dogs - a relationship which is increasingly mediated by law. Dogs are celebrated in popular television shows such as 'The Wonder of Dogs' and 'The Secret Life of Dogs' and increasingly viewed as companion species more akin to family members than to legal property (albeit that this is a heavily commodified relationship with owners spending vast sums of money on accessories and vets are faced with the ethical problems posed by ever more extreme medical interventions to prolong their lives). Simultaneously, however, media headlines reveal a crisis in which the number of stray dogs has reached an all-time high, and dogs are depicted as out of control weapons and killers. Against this backdrop the heavily criticized and largely ineffective Dangerous Dogs Act 1991, which has itself contributed to the issue with bull breeds, remains in force.

Thus, the 2013 annual Stray Dogs Survey by Dogs Trust, the UK's largest dog welfare charity,

reveals a shocking 111,986 stray and abandoned dogs were picked up by Local Authorities across the UK over the last 12 months, equating to a staggering 307 stray dogs being found every day. Significant numbers end up being euthanised. Media campaigns have fuelled the stigma attached to certain breeds making them – and their owners - particularly vulnerable to stigmatization and fuelling a particular crisis in bull breeds and so-called status dogs, while making them perversely attractive to the 'wrong' sort of owners.

With participants from Dog's Trust, Birmingham City Council, the RSPCA and Wood Green Animal Charity, this workshop explored the problematic relationship between humans and dogs, and law's role in its governance with the aim to disseminate academic work on the dog/ human nexus and how it is legally regulated to key stakeholders involved in the regulation of social problems attributable to dogs and anti-social behaviour, including local authorities, the police and a range of dog charities/rescues, both in Birmingham and nationally.



An Evidence-Based Approach to Crime Prevention and Reduction

WORKSHOP LEADERS

Dr Jessica Woodhams, School of Psychology, and Dr Siddhartha Bandyopadhyay, Birmingham Business School.

As well as individual academics there are a number of groups in the University that reflect an underlying interest in tackling crime and antisocial behaviour: The Centre for Forensic and Criminological Psychology, The Birmingham Criminal and Community Justice Group; Formal Verification and Security Group; The Accountability and Governance Cluster, Birmingham Business School. The workshop was held at an opportune time for to maintain the momentum to build this cross-College, multidisciplinary collaboration, develop a cohesive and recognised presence in the field of crime prevention and reduction and endeavour to link all researchers of crime reduction and prevention across the University.The quality of expertise we have at the University of Birmingham became apparent in a cross-College bid to the ESRC and College of Policing Joint Call for a What Works Centre in Crime Reduction. Dr Woodhams led the bid for Birmingham which included representatives from the Schools of Psychology, Birmingham Business School, Law, and Social Policy with Dr Bandyopadhyay also playing a key role in preparing the application.

The workshop enabled members of the University to develop new research collaborations, as well as making potential funders and partners in the criminal justice system aware of our research. This was also an opportunity to develop links, computer science and medicine who have specialised expertise and skills to contribute to the debate on gathering evidence on policies that best contribute to crime reduction. Funding successes since the workshop include:

Dr Woodhams

Research, Development and Training in Evidence-Based Policing. Co-I and Lead of Research Work Package College of Policing Innovation Fund Grant, Co-I and Lead for University of Birmingham to set up a consortium involving five police forces, four universities and Skills for Justice which will engage in knowledge-exchange activities and research planning.

Dr Bandyopadhyay

Co-I (lead from UOB), College of Policing, Police Knowledge Fund, Better Policing Collaborative, 2015-17.

Hybridity: Exploring power, social structures, and institutions beyond the liberal west

WORKSHOP LEADERS Dr Rosa Freedman, Law, and Dr Nicolas Lemay-Hébert, International Development

In an era of globalisation, superdiversity and transnationality the traditional mono-disciplinary, Western-centric, approaches to understanding power, social structures and institutions have been questioned and calls been made for new approaches to be developed to help increase understanding of various fields, ranging from peace-building, sovereignty and state recognition to human rights paradigms. Building on the success of the past IAS workshop on Territorial and Non-Territorial Autonomies, this workshop developed an innovative research agenda around theories of hybridity, which are being increasingly discussed at the academic level.

The workshop bridged the theoretical gap that divides the different disciplines by bringing together scholars and practitioners from political sciences, sociology, development studies, philosophy, international law, and archaeology, in order to focus on hybridity and its potential impact and challenges over the coming years. The workshop provided an interdisciplinary forum for discussions that will fuse the theory and practice of hybridity during its embryonic phase. There was exploration of issues of contested sovereignty and supervised independence, human rights paradigms and other law traditions, and peace-building and local resistance. In Autumn 2016 Routledge will publish Drs Freedman and Lemay-Herbert's edited volume in the Law. Development and Globalization series: Hybridity: Law, Culture and Development.

Powders for Structural and Functional Applications

WORKSHOP LEADER Professor Moataz Attallah, School of

Metallurgy and Materials, Professor of Advanced Materials Processing

Interest in the applications of powders has been growing in various industrial sectors over the past decade. Powders are heavily utilised in the manufacture of structural and functional materials applications, for instance using 3D printing (additive manufacture), powder netshape sintering (eg, powder hot isostatic pressing), gelcasting of ceramics, and other manufacturing processes. They provide various advantages, specifically their capability to reduce waste (making it a resource efficient manufacturing approach). In addition, the powders and particulates, on their own can be used for various applications, in the fields of biomaterials, catalysis, and surface functionalisation. Their use faces a number of challenges that need to be addressed through advanced research.

This includes the understanding of their characteristics, properties, and the development of models that describe their production and processing.

Research on powder processing is performed across various schools and colleges. Significant activity on powder processing exists in the Schools of Metallurgy and Materials and Chemical Engineering. In addition, research on nano-powder characterisation is performed in GEES and School of Chemistry. The workshop brought together all of the interested researchers on this topic to discuss potential collaborations on this strategic topic. Since the workshop in May 2014 there have been several developments from this group including an Innovate UK project on powder processing: SLIMMER; funding from Caterpillar for a project on the use of laser powder additive techniques for repair of engine blocks and an enhancement of the group's research activity with MBDA.



Responding to Uprising: Urban Security Between Resilience and Resistance

WORKSHOP LEADER

Dr Sara Fregonese, Geography, Earth and Environmental Sciences

With the urban population now exceeding those of rural areas, security in the twenty-first century is an urban matter: it concerns urban spaces. infrastructures and communities as much as it concerns global politics. While terrorism has shaped urban security in the last decade, since 2011 cities have been at the centre of protest, riot, and even widespread uprising. Beyond the "Arab Spring", these events are leaving deep marks in cities worldwide, triggering strong, often violent responses from governments. If terrorism was the key for understanding urban security in the past decade, uprising is a crucial key for understanding urban security in the current one. Protest and uprising have produced solidarity and organised resistance at urban, national and transnational scales, hence the importance of researching the phenomenon transcending regional divides. Since late 2010 the Arab uprisings, European and US anti-austerity protests and occupations, and the UK riots have suggested the presence of a new political moment of mass disaffection, disobedience and resistance that has in cities its symbolic and physical terrains. Beyond the specificities of individual events, urban dissent worldwide shares broader concerns about social justice, human rights, and democracy and their exercise in the city.

This one-day multi-disciplinary workshop gathered academic experts from across and beyond the University of Birmingham to exchange knowledge with practitioners on the broad question of how to manage cities in times of uprising. It explored the impact of protest and uprising on everyday urban life, communities and built environments, and focused on responses to these events given by different state and non-state actors. Participants came from across disciplines and fields – including Geography, Law, International Sciences, Resilient Urban Infrastructures – and from various geographical contexts including the UK, Egypt, Greece and Spain. In particular, it explored the development of different notions and practices of resilience, and their relation to localised resistance, in cities that are experiencing crisis and transition. By combining multidisciplinary and multi-context expertise, the workshop produced comparative knowledge about urban responses to crisis, across the accepted binaries of global north/global south and developed/ developing cities.

Consent: A capacious and contentious concept in feminist, legal, philosophical, and queer contexts

WORKSHOP LEADER Professor Lisa Downing, Professor of French Discourses of Sexuality

'Consent' is one of the most heavily debated concepts in feminist activism and academia, in law and social policymaking, and in sexual subcultural politics. The remit of the concept of 'consent' is very broad, including questions of medical ethics and varied legal applications of 'informed consent'. This workshop, however, addressed the usefulness and limitations of the concept of specifically sexual consent, interrogated from a range of academic disciplinary perspectives and by participants with varying degrees of commitment to, or scepticism of, the ethos of consent.

The workshop drew on the expertise of a range of Birmingham scholars, from postgraduate researchers to senior professors, as well as inviting selected world-leading international scholars working on the problem.

In addition, professionals from the legal and psychiatric fields, and activists and writers who have made public interventions into the debates around 'rape culture' and 'consent culture', contributed. The workshop laid the groundwork for a several external funding bids and established the cross-University Sexuality and Gender Studies Network at Birmingham as a leading national and international centre for research and agendasetting on the question of sexual consent.

Bio-Social Methods for a Vitalist Social Science

WORKSHOP LEADERS

Dr Jessica Pykett, Geography, Earth and Environmental Sciences, Dr Lindsey Appleyard ,Social Policy, Dr Catherine Durose, Dr Beth Grunfeld, Dr Will Leggett Government and Society, Catherine Mangan INLOGOV and Dr Catherine Needham, Health Services Management Centre.

Societies face several contemporary governmental challenges ranging from climate change to obesity, which are said to require 'bio-social' solutions. That is, solutions which take into account the biological, ecological, psychological and sociological underpinnings of human behaviour. Insights from behavioural science, emotion science and neuroscience are now used to develop more effective and sophisticated mechanisms for governing the self and societies. This trend has perhaps been most notable with the incarnation of the 'behaviour change agenda' which spans policy areas as diverse as public health communication, household energy consumption, parenting classes, personal pensions policies and tax compliance. Neuroscientific, behavioural economic and psychological research knowledges, and biomedical research methods are part and parcel of these explicit attempts to govern through affective means. Traditional social scientific approaches have been taken to task for failing to adequately recognise the inherent biological vitalism, materiality and complexity of human behaviour in light of advances in the biological and behavioural sciences.

From a critical perspective, it has been widely argued that new affective forms of governance



open up new questions about the democratic legitimacy and public permissiveness of mobilising psychological prompts and primers to 'improve' public policy and implementation. Existing social scientific research has sought to demonstrate how particular forms of disciplinary knowledge have come to be valued by policy strategists, how certain kinds of evaluative methods such as Randomized Controlled Trials have become more wide-spread outside of the medical field, and how policy and research expertise has been reframed.

The sociologist, Nikolas Rose (2012) has arguably pioneered critical approaches which have sought a rapprochement between social theoretic perspectives and developments in the biological and life sciences, in parallel with scholars from the field of Science and Technology Studies (STS) who have radically interrogated the application and translation of laboratory science into various forms of social intervention. Several key issues remain to be fleshed out concerning what the methods, conceptual apparatus and objects of enquiry for this new bio-social science might look like.

Researchers from the biological, behavioural and social sciences across the University of Birmingham together with external speakers considered the potential for integrating critical and applied approaches contemporary 'bio-social' challenges. Examining what kinds of languages, principals, methods and theoretical frameworks might be required for a genuinely transformative approach to 'vitalist' social science and giving consideration to how to hold on to crucial political and ethical questions concerning the potential impact of biologically-infused accounts of the human condition on our conceptions of governance and citizenship.

Best-Practice for Patient Reported Outcomes (PROs) in Randomised Clinical Trials

WORKSHOP LEADERS

Melanie Calvert Professor of Outcomes Methodology and Dr Derek Kyte, Institute of Applied Health Research

Patient reported outcomes (PROs) are increasingly assessed in clinical trials and provide 'the patient voice' in evidence on treatment effectiveness. PROs commonly evaluate health-related quality of life, symptoms such as pain or fatigue, health utility, adherence and patient satisfaction and may be used to influence clinical care and decision-making, predict long-term outcomes and inform health policy. Despite this, processes relating to PRO trial design and data collection are suboptimal and the results are often poorly reported. These practices devalue important patient-centred data, diluting the impact of PRO results in the clinical setting.

Researchers at the University of Birmingham (chaired by Professor Calvert) are lead a programme of work, which aims to enhance the design, implementation, analysis and reporting of PROs in trials, to improve the way that results are used to inform clinical care. This two-day workshop brought together leading experts in PRO trials methodology with key personnel within the Birmingham Clinical Trials Units, UHB clinical leads, researchers involved in PRO data collection and patient representatives, who collectively worked on a strategy to improve standards of PRO trial measurement and reporting. Since 2013, in addition to publications generated by the workshop, Professor Calvert and Dr Kyte have had funding successes from a wide range of organisations and funding bodies; Welcome Trust; QE Kidney Patient's Association; The NIHR Clinical Research Network: West Midlands; (CRN-WM); Mexican National Council for Science and Technology (for an Impact of PRO trial data on health policy and clinical practice); Macmillan Cancer Support; Metchley Park Medical Society and The Health Foundation.

Researching Africa and the development of the Africa Hub Website

WORKSHOP LEADER

Dr Benedetta Rossi Department of African Studies and Anthropology

This IAS workshop facilitated the exchange of information on common interests, research and identified opportunities collaboration;

joint research projects, funding applications, and teaching cooperation; collaboration with African universities, student exchange programs, and distance learning.

Faculty from fifteen different departments, with a broad range of interests, who are working on Africa: its geography, society, arts, history, flora, fauna, diseases, problems. The multi- disciplinary Africa Hub now promotes the outward dissemination of Africa-related knowledge produced at the University of Birmingham.

IAS support was crucial to the development of a UoB-wide network of Africa-focused researchers. The 'Researching Africa' brought together about fifty researchers from eleven UoB departments at all levels of research, from undergraduate students to emeriti research fellows. External scholars and alumni also contributed. Thanks to the workshop, a network that had only existed on paper and in email lists has turned into a reality. IAS provided vital institutional support, and we are building on initial achievements to create new opportunities for continued Africa-focused dialogue and research. Benedetta Rossi

Translational Biomaterials – from Scientific Innovation to Clinical Translation

WORKSHOP LEADER

Liam Grover, Professor in Biomaterials Science, School of Chemical Engineering

Although scientific advances have meant that we can extend the lifetime of individuals, we are still unable to stem the tide of ageing and successfully regenerate diseased and damaged tissues in individuals who may be of working age. This ageing of the UK population is placing a significant economic burden both on the taxpayer (musculoskeletal injuries are thought to cost the UK economy £7 billion alone) and on the National Health Service. Although there is significant research in regenerative medicine in the UK, there tends to be little dialogue between researchers working on fundamental science, end-users (clinicians and medical technology companies), and the regulatory authorities. Securing research funding in this area now requires that the researchers involved are able to demonstrate that their novel technologies will have a real economic and societal benefit, which is a major challenge.

The University of Birmingham has a significant amount of expertise spread across the colleges of Engineering and Physical Science, Medical and Dental Sciences and Life and Environmental Sciences in the area of medical device development and characterisation. The workshop aimed to realise the full potential of this expertise through IAS's co-ordination between researchers across the colleges. The University now finds itself uniquely positioned in the UK with one of the largest teaching hospitals in Europe, the Centre for Defence medicine and the NIHR Centre for Surgical Reconstruction and Microbiology all located on one site.



The Birmingham Hand

WORKSHOP LEADER Dr Rustam Stolkin

The hand is scientifically and culturally iconic. The human hand is intimately intertwined with human evolution and



cognition. A robotic hand and associated algorithms to control grasping and manipulation, that can achieve the dexterity of a human, is an important, but still far from attained, goal of automation engineering. Such a hand would have numerous applications, represent a pinnacle in mechatronic technology and AI, and form a major milestone in the development of real-world intelligent machines. This workshop explored the development of a robotic hand with a highly interdisciplinary, range of expertise from many schools across the University of Birmingham, Mechanical Engineering; Computer Science; Electrical Electronic and Computer Engineering; Psychology; Chemical Engineering as well as the Centre for Computational Neuroscience and Cognitive Robotics and the Centre for Human-Computer Interaction.

Dr Stolkin now leads one of the largest robotics projects in Europe, The RoMaNS (Robotic Manipulation for Nuclear Sort and Segregation) which will advance the state of the art in mixed autonomy for tele-manipulation, to solve a challenging and safety-critical "sort and segregate" industrial problem, driven by urgent market and societal needs.



With Birmingham Business School's Centre for Research in Ethnic Minority



Entrepreneurship (CREME), through workshops in Birmingham and Brussels, supported by our EU Funding team, IAS and CREME have facilitated discussions and drawn upon the expertise of small businesses, large corporations, academics and policy makers to plan the next phase of this timely, relevant and exciting research agenda.

The Institute has built up a fruitful collaboration with the team in CREME, Professor Monder Ram, Kiran Trehan, Professor of Leadership and Enterprise Development, Dr María Villares-Varela and Sophie Sinclair, CREME Centre Manager.

Workshops include:

- New Migrants, Entrepreneurs and Cities: An International Comparison
- Inclusive Entrepreneurship: innovations in research and practice
- International Workshop on Intersectionality and Migrant Entrepreneurship
- Latin American and Caribbean experiences of migration, work and employment

Complaining about Medicine, c.1700-2000

WORKSHOP LEADER Professor Jonathan Reinarz

At a time when complaining about medicine is revealing shortcomings and shaping health care, this workshop brought together local, national and international scholars working in the modern and contemporary history of medicine in ethics, law, philosophy, politics, policy, biography and medicine to explore how complaint cultures have been formed and have influenced medicine.

Additionally, this event stimulated discussions about how the past can inform current and future conflict resolution and best practice. In order to do this, the Director of the University's History of Medicine Unit, Professor Jonathan Reinarz, included a variety of voices, from different areas of the medical humanities, social sciences and medicine, from early-career and experienced scholars, theorists and practitioners, and services users and clinicians. The event facilitated knowledge exchange and promoted networks for future discourse across disciplines.

Since the workshop Professor Reinarz and Dr Rebecca Wynter have edited a volume in Routledge's Historical and Social Sciences Series, 'Complaints, Controversies and Grievances in Medicine'



IAS is a great facilitator of ideas, but each event still throws up many surprises, by linking staff who never had previous opportunities to meet given the disciplinary focus of so many other academic activities. The workshop allowed us to bring in external experts whose participation only magnified the potential of our locally based colleagues. The entire event was also great simply in terms of getting everyone up to speed with developments across the disciplines that touch on a particular research question, not just in a few key areas. Each event also has spin-offs. We gathered to discuss 'complaints' in medicine, and, by the end of the day we had pages of notes from the workshop and half a dozen of viable ideas for research grants.

Jonathan Reinarz

Hydrohazards: extremes, environment and people

WORKSHOP LEADER

Professor David Hannah, School of Geography, Earth and Environmental Sciences Professor of Hydrology

Water-related hazards (hydrohazards) are the results of complex interactions in the oceanatmosphere-land process cascade. Extreme hydrological phenomena (floods and droughts) are anticipated to increase with global warming. Floods and droughts have significant impacts on the environment affecting biogeochemical processes, water quality extremes and pollutant levels as well as altering habitat conditions with impacts on ecosystem structure and function. These hydrological extremes have profound consequences also for people. Floods cause more deaths and infrastructure damage than any other sudden-onset hazard. Droughts have a gradual onset but typically cover larger geographical domains and persist over longer time periods, hence yield widespread impacts on socio-economic life. Floods and droughts result in some of the largest disaster-related economic losses in low to high income countries, with costs of flooding increasing by 160% in OECD countries since 1980. Increased hydrohazard impacts and costs are attributable to factors such as: increased event frequency and magnitude, unplanned urbanization, degradation of ecosystem services, vulnerable livelihoods, and inaccurate public perception of risk.

Building on research breath and strength at Birmingham, this workshop addressed themes such as, understanding links between climateland-hydrology-human processes that generate floods and droughts; reducing uncertainty of



projections of future flood and drought space-time distributions in the context of global change; integrated assessment of hydrohazards impacts on biophysical and socio-economic systems and processes; how best to use knowledge to improve decision making, planning and policy on mitigation and adaptation strategies to enhance resilience and reduce impacts of hydrohazards now and into the future; and moving beyond pure 'social' and 'technical' interpretations of hydrohazards to understand the political ecologies implicated in conditioning human vulnerability. At the time of the workshop in October 2012 hydrohazards as "Water-related disasters" and "Water Scarcity" were identified as core themes for UNESCO's International Hydrology Programme's 8th phase (2014-2019); NERC planned (TAP3) directed

research programmes on "UK drought" and "Flooding from intense rainfall"; EPSRC also identified "water engineering" as one of only 12 research areas within the engineering theme for growth A "Floods" Action was also launched the Joint Research Centre (JRC) of the European Commission. The hydrohazards theme connected up with the University's strategic investment initiative on "Resilience and Urban Living".

After this workshop, Professor Hannah presented at the 'Hydrohazards' session for the the American Geophysical Union's (AGU) 45th annual meeting. The conference was be attended by more than 20,000 Earth and space scientists, educators, students, and other leaders in San Francisco, California.

Trans-disciplinary approaches to Physical Activity Promotion in Older Adults

WORKSHOP LEADER

Professor Janet Lord Director of the Institute of Inflammation and Ageing, Director of the MRC-ARUK Centre for Musculoskeletal Ageing Research Professor of Immune Cell Biology

The European Commission declared 2012 as the European Year of Active Ageing. Although it is evident that life expectancy is increasing greatly in the Western world at least, this trend is not complemented by an increase in the number of healthy years lived. Physical activity is a critical contributor to successful ageing, yet older adults are the least physically active segment of the population. Although many physical activity interventions have been developed with variable success, one of the major problems is that they fail to attract those groups of older adults who may derive the greatest benefits. Therefore, more effective targeted physical activity promotion strategies that can facilitate adoption and adherence are needed. Developing a transdisciplinary platform for the promotion of physical activity in older adults is likely to have the greatest impact and was explored in this workshop.

The attendees included both researchers and practitioners all with expertise that could significantly further this area of work. An emphasis was placed not only on behaviour change strategies that have been shown to be effective



in enhancing physical activity participation, but also on the environmental context and illness preventive services in the community. The workshop considered technological advances (eg, the use of social media such as mobile phone applications and social networking channels) and the arts (literature and drama presentations) which can be used effectively in recruitment and retention strategies for physical activity. Such approaches had received little or no attention in the literature,up to this point in particular as far as older adults are concerned. The workshop established collaboration between researchers in Medical & Dental Sciences, Human and Computer Interaction Centre; Sport & Exercise Science; Business School; the School of Geography, Earth & Environmental Sciences and the participation of outside agencies and organisations allowed for exploration of ways in which research-driven ideas may be feasibly implemented in the community and in more specialised settings such as residential homes for older adults.

Perfect People

WORKSHOP OP LEADERS

Jean McHale, Birmingham Law School, Professor of Health Care Law and Heather Widdows, John Ferguson Professor of Global Ethics

Increasingly developed nations are becoming concerned with concepts of 'perfectionism' and 'perfect people'. Despite the rejection of the language of eugenics and the selection of the fittest in the mid 20th Century, the last decade has been notable for a growing interest in, development of, and indeed in some contexts, growing public acceptance of cultures of body modification and selection of persons. Some of this may be seen as comparatively benign on first glance. 'Looking better', 'Looking healthier' or '10 years younger'

But concerns around the implications of such approaches, technologies and the long term impact of the drive for 'perfection' are increasing. Appearance and the ageing process may impact upon employment prospects. The pressure of such a perfectionist culture on the young led Queensland, Australia to regulate the use of cosmetic surgery on minors. The safety of 'perfectionism' technologies used for bodily enhancement has come under scrutiny at EU and member state level. The appearance of children with Downs Syndrome may be "corrected" by surgery. Have we moved from the amusing to the sinister and indeed dangerous? But is all this really too late? Is this something which we are able now to effectively address or regulate or is it a case of simply closing the stable door now the horse has bolted? At this workshop philosophers, ethicists, lawyers, political scientists, health care professionals, scientists and medical sociologists explored these interlinking themes.

Professor Widdows is the holder of a Leverhulme Major Research Fellowship to support the completion of a monograph Perfect Me! 'Perfect me!' (Princeton University Press) Professors Widdows and Hale are PI and Co-I respectively for The Changing Requirements of Beauty, AHRC Network Grant.



Varieties of Religious Superdiversity

The aim of the workshop was to raw together a series of insights from different disciplines on the nature and study of religious superdiversity in the UK today and then to identify a number of projects that might be possible to build for the future.



Led by Professor Jenny Phillimore, The Institute for Research in to Superdiversity (IRiS) works to advance and promote the University's expertise in the emerging



field of superdiversity. IRiS is the first institute in the UK and one of the first globally to focus of superdiversity. IAS has hosted several workshops in support of IRiS research.



Developing Research agendas in Superdiversity

This workshop gathered academics from across the University with policymakers to participate in focused discussions aimed at developing the IRiS themes and workstreams, new agendas in superdiversity and was instrumental in enabling IRiS to operate in a truly interdisciplinary fashion.

Big data network



Led by Dr Emmanouil Tranos, Geography, Earth and Environmental Science a large initial workshop brought together colleagues from schools alongside Professional Services

colleagues to discuss the new challenges and exciting opportunities in a range of disciplines such as: the natural and life sciences, medicine, humanities, social sciences, business, computing and informatics The workshop addressed the fact that many researchers at the University of Birmingham across these and other disciplines were conducting cutting-edge big data research, in an isolated fashion and the University-wide, interdisciplinary conversation about big data research began here, determining interdisciplinary synergies and opportunities for research collaboration and identifying methodological intersections in approaches to big data research across campus.

The University BIG DATA network is now established and expanding, holding termly informal 'lunch and learn' seminars such as:

'Are predictions from test accuracy meta-analyses valid in practice? Experiences from simulating data in R when developing a validation statistic', Dr Brian H. Willis (Institute of Applied Health Research)

'R or Python? What's your favourite data analysis tool?' Dr Grace Garner and Christoph Stich, School of Geography, Earth and Environmental Sciences 'Data collection for urban metabolism studies and city analysis – the Birmingham Experience'. Dr Susan E. Lee and Joanne M. Leach, School of Civil Engineering

'Understanding international trade through eBay data'. Dr Pierre-Louis Vezina, Department of Economics.

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Launched in 2015 and led by Dr Jonathan Grix, the Sport Policy Centre seeks to provide the bridge between first-class academic research and innovative policy making. As well as supporting visiting fellows and speakers, The Institute of Advanced Studies has supported a number of workshops.



Quo Vadis Olympism: a multidisciplinary exploration

WORKSHOP LEADER Dr Jonathan Grix, School of Sport, Exercise and Rehabilitation Sciences

Bringing together academics from the School of Sport, Exercise and Rehabilitation Sciences, the Ironbridge International Institute for Cultural Heritage and the Department of English Language and Applied Linguistics as well as external academic input this workshop was a opportunity to explore the Olympics from three unique angles: politics, linguistics and heritage.

Each topic group delivered a papers themed around Olympism and the workshop concluded with a multi-disciplinary panel that answered and asks further questions about themes that ran concurrently in each of the panels.

Looking Forward to Clean Sport: The Future of Educationand Detection-Based Deterrents to Doping

WORKSHOP LEADER

Dr Ian Boardley, School of Sport, Exercise and Rehabilitation Sciences As well as colleagues from universities across the UK and Europe, participants included Brian Barton, Nicola Newman, UK Anti-Doping; Chris Bond, Law In Sport; Andy Brown, Sports Integrity Initiative; Ellen Butcher, UK Athletics; Kevin Currell, English Institute of Sport; David Herbert, UK Athletics; Jade Johnson, Elite Athlete; Arne Ljungqvist, Anti-Doping Foundation; Scott Murray, Synergie Coaching; Tom Parsons, Elite Athlete; Craig Pickering, Elite Athlete; David Walsh, UK Athletics; Stephen Watkins, England Rugby.

This workshop offered a wide ranging analysis of the current issues affecting the 'industry' of doping in sport. The overarching theme of the day was the balance those involved have to find between education and testing.



Leveraging the legacies of sports mega-events

WORKSHOP LEADERS Dr Jonathan Grix and Dr Ian D. Boardley

Governments in regimes of every type have shown a new willingness to invest and intervene in sport directly, steer and develop sport policy more purposefully and, recently, to engage in bidding for and hosting sports mega-events (Olympics, FIFA World Cup, but also 2nd order events, such as the Commonwealth Games). The rationale behind the desire to stage global sports mega-events is usually based upon the hoped-for legacy, (eg, increased international prestige; urban regeneration; greater sport participation). Thirty years ago it was difficult to interest states in putting on such elaborate and expensive events; now the competition to do so equals that on the playing field. This workshop galvanised a wide variety of cross-UoB expertise and cross-college disciplines that do not usually work together, sports scientists, psychologists, political scientists, economists, geographers, architects, health scientists, sociologists and engineers. The workshop brought together international experts with UoB scholars to reflect and draw upon previous sports mega-events, including London 2012.

INTERNAL ATTENDEES

Geography: Professor Jon Coaffee; Social Policy: Dr Nathan Hughes; Sportex: Drs Matt Bridge, Mark Griffiths and Symeon Dagkas; Engineering: Dr Regina Santos; UBS: Zena Wooldridge; Business School: Professor Fiona Carmichael and Professor Joanne Duberley; Centre for Obesity: Dr Eliot Marston; MDS: Professor Janet Lord.



EXTERNAL ATTENDEES

UK Sport; DCMS; Sport England; Selected Sports National Governing Bodies; UK-based scholars: Professor John Horne; Professor Mike Weed; Professor Sugden; Prof Tomlinson; Professor Gratton; Professor Bairner; Professor Maguire; Professor Houlihan; Dr Brittain; Dr Xin Xin.

INTERNATIONAL INVITEES

Brazilian Ambassador to London; Professor David Black (Dalhouse Uni, Canada); Professor Bob Stewart (Victoria Uni, Australia); Professor Scarlett Cornelissen (Stellenbosch Uni, South Africa); Professor Wolfram Manzenreiter (Uni of Vienna); Professor Amita Baviskar (Delhi University); Professor Laurence Chalip (UIUC, US)





Public Events

Defining the University as a place of discovery and debate.



'There's no such thing as a tough brain'

As part of the British Science Festival in September 2014, researchers from Sport, Exercise and Rehabilitation Sciences, Psychology, Biosciences, Engineering, Computer Science and Medical and Dental Sciences were joined by experts and concussion advocates to raise awareness in the community and discuss policy solutions. The discussion was followed by a screening of *'Head Games: The Global Concussion Crisis'*. Steve James's hard hitting documentary featuring never-before-seen neurological findings related to sport and the devastating consequences of sports related head injuries.

'Challenges for Early Modern Women's History'



Led by Dr Nadine Akkerman, IAS Distinguished Visiting Fellow, and the late Professor Lisa Jardine at the Barber Institute. This was a lively event exploring the development of archival research which offers exciting new opportunities for

excavating early modern women's history.

'The Kindertransport in History and Memory'

As part of the IAS 'Saving Humans' theme, marking 75th Anniversary of the Kindertransport, colleagues from Theology, German Studies and Drama explored the theoretical and practical questions raised by academic study and representation of the Kindertransport in dialogue with practitioners and survivors. At the end of this moving and fascinating day delegates attended a production of Diane Samuels' acclaimed play *'Kindertransport'* performed at the George Cadbury Hall by the final year Drama and Theatre Arts students. 'What Produces Democracy? Revolutionary Crises, Popular Politics, and Democratic Gains in Twentieth-Century Europe'

Professor Geoff Eley

The Institute of Advanced Studies was delighted that our Visiting Fellow was invited to deliver one of the Vice Chancellor's Distinguished Lectures.

These are occasions where the University and wider community can come together to reflect on the major social, scientific, cultural, and policy issues of our time.



'HS2 or What?: Transport Choices and West Midlands Regeneration'

Invited by the Centre for Urban and Regional Studies (CURS) the distinguished geographer and planner, the late Professor Sir Peter Hall, delivered a keynote address drawing on his long engagement with transport in urban development. The challenges he then set out for the West Midlands were discussed by a panel of experts, chaired by Gisela Stuart, MP Birmingham Edgbaston, before a debate with the audience.The event attracted enormous interest from Geographers and Engineers, Town Planners and pressure groups.

Ambassador Diego Gomez Pickering: Transforming Mexico

Mr. Diego Gómez Pickering was appointed as Ambassador Extraordinary and Plenipotentiary of Mexico to the United Kingdom of Great Britain and Northern Ireland in December 2013. In this public lecture, his Excellency explored the internal and external changes that the Mexican government is currently implementing, including reforms to the labour, energy and telecommunications sectors, with the intention of transforming Mexico into one of the largest and most stable economies in the world.



Re-building manufacturing – New Dogs, Old Tricks!

Professor Sir Mike Gregory is Head of the Manufacturing and Management Division of the University Engineering Department



and of the Institute for Manufacturing (IfM) at The University of Cambridge. An Executive Director of the Cambridge MIT Institute from 2005-2008, Springer Visiting Professor at UC Berkeley in 2008/9 as well as the chair of the UK Manufacturing Professors Forum, Mike is a member of the UK Government's Manufacturing Analytical Group on Manufacturing.

This lecture, part of the IAS theme 'Regeneration Economies' introduced some of the circumstances, business models and technologies which are changing the face of modern manufacturing and suggest what needs to be done to accelerate recent progress.

Dancing Maps!

Presented as part of the Being Human Festival of the Humanties 2014, and an ongoing project led by Dr Pat Noxolo, School of Geography and Earth Sciences, encouraging people to experience African and Caribbean traditional dance in new ways, through engaging with digital technologies. Would new engagement prompt people to think in different ways about how African dance is relevant to their lives now, to their bodies and to the places where they live? Can African dance be re-thought as a 'map' to guide us in our lives today? This event featured a new dance devised by Ace Dance Company, and a debate about where African-Caribbean dance can take you.

The Kingdom of God is Always but Coming': Justice and the Legacy of the Social Gospel in North America

Christopher Evans is the Professor of the History of Christianity and Methodist Studies at Boston University.

In the 20th century, the social gospel movement had a far ranging impact upon North American society. This seminar assessed the social gospel as a movement of religious and political reform in North America and how the movement's legacy has shaped 21st century North American religion and society.







A Future for West Midlands Devolution?

LONDON: Or LOCAL? With Contributing organisations Unlock Democracy, Futures Network West Midlands, and the Centre for Urban and Regional Studies, Gisela Stuart MP for Edgbaston chaired this event to discuss what sort of voice the West Midlands requires to better meet the needs of its 5.2 million people. With greater local/ regional powers up for debate is a 'Greater Birmingham' City-Region enough, or do we need elected regional government - with or without a West Midlands Boris (or Ken)? And how is England as a country of 40 million to be represented without worsening Westminster centralism?

The Ethics of Humanitarian Intervention, with Comments on Syria' a Public Lecture by Jeff McMahan, White's Professor of Moral Philosophy at the University of Oxford.

Part of our 'Saving Humans' research theme, The Institute of Advanced Studies was delighted to host this lecture on the ethics of humanitarian intervention. The event was chaired by Professor Nicholas J Wheeler, Director Institute for Conflict, Cooperation and Security.

One of the most celebrated and influential philosophers writing on the ethics of war today, Professor McMahan visited Birmingham as an IAS Distinguished Visiting Fellow in May 2014. Jeff is well known for a style that combines great philosophical rigour and innovativeness with great clarity and accessibility to non-specialists.

Many on the political left view virtually all exercises of military force with suspicion – even those for which there might be a humanitarian justification. Others deplore the unwillingness of powerful states to intervene in such conflicts as those in Rwanda, Sudan, and Syria, when intervention could arguably save tens or hundreds of thousands of lives. Many on the political right think that no instance of humanitarian intervention can be a justifiable use of a state's resources unless it can be shown to be in that state's interest. McMahan addressed these differing views and considered when humanitarian intervention might be permissible and when it might even be morally required.



Professor Jeff McMahan and Professor Nicholas J Wheeler

New Labour in New York: Precarious Workers and Their Organizing Efforts

The world-renowned sociologist of work, Professor Ruth Milkman explored the themes of her recent research.

Professor Milkman is Professor of Sociology at the City University of New York Graduate Center.

She was formerly Professor of Sociology at UCLA, where she also directed the Institute for Research on Labor and Employment. Her books include Gender at Work (1987), Farewell to the Factory (1997) and LA Story (2006). The last, a study of migrants and trade unions in Los Angeles, underpins her most recent research.



'Global Migration Governance after the High Level Dialogue'

Professor François Crépeau, United Nations Special Rapporteur on the Human Rights of Migrants

In his lecture professor Crépeau, discussed his 2014 report to the EU on migration policies and detention facilities. François Crépeau holds the Hans and Tamar Oppenheimer Chair in Public International Law, at the Faculty of Law of McGill, is Director of McGill's Centre for Human Rights and Legal Pluralism and is a fellow of the Royal Society of Canada. The focus of his current research includes migration control mechanisms, the rights of foreigners, the interface between security and migration, and the interface between the Rule of Law and globalization.

Giving Women Their Place in Holocaust History

Dr Rochelle G. Saidel

Women have always been left out of history or been underrepresented, and the period of the Holocaust is no exception. Although some women's memoirs were published soon after



World War II, the analytical history books and Holocaust exhibitions that followed were written without considering women's experiences as women. Co-hosted with the British Association for Holocaust Studies we were honoured to welcome Dr Saidel whose lecture reviewed the highlights of giving women their place in Holocaust history, as well as some examples of lost opportunities. After outlining the evolution of the subject of women and the Holocaust in general, Rochelle addressed the issue of rape and sexual abuse, the last frontier for the inclusion of women's experiences in the Holocaust narrative. Especially since the publication of *Sexual Violence against Jewish Women during the Holocaust* in 2010, there have been sessions and plenaries on the subject at various conferences. However, it still remains taboo among some scholars, as well as in most Holocaust museums and memorials. Finally, the lecture focused on examples of relatively unknown women, giving them and others in similar circumstances their places in Holocaust history.





'Are University Fine and Applied Art Research Partnerships a substitute for Collections-based Curators in Regional Museums'

Chaired by Professor Matthew Rampley

Over the past 20 years there has been a dramatic decline in fine and applied art curatorship in the regional galleries, despite considerable investment from the Renaissance programme which initially focused on access and learning.

Major regional collections of national standing such as Birmingham, Bristol, Glasgow and Manchester have much diminished specialist fine art curatorial departments. Collection care managers very often now take on the curatorial role and little collection research is carried out by in-house curators, beyond the major national museums in London, Edinburgh and Cardiff and the large University Museums, the Ashmolean and Fitzwilliam.



This day- long open event on the current debate attracted participation from key organisations, the national Gallery, the Art Fund, the Association of Art Historians, the Arts Council, the Museum Association, University Museums Conference, the Art Museums Director's Conference and the Steering Group for the Special Subject Network for European Paintings pre 1900 and the V&A Purchase Grant



'Education In A Global Setting: The Needs of the 21st Century'

This fascinating and wide ranging public lecture was delivered by Professor Dinesh Singh, Vice Chancellor of University of Delhi during his visit to the University in January 2014. Professor Singh is also the Director of Mathematical Sciences Foundation, Delhi and Adjunct Professor, Department of Mathematics, University of Houston, USA and is involved at the international level in many areas of mathematics research and education.









The Centre for Research in Race and Education (CRRE), aims to pursue race equality and social justice by working

to close gaps in educational achievement and improve the educational experiences and career outcomes of Black and minority ethnic people.

Educational Realities and The Tasks of the Critical Scholar/Activist in Education'

Institute of Advanced Studies Distinguished Visiting Fellow Professor Michael W. Apple gave the The Centre for Research in Race and Education's 2015 annual lecture.

Neoliberal, neoconservative, and managerial reforms now dominate the educational landscape internationally. They have taken on an almost religious power in that they seem to be nearly immune to counter evidence. Yet, there are alternatives to them that have made a significant difference, if we reject the simplistic idea that education can only reproduce dominance.

Starting by critically examining dominant tendencies and then drawing from his recent book 'Can Education Change Society?', (should book titlte be in italics?) Professor Apple examined the responsibilities of those who wish to interrupt dominant tendencies and then discussed the tasks of the 'public intellectual', the critical scholar activist, in building and defending more critically democratic and anti-racist educational theories, policies, and practices.

Michael W. Apple is widely recognised as one of the world's leading critical educators. His reputation is built on an exceptional body of scholarship that extends from the 1970s to the present day. Professor Apple's standing is equally strong in numerous parts of the world, including North America, Europe, South America (especially Brazil and Argentina), South Africa and Asia (particularly China). His truly global impact can be gauged by the many translations of his books and by the constant international demand for his services as a speaker and collaborative progressive educator.

Home, Harmony and Hope Birmingham & Chicago

In places where some saw possibilities and others sought to conquer dismal realities, music provided harmony and hope. Drawing upon influences from London to Kingston, New Orleans to Liverpool, and Birmingham to Chicago, melodies created in echoing stairwells, outdoor courtyards and blacktops, nearby churches, and neighbourhood pubs were set to stories from around the world to communicate the commonalities of urban places called home. In conjunction with an exhibition, in the Bramall Music building this discussion explored the lives of diverse Birmingham and Chicago residents, examining how challenging urban realities impacted upon the role of music as marker of collective consciousness, identity and history.



'Biophilic Cities'



Biophilic cities are defined as cities that contain abundant nature; they are cities that care about, seek to protect, restore and grow this nature, and that strive to foster deep connections and daily contact with the natural world. Nature is not something optional, but absolutely essential to living a happy, healthy and meaningful life; these cities put nature at the heart of their decision making. The symposium explored these issues with an audience drawn from right across Birmingham's civil society and members of the public.

Speakers included:

Dr William Bird, (MBE) a general practitioner in Reading, Berkshire, England. He has set up schemes to encourage people in the United Kingdom to exercise in order to promote good health, and he was awarded an MBE for his contributions to health and physical activity in the Queen's New Year Honours 2010. Talk: 'Trees, People and the Built Environment'

- Professor Timothy Beatley, (Teresa Heinz Professor of Sustainable Communities, University of Virginia) is an internationally recognized sustainable city researcher and author. His writings have focused on creative strategies cities can use to reduce their ecological footprints and become more livable and equitable places in the process. Beatley was instrumental in launching the new global network of Biophilic Cities, in October 2013. Talk: 'Biophilic Cities'
- Professor Jean V. McHale Professor of Health Care Law Birmingham Law School. Jean McHale researches and writes in the area of Health Care law. She has written several key works in the field and participated on several external policy committees. She is the Director of the Centre for Health Law, Science & Policy at Birmingham Law School and is one of the academic directors of the University of Birmingham Policy Commission, Healthy Ageing in the 21st Century. Talk: 'Healthy ageing in the 21st Century: the best is yet to come?'
- Professor Miles Tight Professor of Transport, Energy and Environment, The University of Birmingham School of Civil Engineering. Miles Tight has been actively researching safety, equity and sustainability of travel for over 20 years with a particular emphasis recently on sustainability of transport. Most recently his research interests focus on walking and cycling, the nature of long term and large scale change in transport systems and the future design and form of sustainable urban areas. Talk: 'Can long term visions for sustainable urban transport contribute?'

SESAME: A Bright Hope for the Middle East

"Science is a common language – if we can speak it together, possibly we can build bridges of trust which will help in other areas."

Speakers.



Sir Christopher Llewellyn-Smith (Oxford University, President, SESAME Council and Former Director-General CERN) and Professor Eliezer Rabinovici (Hebrew University of Jerusalem, Vice



President, SESAME Council and Vice- President CERN Council).

SESAME is a cooperative venture by scientists and governments of the Middle East set up on the model of CERN (European Organization for Nuclear Research). It is being developed under the auspices of UNESCO (United Nations Educational, Scientific and Cultural Organization). Sesame stands for Synchrotronlight for Experimental Science and Applications in the Middle East. And it is also a reference to the famous phrase 'open sesame', the secret command to open a treasure trove in the tale of Ali Baba and the Forty Thieves.

'It is pretty remarkable but it's happened and it's because the scientific communities in these countries have pushed for this and ignored the political barriers'





University-Based Institutes for Advanced Study

UBIAS University-Based Institutes for Advanced Study

The Institute of Advanced Studies at the University of Birmingham has been a member of the UBIAS network since March 2013. UBIAS are associated with or embedded within universities, and actively contribute to the academic culture, the research environment and academic achievements of their home university.

UBIAS institutes bring together outstanding researchers from different disciplines, nationalities and academic backgrounds, creating a productive environment for innovative research and although the individual institutes have a large variety of different concepts and academic pursuits, what we have in common has proved to be a fruitful and supportive basis for mutual exchange.

The UBIAS network was initiated in 2010, when representatives from 32 research institutes worldwide met at the conference entitled 'University-Based Institutes for Advanced Study in a Global Perspective: Promises, Challenges, New Frontiers', hosted by the Freiburg Institute of Advanced Studies, Germany.

The UBIAS Directors' meeting in 2013 with the theme of 'Shaping the Future, navigating in a Changing World' was held at The Israel Institute for Advanced Studies of Jerusalem, The Hebrew University of Jerusalem.

In September 2013 The Peter Wall Institute for Advanced Studies at the University of British Columbia hosted the biennial UBIAS conference, 'Scientific and Academic Knowledge'. The conference was an initiative by the UBIAS network to strengthen relationships among member institutes and spread knowledge globally. Professor Malcolm Press presented the mission and vision of Birmingham's IAS at this meeting.

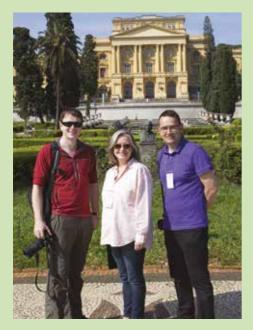
The UBIAS Directors' meeting in November 2014, 'Rising New Perspectives in an Age of Globalisation: Challenges and Prospects', was held at the Institute of Advanced Studies in Humanities and Social Sciences, National Taiwan University, Taipei.

In June 2016 The University of Birmingham hosted the UBIAS Directors' Meeting: 'UBIAS into Impact: Networking our academics to meet global challenges'.



Photo Mike Hannon and Sue Gilligan with colleagues from the UBIAS network at Center for Advanced Studies, Ludwig-Maximilians-Universität München planning for the 2016 UBIAS Directors' Meeting.

Dr David Gange, (History), participated in the pioneering UBIAS Intercontinental Academy on the topic of Time. This project was an interdisciplinary venture that drew no distinctions between natural sciences, social sciences and humanities. The team of 13 researchers from around the world comprised one mathematician, a chronobiologist, a marine biologist, a pharmacologist, an educational psychologist, a psychologist/neuroscientist, a philosopher, two historians, a literary scholar, a historian of art, an architectural historian and a zoologist. The Academia began in São Paulo in April 2016; the second workshop was Nagoya in March 2016 where in addition to the workshop Professor Jonathan Reinarz (History of Medicine) took part in a panel discussion on the future of Institutes for Advanced Study and the UBIAS network.



David Gange, Sue Gilligan and Jonathan Reinarz São Paulo April 2015



As a historian of the nineteenth century a period when conceptions of time were transformed around the world - I have long been interested in temporalities, so I signed up to the Intercontinental Academia on Time without hesitation. At that stage I was planning a book quite similar to my previous projects, which would explore how changing ideas of death, time and the self were interrelated amidst the cultural transformations of nineteenth-century Europe. I went to the first part of the Intercontinental Academia, in Sao Paulo, as a cultural historian of the nineteenth century with interdisciplinary interests. A year later, after immersive work with scholars from a host of disciplines, I came back from Japan a very different kind of researcher. Over the course of the year I hadn't found answers to the historians' guestions about temporalities I had been asking, but had gained access to a vast array of more interesting ways of asking the questions. In particular, it became much clearer to me what kinds of ideas historians can contribute that complement and extend the work of other disciplines in relation to the big issues of our time, particularly as these relate to ecology and the earth system. In ways that I could never have foreseen, my work is now far more interdisciplinary than it was and my focus as a historian is no longer on the nineteenth century. In conversation with other members of the UBIAS team I've developed a project on coastal temporalities: the perception of time on British coasts (the most fragile and transitory of

landscapes) over four centuries. Grant applications and an extended monograph on this topic are underway, but in the meantime I've signed to write a book with Harper Collins, entitled The Frayed Atlantic Edge, which explores the question of what a historian can bring to understanding the ecology of threatened coasts. These projects are far more intellectually ambitious than anything I'd previously attempted; without the immersive interdisciplinary work of the Intercontinental Academy I would never had felt the confidence to take them on, nor the sense that I had access to the wide range of disciplinary expertise that the project's network now allows me to draw on.

David Gange



Group photo Nagoya March 2016



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