

ISSTI

THE INSTITUTE FOR
THE STUDY OF SCIENCE
TECHNOLOGY AND INNOVATION
www.issti.ed.ac.uk

newsletter

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New academic year brings new awards and new colleagues

This edition of the Newsletter, marking the start of a new academic year, brings news of developments across many fronts.

We report on an array of exciting **new awards** including three studies by the Innogen Institute under the ESRC Future of the UK and Scotland programme ([page 4](#)), an award from The Leverhulme Trust to Dr Martyn Pickersgill and a Wellcome Trust Fellowship for Dr Christine Knight - [page 2](#)

Earlier research programmes continue to bear fruit. We report on various recent outputs including a wide range of **new publications** ([page 12](#)), and a **report of the continuing legacy of the ESRC Genomics Forum** even after the end of the award - [page 6](#)

The Science, Technology and Innovation Studies community at the University of Edinburgh continues to grow. On [page 9](#) and [10](#) we **introduce some of the exciting new appointments** to our research and teaching staff

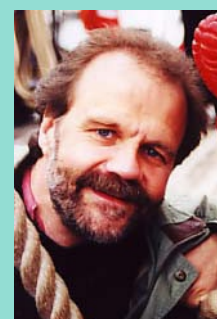
Finally we are experimenting with **new interactive formats**. This issue gives online access to the academic debates that arose in this year's ISSTI Retreat - [page 11](#)

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Grants and Awards



Dr Christine Knight has been awarded £169,395 by the Wellcome Trust, for a three year Medical History and Humanities Research Fellowship entitled “Stalking the Deep-Fried Mars Bar”.

The study will trace the contemporary history of the Scottish diet stereotype, investigating its representation within policy and public discourse in the UK from World War II to the present day.



Dr Christine Knight

The research will draw on archives and library collections across Scotland, as well as further afield. Sources will include media reports, government policies, recipe books and food

advertising. The project will also include oral history interviews with policymakers, food writers and journalists. The fellowship aims to investigate how an emerging public discourse about Scottish diet and public health relates to broader discourses about Scottish national identity, political independence, and UK sub-state national relationships. Dr Knight was previously Senior Policy Research Fellow at the ESRC Genomics Policy and Research Forum, University of Edinburgh.



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Wellcome Award for Pickersgill

Dr Martyn Pickersgill, Wellcome Trust Senior Research Fellow in Biomedical Ethics, has been awarded a prestigious two-year research grant from The Leverhulme Trust for a project on ‘Neuroscience and Family Life: The Brain in Policy and Practice’.

Professor Sarah Cunningham-Burley (Head of the School of Molecular, Genetic and Population Health Sciences) and Professor Ian Deary (Director of the Centre for Cognitive Ageing and Cognitive Epidemiology) are co-investigators. The research

integrates the sociologies of science, medicine, and family life, and will map how neuroscience is being used in policy debates and services, and how these are regarded by the individuals and families they target.



Dr Martyn Pickersgill

Pickersgill to represent UK on Science and Ethics Working Group

Dr Martyn Pickersgill has been elected UK representative for the ALLEA (European Federation of Academies of Sciences and Humanities) Permanent Working Group on Science and Ethics.

The Working Group is concerned with a wide range of problems, 'internal' (within the scientific community) and 'external' (relations between science and society). It meets at least twice a year and also convenes thematic

meetings in wider settings, typically in partnerships with other relevant organizations such as European Science Foundation (ESF), the European Commission, the Council of Europe, Pugwash, International Council for Science

(ICSU), or UNESCO. Some of the issues recently addressed include: scientific integrity and research misconduct, research on human embryos, quantitative evaluation of research, ethical aspects of risk, education in ethics.

Making Use of Digital Research: new Distance Learning course

Dr Gian Marco Campagnolo and Prof Robin Williams have been awarded £73,700 under the University of Edinburgh Distance Education Initiative to develop pathbreaking advanced training around digital research challenges.

Working with colleagues in Sociology (Kate Orton-Johnson, Nick Prior) and others with relevant skills and expertise they will develop training to enable postgraduate social scientists,

business professionals and policymakers to develop a critical understanding of the research opportunities arising from social media and other online data resources. The course will be

available from September 2014
For more information contact Gian Marco Campagnolo.
g.campagnolo@ed.ac.uk

Future Africa? Transformative Science and Technology

Talk by Jonathan Ledgard (Afrotech EPFL) 12-2pm. Monday 18 November. Chrystal Macmillan Building (6th floor, Staff room)

Jonathan Ledgard, director of the new future Africa Afrotech initiative at the Swiss Federal Institute of Technology, will present his vision for the massive upscaling of frontier technologies in Africa. The pace and possibility of science is rapidly accelerating. New fields of knowledge, new technologies and new models of delivery are emerging. Synthetic

biology, big data, ICT and genomics represent both promise as well as platforms for further progress. Perhaps the fundamental question constraint to the transformative power of technology in and for Africa is finding ways to connect up knowledge, technology and markets in ways that will drive multi-scale innovation that

includes, inspires and impacts. There will then be an opportunity to respond, discuss and perhaps take things forward over a brown bag lunch. For further information please contact Prof James Smith, Centre for African Studies.
James.Smith@ed.ac.uk

Valuation as Practice

International Research Symposium and Doctoral Workshop

13 and 14 February 2014, The University of Edinburgh

Keynote lecture by Professor Wendy Espeland, Northwestern University

Jointly organised by The University of Edinburgh, Institute for the Study of Science, Technology and Innovation and the Valuation

studies (ValueS) programme, Department of Thematic Studies -Technology and Social Change, Linköping University

For more information check our website www.issti.ed.ac.uk or contact Prof Robin Williams (R.Williams@ed.ac.uk)



Innogen to look at the future of Scotland and the UK

The Innogen Institute has been funded by the Economic and Social Research Council (ESRC) to undertake three research projects as part of its Future of the UK and Scotland programme. This programme of activities seeks to inform the debate in the run-up to the Scottish independence referendum and assist in planning across a wide range of areas that will be affected by the outcome of the vote.



The Future of Scottish Healthcare and Research

Scotland is seen as both the 'sick man of Europe' and an isolated population viewed as a 'living lab' for researchers. Polls are already showing that access to quality healthcare services and good research (for both public and commercial benefit) will be a key area of concern in debates about independence.

Building on a decade of research into life science innovation systems and translational medicine, the sociology of health and illness and the history of medicine, Innogen is leading a study on the future of Scottish healthcare and research. This project will have significant impact

on improving knowledge and understanding of the key benefits and limitations of the currently devolved health service in Scotland, and the partially devolved health research system, in the context of social, political and economic exigencies being mobilised by the referendum.

Innogen's activities will inform public debate, as well as prove relevant to the clinical and research communities and industrial sectors by providing new knowledge, understanding and insights into the broader, systemic challenges of devolved healthcare and research.

Independence and Innovation Policy in Scotland

The potential for positive or negative impact on wealth creation arising from independence is relevant to all Scots, and the UK more generally. It is becoming increasingly important to anticipate how institutions and dynamics of Scottish innovation will be affected by different degrees of Scottish independence.

With a record of excellence in understanding the drivers of innovation policy and institutional supports, Innogen is undertaking research into how institutions in regional, and encompassing national, innovation systems respond to independence movements, and how those responses shape future

innovation capacity through impact on higher education, entrepreneurial capacity and financial capacity. These activities will, ultimately, help evaluate how Scotland can maximise the possible benefits of different levels of autonomy and prevent damage to the Scottish economy. As a result of this project, Innogen

seeks to anticipate and provide evidence for policy makers, leaders of public and private organisations, and to stimulate and inform public discussion on Scotland, its innovation system and its prospects for economic growth.

Scottish Science and Industrial Dynamics

At present there is a major disconnect between the strong research base and the weaker industrial base in Scotland. While punching well above its weight in the UK and internationally in research grant funding, publications and their citation, Scotland has relatively low business R&D investment and weak performance in building sustainable science-led sectors.

With the prevailing view that Scotland is under-performing in the translation of basic and applied science through to innovation and entrepreneurship, this is an important moment to understand better how to increase the emphasis on Scottish research and its connection to industrial policy for a productive economy. Building on the knowledge and

insight being developed on the institutions and dynamics of Scottish innovation, Innogen will carry out further research that investigates how Scottish industry is connected to the Scottish research base, in light of institutional and policy dynamics arising from the independence debate.



As the work of ESRC Genomics Forum concludes, its legacy continues

With the ESRC Genomics Network officially ending (in its current form) in June 2013, the work of the ESRC Genomics Forum, in coordinated engagement initiatives across the Network, has also concluded. A website providing an overview of the outputs resulting from the work of the four centres that previously comprised the Genomics Network will soon be available at www.genomicsnetwork.ac.uk. Even though the Genomics Forum is no longer active, the legacy of its work continues to flourish.

In September 2013 a rehearsed reading of a “genomics-themed” play took place at Edinburgh’s Traverse Theatre. Group Portrait in a Landscape (Et in Arcadia...) has been written by former Genomics Forum Playwright-in-Residence, Peter Arnott, and examines how issues around the life sciences result in far-reaching consequences for the “perfect” family portrayed in the drama. The work is a direct result of the time Peter spent in residence with the Forum. Through undertaking a rehearsed reading – which has



Peter Arnott, Genomics Forum Playwright-in-residence

been produced by the Traverse theatre in collaboration with the Genomics Forum – it is ultimately hoped to attract other co-producers in order to stage a full production of this powerful and ambitious work.

Earlier this year, at the end of May, the Genomics Forum used its final engagement event to showcase the work resulting from its collaboration with two

Filmmakers-in-Residence. The filmmakers resided at the Forum from September 2012, working with social and life scientists to research and develop documentaries that relate to the work of the ESRC Genomics Network. Cameron Duguid has produced Simply Complex – an animated exploration of how the development of our understanding of DNA has impacted the life sciences and wider society. Lindsay Goodall’s film – entitled East End Journey – focuses on the comparatively poor levels of health and reduced life expectancy experienced by residents of the east end of Glasgow, and the possible role of epigenetic factors in understanding this disparity. Both documentaries will now be submitted to a number of international film festivals, thanks to the support of the Scottish Documentary Institute.

As part of its mission to engage stakeholders in social issues resulting from developments within the life sciences, in September 2011 the Genomics Forum co-organised – with the Human Genetics Commission (HGC) – a workshop to consider the incidental findings resulting from genetic testing in clinical contexts. Bringing together a range of experts covering clinical practice, biomedical research, anthropology, sociology, law and

ethics, the initiative was developed through a number of themed sessions, each of which included a commentary from an HGC member, followed by a wider discussion. A report (with Cate Heeney as lead author) summarising the presentations and discussions from the workshop has now been made available through the Forum. Despite the fact that neither the Genomics Forum nor the HGC any longer exists in their previous form, the conclusions of the report are intended to advance the debate and influence practice in relation to incidental findings resulting from clinical genetic testing. The report will be circulated widely and should be of interest to several potential audiences including biomedical charities, patients’ groups and the UK government’s new health-genetics regulatory committees. Further information on the report – including how to obtain copies – will shortly be available on the Genomics Forum archive website:

<http://www.genomicsnetwork.ac.uk/forum>



Farewell to Moyra Forrest after thirty six years service

Fond farewell to Moyra Forrest, our Information Officer, who has retired after thirty six years service with us

Moyra started as Librarian for the Science Studies Unit in 1977 before taking on the role of Information Officer in 1987 for Edinburgh PICT – our Centre under the ESRC Programme on

Information and Communications Technology. We will miss her exceptional skills in tracking down even the most obscure of publications and her keen engagement in our research.



Moyra Forrest

Triple Congratulations to Daniele Fanelli

Triple congratulations are due to our Research Fellow, Dr Daniele Fanelli, who is moving to the Université de Montreal, École de bibliothéconomie et des sciences de l'information as Professeur Associé.

Daniele's paper with John P. A. Ioannidis 'US studies may overestimate effect sizes in softer research' has been published in the prestigious Proceedings of the National Academy of Sciences PNAS (August 26, 2013, doi: 10.1073/pnas.1302997110). This shows that published studies whose outcome included behavioral parameters were generally more likely to report extreme effects. Moreover, those with a corresponding author

based in the US were more likely to deviate in the direction predicted by their experimental hypotheses.

In addition he has secured a National Institutes of Health award for c \$US 320,000 for a two year study entitled: "From countries to individuals: unravelling the causes of bias and misconduct with multilevel meta-meta-analysis". This will expand the PNAS study to more disciplines, countries and hypotheses.



Dr Daniele Fanelli

Personal Chair for Catherine Lyall

Congratulations to Dr Catherine Lyall, former Deputy Director of the ESRC Genomics Forum and

ESRC Innogen Centre, who has been promoted to Professor of Science and Public Policy.



Prof Catherine Lyall

The Dr Stewart Russell Student Award Fund

A scholarship fund has been created to commemorate the contribution of our former colleague Dr Stewart Russell. For donation links, please see below.

Stewart made an important contribution to the development of the field of Science and Technology Studies over many years. After studying both science and social science at Cambridge Stewart took his doctorate at Aston University, Technology Policy Unit. Stewart spent two decades at the University of Wollongong, inspiring a generation of students at their Science, Technology & Society program.

Stewart joined the University of Edinburgh in 2006 as Deputy Director of the Research Centre for Social Sciences. He helped build the interdisciplinary research programmes of the Institute for the Study of Science, Technology and Innovation, particularly around the transition to environmental sustainability, water management and energy technologies. His sustained efforts, particularly in developing our joint postgraduate programmes with the Science Studies Unit, paved the way for the establishment of the Science, Technology and Innovation Studies subject group.

Stewart was tireless in his support for colleagues in their work and in building links with other scholars and with wider audiences. He is greatly missed by all who knew him.

To commemorate Stewart's commitment and passion in helping students achieve their full



Dr Stewart Russell (6 August 1955 - 17 September 2011)

potential we are delighted to announce the creation of a fund in his memory which will directly help students at the University of Edinburgh.

To support students in memory of Stewart please click on one of the links on the right.

For more information see: www.stis.ed.ac.uk/stewart_russell

Single donation

Regular donation

Welcome to our new members

Prof Paolo Quattrone

Prof Paolo Quattrone has been appointed to the Chair of Accounting, Governance and Social Innovation, in the University of Edinburgh Business School.

He was previously Professor of Accounting and Management Control at IE Business School, Madrid, Reader in Accounting at the Saïd Business School, and Official Student (i.e. Fellow) of Christ Church, at the University of Oxford. A truly international scholar, he has conducted research and taught at the Universities of Catania, Kyoto, Madrid Carlos III, Manchester, Oxford, Palermo, Siena, Stanford and Luigi Bocconi of Milan.

Paolo's work addresses questions related to the emergence and diffusion of accounting and managerial practices in historical and contemporary settings. He has published widely on the interface between management control and information

technologies (especially ERPs), the history of accounting and management practices and thinking, and the managerialisation of higher education institutions. As Fulbright New Century Scholar at the University of Stanford, he conducted research on changes in business models and education. Paolo sits on the editorial boards of major academic journals such as Accounting Organizations and Society, Accounting, Auditing and Accountability Journal, Critical Perspectives of Accounting, the Accounting Historians Journal and Organization. More recently, he teaches, consults, and researches in the area of Major Programme Management, where he is

developing a series of case studies on reporting, governance and leadership practices to address issues of risk and uncertainty in complex organizations for the courses that he teaches for the MSc in Major Programme management at the Saïd Business School, Oxford, and for the Major Programme Leadership Academy of the UK Cabinet.



Prof Paolo Quattrone

Dr Fadhila Mazanderani

Fadhila Mazanderani recently began a prestigious five year University of Edinburgh Chancellor's Fellowship in Science, Technology and Innovation Studies.

After completing her doctorate at the University of Oxford in 2011, Fadhila was Research Fellow at the University of Warwick and Lecturer in Sociology at Durham University. She originally studied at the University of Pretoria and worked as a management consultant in the South African telecommunications industry before pursuing an MSc at the LSE. Fadhila's academic interests sit at the intersection of Science and Technology Studies, Medical Sociology and Anthropology. Her research looks at the use of

information technology in relation to chronic illness and contemporary healthcare, with particular focus on the production and mediation of alternative forms of knowledge, and how this might be used to re-think the relationship between epistemology, ethics and aesthetics. During her time as a Chancellor's Fellow, Fadhila will be conducting research on the effects of transnational patient activism on health policy and clinical practice in relation to a controversial theory of, and

associated intervention in, multiple sclerosis (MS).



Dr Fadhila Mazanderani

Welcome to our new members

Dr Dagmara Weckowska

Dr Dagmara Weckowska has been appointed as Research Fellow in Science, Technology and Innovation Studies.

Dagmara is a social scientist with a background in science, technology and innovation studies as well as social and organisational psychology. Her research interests cover science-based innovation, university-industry interactions, intellectual property and knowledge management, social learning and practice change. Before joining

the Innogen Institute and STIS, University of Edinburgh, Dagmara completed her doctoral studies at SPRU, University of Sussex, during which she worked as a teaching fellow and was involved in a range of research projects for the European Commission, the Gatsby Charitable Foundation, and the UK Intellectual Property Office.



Dr Dagmara Weckowska

Dr Omid Omidvar

Dr Omid Omidvar has been appointed Research Fellow in the Innogen Institute, Science Technology and Innovation Studies.

Omid received his Ph.D. degree from The University of Manchester - Manchester Business School in 2013. His thesis broadly focused on the development of learning capabilities across organisational and disciplinary boundaries in

collaborative research initiatives. His current research interests include absorptive capacity, boundary crossing mechanisms, communities of practice, and identity development in inter-disciplinary inter-organisational work contexts.



Dr Omid Omidvar

Recent PhD successes across the Institute for the Study of Science, Technology and Innovation Studies

We have a lively and growing cohort of PhD students, undertaking doctoral research into a wide range of topics. So we felt it would be useful to celebrate the achievements of those whose work has come to successful fruition.

Ka Lia (Kate) Ho: Understanding Requirements Work in E-Science Projects

Laur Kanger: Domestic PC Production in Soviet Baltic States 1977-1992

Emma King: Blood, sweat and tears: A case study of the development of cultured red blood cells for transfusion

Ali Maleki: Dynamics of knowledge base complexity: An inquiry into oil producing countries' struggle to build innovation capabilities

Hajar Mozaffar: Inside the New Sites of Innovation: How User Communities Influence Complex Enterprise Technologies

Jonathan Suk: Epidemic Communities. Climate change, emerging disease and the governance of science.

Recent Events



ISSTI Retreat 2013

The 2013 ISSTI Retreat (3 & 4 June 2013) took place in the unusual surroundings of the Budongo Lecture Theatre at Edinburgh Zoo.

65 lecturers and researchers from different schools and disciplines from right across the University of Edinburgh gave presentations and contributed to discussions over the two days (along with dozens of lively chimpanzees and

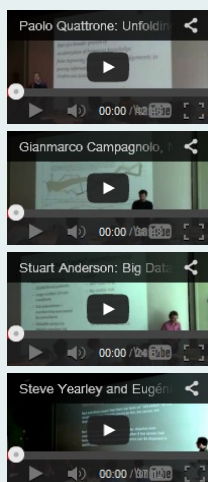
a few gorillas). As well as a guest presentation by Trevor Pinch (Goldwin Smith Professor of Science & Technology Studies at Cornell University), the first day revolved around issues surrounding Evaluation while the

second day's topics sought to promote new kinds of Encounters and Interactions between different analytical traditions and streams of work. Pandas were also observed!

Retreat programme on ISSTI website and youtube

The full programme of the retreat including papers or slides is available on www.issti.ed.ac.uk.

In addition to that we premier the **ISSTI youtube channel** where most of the presentations can be viewed online - see a sample of videoed presentations of the first day below.



Paolo Quattrone:

Unfolding Rationality: Performative Accountability, Visual Memory, and Order

Gian Marco Campagnolo, Neil Pollock:

Subitisation

Stuart Anderson:

Big Data and its malcontents

Steve Yearley and Eugénia Rodrigues:

Ensuring and evaluating compliance with policy: politics and the monitoring of climate emissions and climate change in the UK

Visit the ISSTI **youtube** channel to find more videos
www.youtube.com/edinburghissti



Some Recent Publications



Ronan Bolton and Timothy J Foxon (2013) *Environment and Planning A*, 'Urban infrastructure dynamics: market regulation and the shaping of district energy in UK cities' <http://www.envplan.com/abstract.cgi?id=a45575>

Mikael Johnson, Hajar Mozaffar, Gian Marco Campagnolo, Sampsa Hyysalo, Neil Pollock and Robin Williams (2013) 'The managed prosumer: evolving knowledge strategies in the design of information infrastructures', *Information Communication and Society* 08/2013; 10.1080/1369118X.2013.830635

Eric Monteiro, Neil Pollock, Ole Hanseth & Robin Williams, 'From Artefacts to Infrastructures', (2013) *Computer Supported Cooperative Work Special issue CSCW: The First Quarter Century*, Nos 4-6 DOI 10.1007/s10606-012-9167-1

Flear, M. L. and Pickersgill, M. D. (2013) 'The European Union's Regulation of Emerging Health Technologies and Citizen Participation: Regulatory or Regulating Publics?', *Medical Law Review*, 21, 1, 39-70 (special issue on 'Regulatory 'Desirables' for New Health Technologies').

Pickersgill, M. (2013) 'The Social Life of the Brain: Neuroscience in Society', *Current Sociology*, 61, 3, 322-340.

Pickersgill, M. D. (forthcoming) 'The Endurance of Uncertainty: Antisociality and Ontological Anarchy in British Psychiatry, 1950-2010', *Science in Context*.

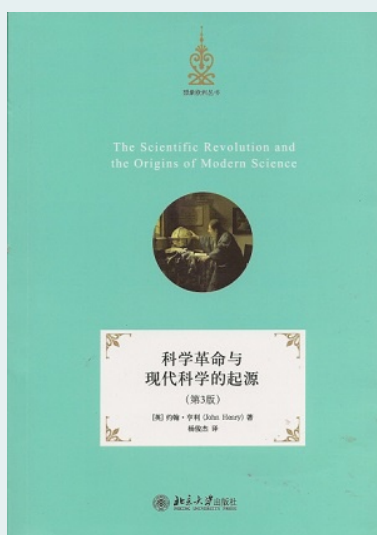
Neil Pollock and Sampsa Hyysalo (2013) 'The Business of Being a User: The Role of the Reference Actor in Shaping Packaged Enterprise System Acquisition and Development' *Management Information Systems Quarterly* <http://www.misq.org/contents-forthcoming>

Graham Spinardi (2013) 'Technical controversy and ballistic missile defence: disputing epistemic authority in the development of hit-to-kill technology' *Science as Culture*, 2013 DOI : 10.1080/09505431.2013.768224

International recognition for Professor John Henry

We are delighted to see earlier work gaining recognition and wider dissemination by being published in foreign translation. Two books by Professor John Henry (Director, Science Studies Unit) have been translated.

The Scientific Revolution and the Origins of Modern Science



A Short History of Scientific Thought



Two new Innogen collections

Alessandro Rosiello and Michele Mastroeni are guest editors on a recently published special issue of Technology Analysis and Strategic Management exploring ‘The evolution and dynamics of biotechnology systems of innovation: the role of policy targeting.’

Based on the Target Project (sponsored by the Framework Programme 7 of the European Union, <http://targetproject.net>), which they led, this special issue presents a new policy model

based on a system-evolutionary theory of innovation to help better understand the significant changes taking place within large pharmaceutical companies, biotech start-ups, and finance and

policy institutions.

Technology Analysis & Strategic Management Special Issue – The evolution and dynamics of biotechnology of innovation: the role of policy targeting

Innogen papers within the special issue include:

Guest Editorial: The evolution and dynamics of biotechnology systems of innovation: the role of policy targeting (Alessandro Rosiello & Michele Mastroeni)

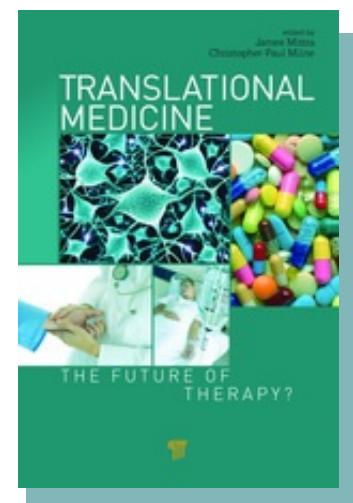
Evolutionary policy targeting: towards a conceptual framework for effective policy intervention (Alessandro Rosiello, Michele Mastroeni, Morris Tuebal & Gil Avnimelech)

Pursuing a biotechnology system of innovation in Lithuania: a conceptual framework for effective policy intervention (Michele Mastroeni & Alessandro Rosiello)

New Book: Translational Medicine: The Future of Therapy? edited by James Mittra and Christopher-Paul Milne (Tufts) is now available for purchase.

The central aim of this book is to bring together a range of academic, industry and practitioner perspectives on translational medicine (TM) to significantly enhance conceptual and practical understanding of the emergence and progress of the field and its potential impact on basic research, therapeutic development, and institutional infrastructure/resources. Rather than focus simply on the basic

science and its relation to clinical practice, the chapters in this book explore the dynamic interactions and key challenges in translating new science into viable therapies for the clinic, which crucially includes the recognition of the importance of social, commercial, and regulatory environments in addition to good science. Available in both Hardback and eBook.



Key Features

- A truly interdisciplinary book that provides an overview of translational medicine from “proof of concept” to the delivery of therapy from the relevant stakeholder perspectives that bridge the industry, science, and society nexus
- International in scope (including chapters relevant to the developing world) and written by international experts in the field
- Relevant to a broad readership (scientists, social scientists, industry and policy stakeholders)
- Practically useful for both practitioners of translational medicine (in public and commercial settings) and scholars studying biomedical innovation

Potentially a standard text for postgraduate programs in translational medicine.

[Purchase Translational Medicine: The Future of Therapy? from the publisher.](#)