Robert B Petersen, Ph.D.

AAAS Fellow (2018): “For distinguished contributions to cell biology in post-translational mechanisms of gene regulation and in particular for elucidation of a novel genetic mechanism underlying phenotypic heterogeneity.”

Consulting

Scientific Consultant- Efoora, Inc. (1/99-8/2000)

Chief Scientific Officer- Prion Developmental Laboratories, Inc. (9/2000-1/2005)

Chief Operating Officer- Prion Developmental Laboratories, Inc. (1/2005- 11/05)

Chief Executive Officer- Prion Developmental Laboratories, Inc. (11/05-8/2008)

Scientific Advisor, Genesis Bioventures, Inc. (4/01-11/02)

Director- Prion Developmental Laboratories, Inc. (1/2003-2009)

Scientific Consultant- Bionosis (2010-2012)

My research activity includes collaboration with Dr. Rossignol.  I participate in student training attending bi-weekly meetings and helping students write manuscripts.  I’m also the Specialty Chief Editor of the Frontiers in Neuroscience Aging section on [Parkinson’s Disease and Aging-related Movement Disorders](http://links.email.frontiersin.org/ls/click?upn=AAaFa03elZRFPXQ6ShiKwLL3KSuM-2F6mAmg7EUR7j5-2BkjLV8sSEBCKcgCc1lILiAWuTEuwvt8xZn-2FZu0hdCzeE1iAyJ-2B-2BWmRVc46UzWKuYGZzR4mgH-2B-2FXj2gnasIjwnMHpfYgaQgJNo-2FYc0VOHHun8nvNQAM2Ih4qnTNsOFeiO-2B-2F4J-2BLTBdbFhwFORdIUaHJUKZkL-2FKRl3PT0QKIiW0pJTQ-3D-3DlBe5_bzhep0PjROO1Sn4vUY-2FPBw8vFZG-2Bmr3Uc0zD7mlzWu9nxKzEZPufo3Ly1m2fcpuVNBpA7ravGL-2BE4Ildcicb4fppaUI3pFcaaL2blzfmgX8ZO3rqQCqGt9RIpBP0Fl-2BcM-2BpWfyVwl9V766EWVTNSbfT2T9L3qP6nmt-2FXhN7CXH5V72vjuCJdhzTCpO5XH8kg-2B5ceSC1iVPHEgzcOzHlmd3RsM6nUplHok0Y9r32Lt-2BYngdIhDuFqkmGBUD-2BZm337yZyrFjXbvc-2F2uCPqVeLiL8pf5nOQrZCMDOSQC0wF5xw-3D).  I have an outside collaboration with Dr. Kun Huang of the School of Pharmacy, Tongji Medical College, Wuhan, Hubei, China.  The research projects are in the Basic/Translational arena and include studies on protein misfolding disorders and acute kidney injury:

[Modelling Parkinson's Disease in C. elegans: Strengths and Limitations.](https://pubmed.ncbi.nlm.nih.gov/36111767/)  Curr Pharm Des. 2022

[Probing the interactions between amyloidogenic proteins and bio-membranes.](https://pubmed.ncbi.nlm.nih.gov/36889133/)  Biophys Chem. 2023

[Tet1 deficiency exacerbates oxidative stress in acute kidney injury by regulating superoxide dismutase.](https://pubmed.ncbi.nlm.nih.gov/37908721/)  Theranostics. 2023

[Loss of renal tubular G9a benefits acute kidney injury by lowering focal lipid accumulation via CES1.](https://pubmed.ncbi.nlm.nih.gov/37042626/) EMBO Rep. 2023

[β-synuclein regulates the phase transitions and amyloid conversion of α-synuclein.](https://pubmed.ncbi.nlm.nih.gov/39384788/)  Nat Commun. 2024