

## **Beckman Foundation Names King-Wai Yau, Ph.D., of the Johns Hopkins University School of Medicine as 2019 Beckman-Argyros Vision Research Award Winner**

### *Newly Funded Research Supports Understanding of Fundamental Mechanisms of Retinal Photoreception*

IRVINE, Calif. ([PRWEB](#)) July 30, 2019 -- The Arnold and Mabel Beckman Foundation today announced that its [2019 Beckman-Argyros Vision Research Award](#) winner is Dr. King-Wai Yau, Professor of Neuroscience at Johns Hopkins University School of Medicine. Presented annually, the award recognizes an individual who has made and is continuing to make significant, transformative breakthroughs in vision research; particularly through the development of an innovative technology or fundamental scientific breakthrough that has been applied to, aided and/or improved the vision sciences. Yau and Johns Hopkins SOM will receive \$100,000 and \$400,000, respectively, to further advance his research on rods and cones as well as non-rod/non-cone photoreceptors of the eye.

In work spanning several decades, Yau's laboratory has made many fundamental discoveries in vision, impacting both basic science and clinical medicine. In collaboration with Denis Baylor and Trevor Lamb, Yau developed the suction-pipette recording method, which revolutionized the study of retinal rods and cones and remains today the standard method for studying these cells in health and disease. Separate but contemporaneous with Evgeney Fesenko's group, Yau's laboratory solved the intensely-debated and protracted puzzle about the cellular mechanism of rod/cone phototransduction. Based on his quantitative studies of visual pigments and their spontaneous thermal excitation in darkness, Yau provided a rationale as to why we are infrared-blind. Finally, he has contributed much knowledge about the cellular mechanisms of phototransduction in the intrinsically photosensitive retinal ganglion cells (ipRGCs), which are photoreceptors mediating largely non-image vision, and their axonal projections to the brain.

"It's an honor to be able to recognize Dr. Yau for his exceptional work in vision research," explained Dr. Anne Hultgren, Beckman Foundation's Executive Director. "His work is an excellent example of the rigorous basic science that is essential to advancing clinical ophthalmology."

The proposed research at Johns Hopkins University School of Medicine will be to continue Yau's on-going work on rods and cones as well as ipRGCs, and to explore the interactions between these cells and their neighboring environment in the eye.

#### About the Arnold and Mabel Beckman Foundation

Located in Irvine, California, the Arnold and Mabel Beckman Foundation supports U.S. researchers and U.S. nonprofit research institutions in making the next generation of breakthroughs in chemistry and the life sciences. Founded in 1978 by 20th century scientific instrumentation pioneer Dr. Arnold O. Beckman, the Foundation supports institutions and scientists whose creative, high-risk, and interdisciplinary research will lead to innovations and new tools and methods for scientific discovery. For more information, visit <http://www.beckman-foundation.org/>.



**Contact Information**

**Catrina Bryant**

Arnold and Mabel Beckman Foundation

<http://www.beckman-foundation.org>

949-721-2246

**Beckman Foundation PR**

Arnold and Mabel Beckman Foundation

<http://www.beckman-foundation.org>

949-721-2222

**Online Web 2.0 Version**

You can read the online version of this press release [here](#).