

Tissue Engineering in the Auditory System

Paving the way from basic science to clinical practice

at

The Royal Society, London
(<http://royalsociety.org/>)

Thursday 2 June 2011

Organised by: Gerard O'Donoghue (Nottingham) and Marcelo Rivolta (Sheffield)

The loss or failure of a vital organ or tissue is one of the most devastating and challenging problems in medicine to-day. Tissue engineering combines the principles of biology and engineering to produce synthetic functional substitutes for damaged tissue; it produces prosthetic devices containing living cellular and structural components capable of mimicking the functional properties of the original tissue. Thus, the formidable process of engineering a living tissue to replace that damaged or diseased has become a reality. The field is likely to improve health and life quality for millions of people by restoring, maintaining or regenerating organs and tissues and developing novel diagnostic and therapeutic possibilities.

The focus of this meeting is to reflect how these advances could be applied to the auditory system and explore how this interdisciplinary field could provide solutions to tissue creation and repair or restore key tissues in the auditory system – from cochlea to cortex

Intended audience: Clinicians and scientists across the many disciplines related to hearing: audiologists, otolaryngologists, molecular geneticists, neuroscientists, cell biologists, bioengineers etc; Voluntary organisations connected with deafness.

Topics: General principles of tissue engineering, sensory restoration in related systems (e.g. in vision); auditory neuroepithelium in health and disease, human auditory stem cell research, physiological challenges, stem cell transplantation in the inner ear, combining electrical and biological implants, advanced drug and gene delivery, cochlear robotics and nanosurgery, deprivation and reactivation of the central auditory pathways.

Guest Faculty: Robin Ali (UK), Andrew Forge (UK), Juichi Ito (Japan), Andrej Kral (Germany), Alessandro Martini (Italy), Helge Rask-Andersen (Sweden), Robert Shepherd (Australia); Alain Uziel (France).

Guest of Honour: Professor Richard Ramsden (Manchester).

Opening Remarks: Professor Sue Hill, Chief Scientific Officer, Department of Health; Professor Dame Julia Polak, Imperial College, London

CPD Points (Applied For)

Registration:

£125 conference including lunch / £90 Trainee Fee

£180 conference including lunch, and dinner with the faculty

All enquiries should be addressed to Sam Devanney at The Ear Foundation
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To register: <http://www.earfoundation.org.uk/education/articles/644>

