

## USC Ginsburg Institute for Biomedical Therapeutics



## USC GINSBURG INSTITUTE TO HOST FIRST-OF-ITS-KIND SYMPOSIUM ON BIOMEDICAL ENGINEERING IN OPHTHALMOLOGY

### **GIBT BIENNIAL SYMPOSIUM**

*Abiotic-Biotic  
Interfaces for  
Ophthalmology*

***Recipient of National  
Eye Institute Funding***

**Date: Jan. 21-22, 2021  
Virtual Format**

**Time: 7:00-11:30AM**

“Our team looks forward to connecting with vision science colleagues from across the country to collaboratively work toward a brighter future for patients experiencing vision loss,” said Dr. Humayun. “There’s no better time than the present to take innovations from fields like artificial intelligence, engineering and medicine and apply them to the treatment of ophthalmic disease.”

The USC Dr. Allen and Charlotte Ginsburg Institute for Biomedical Therapeutics recently received support from the National Eye Institute to host a first-of-its-kind symposium on the use of implantable and wearable devices in ophthalmology. The symposium, called “Abiotic-Biotic Interfaces for Ophthalmology,” will bring together world experts in clinical care, biomedical research, engineering, industry and pharmaceuticals to brainstorm ways to transform the landscape of vision science.

This conference comes at a time when innovations in machine learning and personalized medicine have opened new doors for the creation of therapeutic devices that blur the boundaries between human and machine. Scientists at the USC Ginsburg Institute believe ophthalmology is ripe for applying such innovations to treat vision loss. Their upcoming conference will encourage world-renowned experts and up-and-coming scientists to connect, collaborate and pursue innovations that fundamentally advance vision science and patient care.



The two-day symposium, scheduled for January 2021, will feature presentations on topics including implantable and wearable bioelectronic devices, nanoscale scaffolds for stem cell implantation, innovative drug delivery tools and cutting-edge gene therapies. Confirmed participants include leading experts from renowned institutions and numerous industrial partners.

A central goal of the symposium is fostering multidisciplinary collaboration spanning the academic, public and private sectors while creating mentorship opportunities for junior investigators entering the field of vision science. Trainees and early-career scientists will have the opportunity to present their work at the symposium, and one will receive the USC Ginsburg Award for Best Student Paper.

The organizing committee is composed of four leading vision scientists affiliated with the USC Ginsburg Institute: **Mark Humayun, MD, PhD**, director of the USC Ginsburg Institute and co-director of the USC Roski Eye Institute; **Yu-Chong Tai, PhD**, Caltech professor and expert in microelectromechanical systems for biology; **Amir Kashani, MD, PhD**, ophthalmologist with Keck Medicine of USC, associate professor of ophthalmology and

clinical scholar at the Keck School of Medicine of USC; and **Stan Louie, PharmD**, professor of clinical pharmacy at the USC School of Pharmacy. All four scientists are actively involved in developing implantable and wearable devices to treat ophthalmologic and degenerative neurological diseases.

The committee will draw upon their decades of experience to lead discussions at the symposium that center on the translational, therapeutic applications of emerging abiotic-biotic technologies. This upcoming conference also builds upon their previous experiences hosting the inaugural **USC Ginsburg Institute Symposium** and speaking as guest lecturers at numerous external conferences throughout their individual careers.

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**MARK HUMAYUN, MD, PHD,  
HONORED ON  
“SOUTHERN CALIFORNIA  
SUPER DOCTORS” LIST FOR  
14TH CONSECUTIVE YEAR**

Renowned ophthalmologist and prolific inventor **Mark S. Humayun, MD, PhD** has been selected as one of the 2021 Southern California Super Doctors® by the independent publication *Super Doctors*.

The honor is meant to recognize “healthcare providers who have attained a high degree of peer recognition and professional achievement,” according to *Super Doctors*. Humayun, who serves as director of the USC Dr. Allen and Charlotte Ginsburg Institute for

**“It is a great honor for me to be recognized amongst such great peers from all specialties of medicine. It encourages me to work even harder to help our patients in need.”**

**~ Mark Humayun, MD, PhD**

Biomedical Therapeutics and co-director of the USC Roski Eye Institute, has received this honor every year since the *Super Doctors* list was created in 2008.

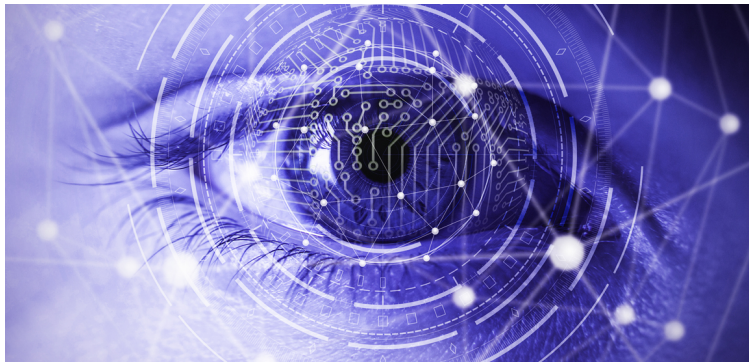
The selection process starts with nominations for each specialty category, in which colleagues can submit the names of physicians they themselves would see if they were in need of medical care. *Super Doctors* staff also nominate physicians based on honors,

achievements and credentials gleaned from professional databases. *Super Doctors* research staff evaluate all candidates, and finalists are reviewed and scored by physician panelists to pare down the final list. The annually published *Super Doctors* list honors the highest-achieving physicians and represents approximately 5% of all doctors in their respective state or region.

“It is a great honor for me to be recognized amongst such great peers from all specialties of medicine,” Humayun said. “It encourages me to work even harder to help our patients in need.”

**The *Super Doctors* list will be published in *Super Doctors Southern California Magazine*, delivered in January with the Los Angeles Times, and will also be available online at**

**[www.superdoctors.com](http://www.superdoctors.com).**



**Mark Humayun, MD, PhD**  
**interview *On Tech & Vision***  
**with *Dr. Cal Roberts***

***On Tech & Vision with Dr. Cal Roberts*** is a Lighthouse Guild Podcast series on how technology can improve the lives of people with vision loss. [Visit the Lighthouse Guild website](#) to hear Mark Humayun, MD, PhD discuss the Argus II retinal implant during an August, 2020 interview.



**Lighthouse  
Guild**

**Save-the-Date**  
**January 21-22, 2021**

**USC Dr. Allen and Charlotte Ginsburg  
Institute for Biomedical Therapeutics**

**Virtual Symposium on**

***Abiotic-Biotic Interfaces for Ophthalmology***