RESTORATION OF VISION

Recent advances in basic and clinical vision research have made ophthalmology one of the most exciting fields of technological and therapeutic innovations. This 10th annual Ri.MED symposium on the theme “Restoration of Vision,” jointly organized by the Ri.MED Foundation, the University of Pittsburgh School of Medicine, UPMC, and the Paris-based Institut de la Vision, will bring together renowned academic and industry experts to discuss recent breakthroughs in vision restoration therapies. The symposium will provide an overview of the latest advances in gene therapy, neuroprotection, visual prostheses, and stem cell treatments for currently incurable eye diseases. It will highlight the theoretical advances and emerging practical applications of visual information processing, optic nerve regeneration, and corneal transplantation. Special emphasis will be given to novel pathophysiological mechanisms and therapeutic targets for age-related macular degeneration.

The University of Pittsburgh School of Medicine and the Institut de la Vision-Sorbonne-Universités have already signed an agreement enabling collaborative programs between the two sites in the field of vision restoration. The Institut de la Vision is also working with the Ri.MED Foundation to translate its research findings into new treatments and products. We are hopeful that this symposium, which brings together some of the best and brightest minds in vision restoration, will catalyze new collaborations that advance integrative multidisciplinary research and expedite the evolution of laboratory discoveries into new diagnostic tools, medical devices, and therapies for patients.
PROGRAMME

Thursday, 26 October 2017

11:30  Symposium Registration

12:00  Welcome and Introduction
       Camillo Ricordi, MD
       Bruno Gridelli, MD
       Alessandro Padova, PhD

13:00  Lunch

SESSION 1: REGENERATIVE THERAPIES FOR RESTORING VISION
14:00  José-Alain Sahel, MD
       From Cone Rescue to Optogenetics
14:30  Valeria Marigo, PhD
       Neuroprotective Approaches for Retinitis Pigmentosa
14:30  Masayo Takahashi, MD, PhD
       Retinal Cell Therapy Using iPS Cells
15:00  Alberto Auricchio, MD, PhD
       Large gene delivery to the retina with AAV vectors
15:30  Graziella Pellegrini, PhD

16:00  Coffee Break

SESSION 2: CORNEA
16:30  Flavio Mantelli, MD, PhD
17:00  Alain Chédotal, PhD
       New Strategies for the Analysis of Axonal Regeneration in the Cornea and Optic Nerve
17:30  Vishal Jhanji, MD
       The Role of MDM2/p53 in Pterygium Pathogenesis

18:00  Final Discussion
**Friday, 27 October 2017**

8:30  Symposium Registration

**SESSION 3: VISUAL INFORMATION PROCESSING AND VISUAL PROSTHESES**

9:00  Serge Picaud, PhD  
*Visual Restoration by Retinal Prostheses and Optogenetic Therapy: Preclinical Validation in Non-Human Primates*

9:30  Fabio Benfenati, MD, PhD  
*A Fully Organic Retinal Prosthesis Restores Vision in a Rat Model of Degenerative Blindness*

10:00  Matthew A. Smith, PhD  
*A Brain-Computer Interface for Visual Attention*

10:30  Botond Roska, MD, PhD  
*Targeting human retinal cell types to restore vision*

11:00  Coffee Break

**SESSION 4: AGE-RELATED MACULAR DEGENERATION**

11:30  Florian Sennlaub, MD, PhD  
*The Pathogenic Role of Chronic Inflammation in Age-Related Macular Degeneration*

12:00  Michel Paques, MD, PhD  
*Cellular-Scale, Time Lapse In Vivo Imaging in the Human Eye*

12:30  Chiara M, Eandi, MD, PhD  
*Biomarkers and new treatments for AMD*

13:00  Lunch

**SESSION 5: DEGENERATIVE EYE DISEASES**

14:00  Debashish Sinha, PhD  
*The Crucial Impact of Lysosomes in Age-Related Macular Degeneration*

14:30  GM Tosi, MD, PhD  
*Age-Related Macular Degeneration Biomarkers in the Aqueous Humor*

15:00  Stephen Moss, PhD  
*Novel approaches to the treatment of retinal vascular disease*

15:30  Final Discussion & Symposium Conclusion
11th Annual Ri.MED Scientific Symposium
26-27 October 2017
Palazzo dell’Informazione, Piazza Mastai 9, Rome, Italy

SPEAKERS

Alberto Auricchio, MD, PhD
Principal Investigator, Molecular Therapy Program Coordinator, and Head, Vector Core
Telethon Institute of Genetics and Medicine (TIGEM)
Associate Professor of Medical Genetics Department of Translational Medicine, University of
Naples “Federico II”

Fabio Benfenati, MD, PhD
Director, Center for Synaptic Neuroscience and Technology Italian Institute of Technology
Professor of Neurophysiology and Head, Laboratory of Molecular and Cellular
Neurophysiology, University of Genova Medical School

Alain Chédotal, PhD
Group Leader, Role of Axon Guidance Molecules, Institut de la Vision

Chiara M. Eandi, MD, PhD
Professor of Ophthalmology, Department of Surgical Sciences, Eye Clinic, University of Torino

Bruno Gridelli, MD
Vice President, Ri.MED Foundation
Executive Vice President, UPMC International
Director, UPMC Italy
Professor of Surgery, University of Pittsburgh

Vishal Jhanji, MD
Professor of Ophthalmology, University of Pittsburgh School of Medicine

Flavio Mantelli, PhD
Chief Medical Officer, Dompé Ophthalmology Division

Valeria Marigo, PhD
Associate Professor of Molecular Biology, Department of Biomedical Sciences, University of
Modena and Reggio Emilia

Stephen Moss, PhD
Norman Ashton Professor of Biomedical Research Institute of Ophthalmology, University
College London

Michel Paques, MD, PhD
Professor of Ophthalmology
Group Leader, Retinal Degeneration and Microvascular Remodeling, Institut de la Vision
11th Annual Ri.MED Scientific Symposium
26-27 October 2017
Palazzo dell’Informazione, Piazza Mastai 9, Rome, Italy

Alessandro Padova, PhD
CEO, Ri.MED Foundation

Graziella Pellegrini, PhD
Professor of Cell Biology
Director, Cell Therapy Program, Center for Regenerative Medicine
Stefano Ferrari, University of Modena and Reggio Emilia

Serge Picaud, PhD
Group Leader, Visual Information Processing, Institut de la Vision

Camillo Ricordi, MD
President, Ri.MED Foundation
Stacy Joy Goodman Professor of Surgery
Distinguished Professor of Medicine
Professor of Bioengineering, of Microbiology, and of Immunology
Director, Cell Transplant Program and Diabetes Research Institute
Leonard M. Miller School of Medicine
University of Miami

Botond Roska, MD, PhD
Senior Group Leader, Friedrich Miescher Institute for Biomedical Research
Professor of Medicine, University of Basel

José-Alain Sahel, MD
Eye and Ear Foundation Professor and Chair of Ophthalmology
University of Pittsburgh School of Medicine
Director, UPMC Eye Center
Director, Institut de La Vision

Florian Sennlaub, MD, PhD
Group Leader, Ocular Inflammation and Degeneration, Institut de la Vision

Debasish Sinha, PhD
Salvitti Professor of Ophthalmology, University of Pittsburgh School of Medicine

Matthew A. Smith, PhD
Assistant Professor of Ophthalmology, University of Pittsburgh School of Medicine

Masayo Takahashi, MD, PhD
Project Leader, RIKEN Center for Developmental Biology, Kobe City Medical Center General Hospital

GM Tosi, MD, PhD
Ophthalmology Unit, Department of Medicine, Surgery, and Neuroscience, University of Siena