

Genentech AMD Research Fellowships

As many as 11 million people in the United States have some form of age-related macular degeneration. This number is expected to double to nearly 22 million by 2050. The impact of age-related macular degeneration on the global aging population is enormous as people are deprived of their economic livelihoods and independence.

The Genentech Age-related Macular Degeneration (AMD) Research Fellowships offers two grants:

- basic research in the understanding of AMD and
- translational AMD research focusing on therapeutics (not yet in clinical trials).

Past Recipients

2011

Stephen H. Tsang, MD, PhD (Basic)

Stem Cells in Personalized, Predictive, and Targeted Medicine for AMD

Balamurali K. Ambati, MD, PhD (Translational)

RGD-Targeted Flt23k-intracellular Nanoparticles for Prevention and Treatment of Spontaneous Choroidal Neovascularization in a Novel Transgenic Murine Model of Age-related Macular Degeneration

2012

Venkata R.M. Chavali, MSc, PhD (Basic)

Association And Functional Characterization Of Long Non-Coding RNAs (lncRNAs) In Age-related Macular Degeneration

Helder A.M.B. Andre, PharmD, PhD (Translational)

Sustained Anti-VEGF Cell Therapy in nAMD

2013

Matthew Campbell, PhD (Basic)

The role of autophagy in NLRP3 inflammasome regulation; Therapeutic target identification

Cristhian J. Idefonso, PhD (Translational)

Gene Therapy Targeting the Inflammasome Signaling in Dry-AMD Mouse Models

2014

Scott Adrian Smemo, PhD (Basic)

Patient-specific cellular models of AMD generated by gene editing

Felicity Jane De Cogan, MChem, PhD (Translational)

Delivery of ranibizumab to the retina via topical eye drop administration.

2015

Sarah Louise Doyle, BA, PhD (Basic)

Does ageing metabolism flick the switch towards a chronic para-inflammatory state through activation of the NLRP3-inflammasome in Age-related Macular Degeneration?

Katie Leigh Pennington, BS, MS, PhD (Translational)

CRISPR/dCas9 to treat age-related macular degeneration

2016

Glenn C. Yiu, MD, PhD (Basic)

Optogenetic Control of Reactive Oxygen Species in a Model of Geographic Atrophy in Age-Related Macular Degeneration

Petr Baranov, MD, PhD (Translational)

The upregulation of pigment-epithelium derived growth factor as a pharmaceutical strategy for age related macular degeneration

2017

Eiko de Jong, MSc, PhD (Basic)

Proteomic profiling of high-density lipoprotein particles in AMD patients

Sonali Nashine, PhD (Translational)

Protecting AMD cybrid cells using mitochondrial-derived peptides and FDA-approved mitochondria stabilizing drugs; Implications for macular degeneration therapeutics

2018

Kevin Schneider, PhD (Basic)

The Role of MicroRNA in the Development and Progression of AMD

Rosario Fernandez-Godino, PhD (Translational)

Targeting complement activation via tick-over: a prophylactic treatment for dry AMD

2019

Susana da Silva, PhD (Basic)

Establishment of a foveated human 3D retinal organoid system to model AMD

Dimitra Skondra, MD, PhD (Translational)

Common antidiabetic drug metformin prevents AMD by reshaping the gut microbiome