

Note: All times are Pacific Standard Time

Day 1: Thursday, January 21, 2021

| | | |
|--------------|----------------------------------|----------------------------------|
| 7:00-7:10 AM | Welcome and Introductions | Mark Humayun, MD, PhD, USC |
| | Opening Remarks | USC President Carol L. Folt, PhD |

Session 1: Photopolymers and Drug Delivery

| | | |
|--------------|---|---------------------------------------|
| 7:10-8:20 AM | Session 1: Live Group Discussions of Pre-Recorded Talks | Moderator, Mark Humayun, MD, PhD, USC |
| | Plenary: The Role of the Physician | Dan Schwartz, MD, UCSF & Caltech |
| | Polymeric Approaches to Drug Delivery in the Eye | Justin Hanes, PhD, Johns Hopkins |
| | Ophthalmic Molecular Therapeutics Delivered via Nanoscale Systems and Devices | Nicos Petasis, PhD, USC |
| | Nanotechnologies for Ocular Drug Delivery | Erin Lavik, MS, ScD, UMBC |
| | Omics for Ophthalmology | Stan Louie, PharmD, USC |

8:20-8:30 AM **Break**

Session 2: Bioelectronic Implants

| | | |
|--------------|---|---------------------------------------|
| 8:30-9:40 AM | Session 2: Live Group Discussions of Pre-Recorded Talks | Moderator, Mark Humayun, MD, PhD, USC |
| | Ginsburg Keynote Lecture and Award: bio-MEMS for Ophthalmology | Yu-Chong Tai, PhD, Caltech |
| | Data Transfer to Implants and Wearables | Manuel Monge, MS, PhD, USC |
| | Retinal Responses to Electrical Stimulation | James Weiland, PhD, UMich |
| | Bioelectronic Color Vision | Lan Yue, PhD, USC |
| | Treating Blindness at the Nanoscale: Nanotechnologies as Treatments for Retinal Blindness | Marco Zarbin, MD, PhD, Rutgers |

9:40-10:40 AM **Poster Session Break Out Rooms**

10:40-11:10 AM **Discussion of Session 1 and Session 2 Highlights**

Day 2: Friday, January 22, 2021

| | | |
|--------------|----------------------------------|---|
| 7:00-7:10 AM | Welcome and Introductions | Mark Humayun, MD, PhD, USC |
| | Opening Remarks | Charles F. Zukoski, PhD, USC Provost and Senior Vice President for Academic Affairs |

Session 3: Wearable Electronics and Data Analysis

| | | |
|--------------|--|---------------------------------------|
| 7:10-8:20 AM | Session 3: Live Group Discussions of Pre-Recorded Talks | Moderator, Mark Humayun, MD, PhD, USC |
| | Plenary: Epigenetic Changes in Retina in Response to Electrical Stimulation | Bodour Salhia, PhD, USC |
| | Electromagnetic Fields at the Retina from Implantable and Wearable Electronics | Gianluca Lazzi, PhD, MBA, USC |
| | Artificial Intelligence Application to Medical Devices | Shrikanth Narayanan, MS, PhD, USC |
| | Therapeutic Ultrasound for the Eye | Qifa Zhou, PhD, USC |
| | Biomolecular and Cellular Ultrasound | Mikhail Shapiro, PhD, Caltech |
| | Wearable Data Acquisition and Analysis for Health Applications | Cyrus Shahabi, MS, PhD, USC |

8:20-8:30 AM **Break**

Session 4: Bioengineered Scaffolds

| | | |
|--------------|---|---|
| 8:30-9:40 AM | Session 4: Live Group Discussions of Pre-Recorded Talks | Moderator, Mark Humayun, MD, PhD, USC |
| | Plenary: Development of Instructive Scaffolds for Implantation of Stem Cells | Dennis O. Clegg, PhD, UCSB |
| | Autologous IPS Cell Therapy for Macular Degeneration: From Bench-to-Bedside | Kapil Bharti, PhD, NIH, NEI |
| | Clinical Implementation of an Ultrathin Stem-Cell Derived RPE Monolayer in Phase 1/2a Clinical Trial for Geographic Atrophy | Amir H. Kashani, MD, PhD, Johns Hopkins |
| | Femtosecond Laser-Assisted in-situ Retinamileiiosis (FLAIR) for Cone Photoreceptor Sheet Transplantation | Raymond Iezzi, Jr., MD, Mayo Clinic |

9:40-10:40 AM **Poster Session Break Out Rooms**

10:40-10:50 AM **Presentation of Ginsburg Award for Lifetime Achievement**

Presentation of Ginsburg Award for Best Student Paper

10:50-11:20 AM **Discussion of Session 3 and Session 4 Highlights**

11:20-11:30 AM **Symposium Evaluation**

11:30 AM **Adjourn**

11:30AM - 12:30PM **Closed Session with funding agency representatives to discuss highlights**