

***The Eye and The Chip 2006  
World Congress on Artificial Vision***  
took place on June 15-17, 2006  
at the Westin Hotel in Detroit.

The Eye and The Chip 2006 DVD set is now available!

The set includes four DVD's of the World Congress held on June 15-17, 2006 at the Westin, Detroit Metropolitan Airport.

# ***The Eye and The Chip 2006 World Congress***

THURSDAY, June 15 (7:00 AM - 5:00 PM)

7:00 AM  
A. 7:45-8:00AM

**Continental Breakfast**  
**WELCOME & INTRODUCTION**

Keith Cooley, Michigan  
Chair, Research Committee  
Joseph Rizzo MD, Massachusetts  
Massachusetts Eye & Ear

**CRITICAL ISSUES**  
B. 8:00-8:30AM

***MODERATOR: JAMES WEILAND PHD***  
**Ethan Cohen PhD**  
FDA, Maryland

Safety and Effectiveness  
Considerations for Clinical Studies  
of Visual Prosthetic Devices

C. 8:30-9:00AM

**Joseph Rizzo MD/John Wyatt PhD**  
Massachusetts Eye & Ear/MIT, Massachusetts  
**Stuart Cogan PhD**  
EIC Laboratories, Massachusetts

N/A

D. 9:00-9:30AM

Performance and Limitations of  
Electrode Coatings for Visual  
Prostheses

E. 9:30-10:00AM  
**HUMAN TESTING**  
F. 10:00-10:30AM

**BREAK**  
***MODERATOR: JOHN WYATT PHD***  
**Ralf Hornig PhD/Gisbert Richard PhD**  
IIP Technologies/Univ. Med Ctr, Germany

First Clinical Experience with a 50  
Electrode Retinal Implant

G. 10:30-11:00AM

**John Delbeke PhD**  
Universite de Louvain, Belgium

Prospects for the Optic Nerve Visual  
Prosthesis

H. 11:00-11:30AM

**Alan Chow MD**  
Optobionics Corporation, Illinois

Retinitis Pigmentosa Patient  
Responses: 3<sup>1</sup>/<sub>2</sub> to 6 Years After  
Subretinal Artificial Silicon Chip  
Implantation

I. 11:30AM-12:00PM

**Robert Greenberg MD PhD/Brian Mech PhD**  
Second Sight, California

Second Sight Technology

J. 12:00-1:00PM

**LUNCH**  
***Moderator: Sylvia Elfar PhD***  
**Eberhart Zrenner MD**  
University Eye Hospital, Germany

Subretinal Chronic Multi-Electrode  
Arrays: Results in Blind Patients

K. 1:00-1:30PM

**ANIMAL IN VIVO**  
L. 1:30-2:00PM

**Jun Ohta PhD**  
Nara Institute of Science & Technology, Japan

Microelectronic-based Stimulators  
for STS (Suprachoroidal Transretinal  
Stimulation)

M. 2:00-2:30PM

**James Weiland PhD**  
Doheny Retina Institute, California

Retinal Responses to Electrical  
Stimulation

N. 2:30-3:00PM

**BREAK**  
***Moderator: Eberhart Zrenner MD***  
**Nicolas Cottaris PhD/Sylvia Elfar PhD**  
Wayne State University, Michigan

Electrical Stimulation of the Retina:  
A View from the Brain

O. 3:00-3:30PM

P. 3:30-4:00PM

**Maureen McCall PhD**  
University of Louisville, Kentucky

Passive Subretinal Implants – An  
Empirical Evaluation of Central  
Responses

Q. 4:00-4:30PM

**John Pezaris PhD**  
Harvard Medical School, Massachusetts

The Thalamic Lateral Geniculate  
Nucleus as a Stimulation Target for  
a Visual Prosthesis

R. 4:30-5:00PM

**Discussion**

# ***The Eye and The Chip 2006 World Congress***

FRIDAY, June 16 (7:15 AM – 4:30 PM)

7:15AM

**Continental Breakfast**

## **ANIMAL IN VITRO**

***Moderator: Raymond Iezzi MD***

S. 8:00-8:30AM

**Chris Sekirnjak PhD**

Salk Institute for Biological Studies, San Diego

High-Resolution Epiretinal Stimulation of Mammalian Ganglion Cells

T. 8:30-9:00AM

**Shelley Fried PhD**

UC Berkley, California

Targeting Specific Ganglion Cells with Prosthetic Stimulation

U. 9:00-9:30AM

**Ralph Jensen PhD/Steve Stasheff MD**

VA Boston Healthcare System/Harvard Medical School, Massachusetts

Relative Effects of Early Retinal Degeneration on ON & OFF Pathways

V. 9:30-10:00AM

**BREAK**

## **ANIMAL IN VITRO**

***Moderator: Daniel Palanker PhD***

W. 10:00-10:30AM

**Raymond Iezzi MD**

Kresge Eye Institute, Michigan

Pharmacological Enhancement of Retinal Prosthesis Function

# ***The Eye and The Chip 2006 World Congress***

**SATURDAY, June 17 (7:15 AM - 5:00 PM)**

7:15AM

## **NANOELECTRONICS & BIOENGINEERING**

II. 8:00-8:30AM

### **Continental Breakfast**

***Moderator: Gislin Dagnelie PhD***

**Tohru Yagi PhD/Masami Watanabe PhD**

Tokyo Institute of Technology, Japan

Biohybrid Visual Prosthesis  
Update 2006

JJ. 8:30-9:00AM

**Gregory Auner PhD**

Wayne State University, Michigan

Retinal Stimulation Array  
with Wireless Power and  
Communication Interface

KK. 9:00-9:30AM

**Eduardo Fernandez MD PhD**

University Miguel Hernandez, Spain

Development of a Cortical  
Visual Neuro-Prosthesis for  
the Blind: The Relevance of  
Neuroplasticity

LL. 9:30-10:00AM

## **VISUAL PROSTHETICS/ PSYCHOPHYSICS**

MM. 10:00-10:30AM

### **BREAK**

***Moderator: Gregory Auner PhD***

**Ronald Schuchard PhD**

Atlanta VA Rehab, Georgia

Evaluating Functional Vision  
Outcome Measures in People  
with Visual Prosthetics

NN. 10:30-11:00AM

**Gislin Dagnelie PhD**

Johns Hopkins University, Maryland

Simulation Revisited:  
A Roadmap towards  
Understanding Prosthetic Vision

OO. 11:00AM-11:30AM

**Michaela Velikay-Parel MD**

University Hospital Graz, Austria

Visual Acuity and Function  
Tests for Patients with a Retinal  
Implant

PP. 11:30AM-12:00PM

**Avinoam Safran MD**

Geneva University Hospital, Switzerland

Simulation Studies Determining  
Minimal Information for Reading  
and Visuomotor Coordination,  
in Central and Eccentrically  
Stabilized Vision

QQ. 12:00-1:00PM

## **VISUAL PROSTHETICS/ PSYCHOPHYSICS**

RR. 1:00-1:30PM

### **LUNCH**

***Moderator: Rolf Eckmiller PhD***

**Alan Horsager PhD**

University of Southern California, California

Retinal Prosthetics and Visual  
Perception

SS. 1:30-2:00PM

**Dorothe Poggel PhD**

Boston University School of Medicine,  
Massachusetts

The Eye, the Chip – and the  
Brain: Investigating Functional  
Plasticity of Visual Cortex in  
Candidates for the Retinal  
Prosthesis

TT. 2:00-3:00PM

UU. 3:00-5:00PM

**FINAL DISCUSSION: Joseph Rizzo MD**

**POSTER SESSION – Cash Bar &  
Complimentary Snacks**

All attendees of the poster session will  
receive The Eye and The Chip 2006 poster,  
an EyesOn Design car show poster, and will  
be entered in a drawing for 2 FREE EyesOn  
Design brunch tickets on Sunday, June 18.