At a January 22 White House ceremony, President Barack Obama will award Mark S. Humayun, MD, PhD, co-director of the USC Eye Institute and director of the USC Institute for Biomedical Therapeutics the prestigious National Medal of Technology and Innovation, the nation’s highest award for technology achievement.

In a press release issued by the White House, President Obama stated, “Science and technology are fundamental to solving some of our nation’s biggest challenges. The knowledge produced by these Americans today will carry our country’s legacy of innovation forward and continue to help countless others around the world. Their work is a testament to American ingenuity.”

Dr. Humayun, who is one of nine recipients of the medal this year, was chosen for his lifelong dedication to bridging medical science and engineering to restore sight. He holds more than 100 issued patents and patent applications, most in the area of bioimplants for ophthalmology. His innovative work is best exemplified by the development of the Argus II, the only FDA approved retinal prosthesis system that allows those with certain blinding diseases to regain some useful vision.

“I am very honored to receive the National Medal of Technology and Innovation,” said Dr. Humayun. “Medical breakthroughs such as the Argus II come after long periods of research and development and I am grateful to have been and continue to be surrounded by teams of very talented individuals.”

The National Medal of Technology and Innovation, presented by U.S. presidents since 1980, is given to individuals, small teams collaborating on innovative systems or divisions of companies, all whom have contributed to the nation’s economic, environmental and social well-being.

Administered for the White House by the U.S. Department of Commerce’s Patent and Trademark Office (USPTO), a distinguished panel of individuals from the private and public sector including current and past heads of the Smithsonian Institution, Intel, the Johnson Space Center, Johns Hopkins University Medical School and Corning Corporation, review numerous nominees and make recommendations to the President. Past award recipients include Steve Jobs, Bill Gates, David Packard, Ray Dolby, Vint Cerf and Industrial Light & Magic (ILM) founded by USC alumni George Lucas, as well as inventors of the microprocessor, the digital camera, electronic microphones, and other devices or systems that have fundamentally changed the worlds of communication, biotechnology, automotive, mobile computing, computer science and chemical engineering.

“Mark Humayun epitomizes the culture and dedication of the experts at the USC Eye Institute to constantly seek new solutions in the mission to prevent blindness,” said Rohit Varma, MD, MPH, director of the USC Eye Institute. “One of the reasons the USC Eye Institute has been ranked in the Top 10 of ophthalmology departments over the last 21 years by U.S. News & World Report, is because of the innovative stars in our constellation like Mark who help
guide and inspire us. As only the third USC recipient in 30 years to receive this prestigious honor we are tremendously proud of Mark.”

Dr. Humayun merges medicine and engineering to focus on developing treatments for the most debilitating and challenging eye diseases. An expert in bioelectronics and implants for the eye, Dr. Humayun is a USC professor with joint appointments in ophthalmology, cell and neurobiology at the Keck School of Medicine of USC, and in biomedical engineering at the USC Viterbi School of Engineering. He holds the inaugural Cornelius J. Pings Chair in Biomedical Sciences. He is also the director of the National Science Foundation and the principal investigator of a California Institute of Regenerative Medicine (CIRM) disease team grant involving a multi-university consortium to develop a stem cell implant for age-related macular degeneration.

About Argus II
The Argus II, also known as the “bionic eye,” received approval from the FDA in the U.S. in 2013 and since then the USC Eye Institute has been one of the centers of excellence for patients receiving this implant. Dr. Humayun has trained ophthalmologic surgeons worldwide in implanting the Argus device that has been in use in Europe since 2011 and was also recently approved for implantation in Australia.

A true miracle solution for those who have the inherited retinal degenerative disease retinitis pigmentosa (RP), the Argus II system uses a camera mounted on special glasses that sends a signal to an electronic receiver with electrodes that are implanted in and around the eye. The electrodes send signals to the retina that stimulate the retina and then these retinal impulses travel through the optic nerve to the brain where they are interpreted as images.

About the USC Eye Institute
The USC Eye Institute, part of the Keck Medicine of USC university-based medical enterprise, has been a leader in scientific research and innovative clinical treatments for 40 years. Among the top three funded academic-based medical centers by the National Eye Institute (NEI) research grants and ranked in the Top 10 ophthalmology programs in U.S. News & World Report’s annual “Best Hospitals” issue for more than 20 years, the USC Eye Institute is headquartered in Los Angeles with clinics in Arcadia, Beverly Hills and Pasadena.

Patients from across the country come to see the USC Eye Institute experts who treat a comprehensive array of eye diseases across the life spectrum from infants to aging seniors. The USC Eye Institute is known for its scientific research and clinical innovation including: creation of the Argus implant (also known as the “bionic eye”) for retinitis pigmentosa (RP) patients; stem cell therapies for those who have age-related macular degeneration; discovery of the gene that is the cause of the most common eye cancer in children; treatment for eye infections for AIDS patients; inventors of the most widely used glaucoma implant in the world; pioneers of a device for long-term intraocular drug delivery; and the first to use telesurgery to train eye doctors in developing countries.

For more information visit:
eye.keckmedicine.org or usceye.org