Ethical and Legal Challenges to Stem Cell Research
Forum 7th December 2007

Speaker Profiles (in order of appearance)

Prof. Aurora Plomer

Director of the SIBLE (Sheffield Institute for Biotechnological Law and Ethics) Research Cluster. She joined the University in January 2007.

Research Interests
Regulation of the life-sciences and more generally on the interface between bioethics and biolaw. Her current research focuses on ethical and legal aspects of regulatory controls on human tissue and stem cell research from the lab to the clinic. Prof. Plomer is particularly interested in the emerging ethical and legal issues concerning the implementation of EU Directives into UK law and the international ethical and legal challenges presented by the commercialisation of stem cell research.

Professional Activities and Recognition
Consultant: Retained Organs Commission
Referee & Rapporteur for ESRC – MRC Stem Cell Initiative
Scientific advisor to the Stem Cell and Society Program (Stanford) and DGEMap (Newcastle)
Member ESRC Policy Impact Group for the Stem Cell Initiative

Prof. Peter Andrews

Director of the Centre for Stem Cell Biology. He has been in the Dept Biomedical science at The University of Sheffield since 1992, including a position as Chairman of the Department between 1995-2003.

Research Interests

In addition, Prof. Andrews is a Co-founder and Director of Axordia Ltd., a University Spin-out Company and one of the UK’s leading human embryonic stem cell (hESC) companies. It has a unique portfolio of patent-protected technologies and proprietary materials.

Prof. Andrews is currently the co-ordinator of the Framework 6 Integrated Project ‘ESTOOLS’ which aims to generate knowledge on the fundamental processes governing stem cell differentiation, thus permitting greater standardisation of research with human embryonic stem cells.
Professionals Activities and Recognition
Invited member of ad hoc committees and discussion groups of the MRC to discuss national stem cell strategy, 2002-200
Member UK Stem Cell Bank User Liaison Committee 2003 - present.
Member, UK Stem Cell Bank Management Committee 2003 - present
Co-ordinator of the International Human Embryonic Stem Cell Characterisation Group for the International Stem Cell Forum 2003 - present
Co-organiser of the first UK Human ES cell Training Course (co-sponsored by MRC) BBSRC, DoH and WUN), June 2003
Chairman, Finnish Academy Stem Cell Grants Panel, Sept 2004
Member, YCR Scientific Advisory Committee, from April 2004
Member, MRC Molecular and Cellular Medicine Board, from April 2005

Prof. Marysa Placzek
Holds a personal chair and is a Postgraduate Tutor in the Department of Biomedical Science at the University of Sheffield.

Research Interests
Utilise a combination of embryological, molecular and cellular approaches to the development and role of ventral midline cells of the central nervous system, in particular on floor plate cells of the spinal cord and infundibular cells of the hypothalamus. In vivo transgenic methods in chick and mouse models, are undertaken to examine the role of Sonic hedgehog and TGFbeta signalling, and of target transcriptional facors, in establishing floor plate and hypothalamic identity.

Professionals Activities and Recognition
1998-2001 work Group Member, BBSRC Genes and Developmental Biology Committee
1999-2002: Panel Member, MRC Non-Clinical Training and Career Development Committee
2003-2007: Panel Member, Genes and Developmental Biology Committee, BBSRC

Prof. Brian Salter
Professor of Politics of Biomedicine and Director of the Global Biopolitics Research Group at King's College London.

Research Interests
A political scientist specialising in the analysis of public policy, he has studied the political forces at work in the policy arenas of education, health and, most recently, the life sciences. Here his work focuses on the global politics of new health technologies and the international governance issues surrounding the bioethics and regulatory policies of stem cell research and regenerative medicine.

Professionals Activities and Recognition
Member of the UK National Stem Cell Network Steering Committee
Founder member of the Hinxton Group, an International Consortium on Stem Cells, Ethics and Law
Prof. Sheila MacNeil

Head of the Biomaterials and Tissue Engineering Group at The University of Sheffield. Sheila has been the Director of the University Centre for Biomaterials and Tissue Engineering since 2002, promoting interdisciplinary research, especially between physical sciences and life sciences. She is Deputy Director of the Kroto Research Institute from 2005 and a founding Director of the university spin-out company, CellTran Limited, established in 2000. CellTran has developed a skin product based on the patients own skin cells for the treatment of burns and chronic wounds.

Research Interests
From the early 90s Sheila’s group has focussed on research in Tissue Engineering of skin and other soft tissues. The group has a strong translational interest in developing tissue engineering which will benefit patients alongside fundamental work to develop new understanding and tools in the area of tissue engineering. The groups work includes the tissue engineering of skin, oral mucosa, cornea and nerve with growing interests in oesophagus and bladder. She leads a large multidisciplinary group spanning biomaterials, cell biology, molecular biology, nanobiology and imaging of 3D tissues.

Professional Activities and Recognition
Member of BBSRC Engineering and Biological Systems panel from 2001-2004, Member of the UK Medical Research Council College Small Grant Committee from 2006
Member of NC3R Committee from 2007

Prof. Pam Shaw

Professor of Neurology at The University of Sheffield and a Consultant Neurologist at the Sheffield teaching Hospitals Foundation Trust. She is also the Director of Sheffield Care and Research Centre for Motor Neuron Disorders.

Research Interests
The Academic Neurology Unit, established as part of a major strategic initiative within the University of Sheffield is well-placed to harness the revolutionary developments in biomedical science for the benefit of patients with neurological disease. The major goal of Prof. Shaw’s research is to elucidate the functioning of motor neurones in health and disease and to translate these basic science findings into health benefits for patients afflicted with degenerative motor system disorders.

Prof. Shaw’s research group consists of a multidisciplinary team of basic and clinical scientists investigating molecular mechanisms of neurodegeneration in disorders of the human motor system, particularly motor neurone disease (MND) and hereditary spastic paraparesis (HSP). The research resources underpinning this programme include clinical material (DNA banks and a human CNS tissue bank); and experimental models employed to investigate genetic perturbations, oxidative stress and
glutamatergic toxicity which may be associated with motor neurone injury (NSC34 cell line, primary neuronal and glial cultures).

**Professional Activities and Recognition**

Member of the Executive Committee of the Association of Physicians of Great Britain and Ireland from 1996 to 1999

Member of the Motor Neurone Disease Research Advisory Panel from 1993 to 1997

Member of the Association of British Neurologists Clinical Research and Academic Committee from 1998

Guarantor of the Brain Trust from 1998

Advisor to the Department of Health Medicines Control Agency/ Committee on Safety of Medicines from 1997

Wellcome Trust / Irish Health Board New Blood Fellowship panel from 1998 to 2000

External assessor for Parkinson’s Disease Society 2000

Medical Advisor to the Motor Neurone Disease Association from 2000

Member of the Neurosciences subpanel for the 2001 UK Universities Research Assessment Exercise

Member of the Medical Research Society Committee from 2001

Invited expert participant in the NICE panel for the evaluation of riluzole therapy

Member of Council for the Association of British Neurologists from 2001

Chairman for the Association of British Neurologists Clinical Research and Academic Committee from 2001

Member of the Wellcome Trust Neurosciences Panel from October 2001

Member of Meetings Subcommittee of the Association of British Neurologists from 2001

World Federation of Neurology Working Group on Therapeutic Trials in ALS/MND from 1996

Secretary to the European ALS Study Group from 1997 to 2000

Member of the European Neurological Society Scientific Committee on motor neurone disease from 1998

Coordinator of the Molecular/ Cell Biology Section of the European Familial ALS Group from 1997 to 2000

Novartis ALS/MND advisory board 2002

Steering committee International MND trial ONO Pharmaceuticals 2002

Invited external assessor Neuroscience review panels, University of Glasgow and Imperial College London 2003

Member of the UK Medical Research Council College of Experts from 2005

Member of the Muscular Dystrophy Campaign Research Advisory Panel from 2004

Chairman of the Scientific Programme Committee for the annual ALS/MND international scientific symposium from 2004

Member of Editorial Boards of Muscle and Nerve; Amyotrophic Lateral Sclerosis and Related Motor Neuron Disorders and Brain

Member of organising scientific panel for the European Federation of Neurological Societies (EFNS) 2004 - 2006

Member of the scientific panel for the International Congress on Neuromuscular disorders 2004 - 2006

Membership of Editorial Boards

- Muscle and Nerve journal
- Editorial board of the new journal “Amyotrophic lateral sclerosis and related motor
neuron disorders”.
Member of HEFCE Senior Lectureship awards panel from 2006.
Member of fellowship selection panel, Academy of Medical Sciences 2007-2010
Member of the Clinical Academic Training Committee, Academy of Medical Sciences – from 2008
Associate Director and Chair of the Clinical Studies Group for Motor Neurone Disease, Dementia and Neurodegenerative Diseases Clinical Research Network (DeNDRoN) 2006 - 2010.
Member of the UKCRC Brain Banking Strategy Committee from 2007.
Member of the UKCRC Experimental Medicine Panel from 2007.

Dr. Mark Taylor

Lecturer in the School of Law. He completed an MA (Biotechnological Law and Ethics) and his Ph.D. at the University of Sheffield and is now a. He is a member of the Sheffield Institute for Biotechnological Law and Ethics (SIBLE) Research Cluster

Research Interests
His primary research interest concerns the legal and ethical issues raised by scientific developments in genetic testing and screening technologies, particularly in whether, (and how) the law ought to regulate the acquisition and use of human genetic information within (prospective) contractual relationships (e.g. insurance and employment) through sui generis anti-discrimination legislation and to explore and examine the (existing and potential) role of data protection law (both domestic and European) in the regulation of genetic discrimination.

He is currently joint Principal Investigator on an EC project called PRIVILEGED (Privacy, Law, Ethics and Genetic Data). PRIVILEGED is a project looking to determine the ethical and legal interests in privacy and data protection for research involving the use of genetic databases and biobanks. It is funded by the European Commission from 2007 to 2009, and has 32 member institutions from the European Union, European Economic Area and three non-European countries Israel, Japan and Taiwan. http://www.privilegedproject.eu/

Professional Activities and Recognition
Member of Advisory Group to HEFCE Centre of Excellence in Teaching and Learning University of Sheffield CILASS (Centre for Inquiry-based Learning in the Arts and Social Sciences)
Expert witness to Rotherham Metropolitan Borough Council (Fluoridation of Water Review)
Fellow of Salzburg Seminar (Session 392: Biotechnology: Ethical, Legal, and Social Issues)

Ben Sykes

Senior Programme Manager, UK Stem Cell network
Ian Peake

Professor of Molecular Medicine and Director of Research, Medicine

Research Interests

Molecular and genetic basis of inherited haemostatic and thrombotic disorders
Molecular basis of acute leukaemias