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Ferrara Receives Champalimaud Award for Role in Eye Disease Therapy

Research led to drug for wet macular degeneration and diabetic retinopathy

Napoleone Ferrara, MD, Distinguished Professor of Pathology and Distinguished Adjunct Professor of Ophthalmology at the University of California, San Diego School of Medicine and senior deputy director for basic sciences at UC San Diego Moores Cancer Center, was named today as one of seven recipients of the António Champalimaud Vision Award in Lisbon, Portugal.



Napoleone Ferrara, MD, named one of seven recipients of the 2014 António Champalimaud Vision Award.

The 2014 António Champalimaud Vision Award was bestowed for the development of anti-angiogenic

therapy for retinal disease. Anti-angiogenic therapy is used to treat age-related macular degeneration and diabetic retinopathy, which are the leading causes of blindness in high- and middle-income countries. Both are rising in prevalence due to an aging population and increased obesity rates.

Ferrara was recognized for the discovery of vascular endothelial growth factor (VEGF), for exposing the role of this molecule in promoting angiogenesis (the formation of new blood vessels), his co-discovery of the role of VEGF in retinal disease and the development of the monoclonal antibody drug ranibizumab (marketed as Lucentis), which treats wet age-related macular degeneration, diabetic eye disease and other related disorders.

Ferrara shared the award with six researchers from Harvard Medical School: Joan W. Miller, MD, and Evangelos S. Gragoudas, MD, both of Massachusetts Eye and Ear Infirmary and Harvard Medical School; Patricia A. D'Amore, PhD, of the Schepens Eye Research Institute of Mass. Eye

and Ear; Anthony P. Adamis, MD, of Genentech; and George L. King, MD, and Lloyd Paul Aiello, MD, PhD, both of Joslin Diabetes Center.

The work of this year's awardees begins with the identification of VEGF by Ferrara, to the collaborative revelation of its role in retinal-vascular disease, to the experimental evaluation of VEGF inhibition in animal models and its final application with a pharmacologic intervention that significantly improves the vision of patients affected by these often devastating retinal conditions.

The award, presented by the Champalimaud Foundation, is given alternately between contributions to overall vision research (even numbered years) and contributions to the alleviation of visual problems, primarily in developing countries (odd numbered years). The honor comes with a \$1.3 million prize, the largest such award given in vision and ophthalmology research. It will be shared among the seven recipients.

Earlier this year, Ferrara was one of eight recipients of the Canada Gairdner Awards, among the most esteemed honors in medical research, for his work identifying the role of VEGF. In 2013, Ferrara was named one of 11 recipients of the inaugural Breakthrough Prize in Life Sciences. He has also won numerous other awards, including the General Motors Cancer Research Award (2006), the ASCO Science of Oncology Award (2007), the Pezcoller Foundation/AACR International Award (2009), the Lasker-DeBakey Clinical Medical Research Award (2010), the Dr. Paul Janssen Award for Biomedical Research (2011), and The Economist's Innovation Award for bioscience in 2012.

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