

Energy Restitution as a Therapeutic Strategy for Alzheimer's Disease

June 18

Tuesday, 12:30 pm

Weekly Colloquium

Billings Building
Rosedale Conference Room



Speaker: Eugenia Trushina, Ph.D.

Professor of Neurology
Associate Professor of Pharmacology
Director, Mitochondrial Neurobiology and
Therapeutics Laboratory
Mayo Clinic
Rochester, MN

Host: Gary Gibson, Ph.D.

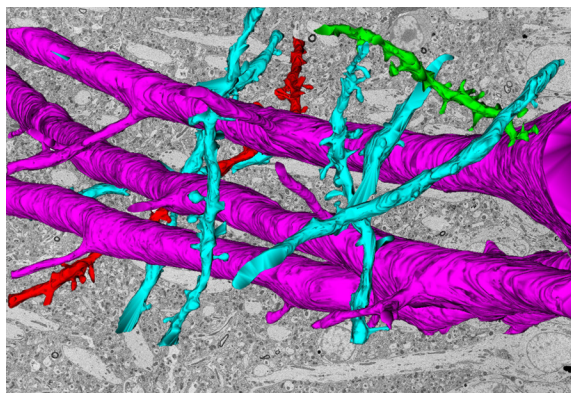
For more information, please contact
Lindsey Echevarria
lechevarria@med.cornell.edu

Burke Neurological Institute

Academic Affiliate of Weill Cornell Medicine
785 Mamaroneck Avenue
White Plains, NY 10605
burke.weill.cornell.edu

Abstract

Dr. Trushina is a Professor in the Department of Neurology and the Department of Molecular Pharmacology and Experimental Therapeutics at the Mayo Clinic Rochester. She received her doctoral degree in organic chemistry from Saratov State University in Russia. Dr. Trushina completed her postdoctoral training at the Mayo Clinic, Rochester studying redox chemistry related to nitric oxide and mechanisms of mitochondrial dynamics and function in Huntington's Disease. Dr. Trushina translational research program is focused on the mechanisms of neurodegenerative diseases, particularly as they intersect with studies on aging and metabolic disorders, and the development of mitochondria-targeted therapeutics. Her group developed neuroprotective treatment for Alzheimer's Disease, which is now in the lead optimization and preclinical characterization stage. Dr. Trushina is a recipient of the NIH NINDS, NIA, NIEHS, BrightFocus, GHR, ADDF, and Mayo Clinic Research Awards.



1. Zhang L., Trushin S., Christensen T. A., Tripathi U., Hong C., Geroux R. E., Howell K. G., Poduslo J. F., and Trushina E. (2018) Differential effect of amyloid beta peptides on mitochondrial axonal trafficking depends on their state of aggregation and binding to the plasma membrane. *Neurobiology of Disease*, <https://doi.org/10.1016/j.nbd.2018.02.003>
2. Zhang L., Trushin S., Christensen TA., Bachmeier BV., Gateno B., Romanes JP., Schroeder A., Yao J., Itoh K., Sesaki H., Poon W., Gyls KH., Parisi JE., Brinton RD., Salisbury JL., and Trushina E. (2016) Altered brain energetics induces mitochondrial fission arrest in Alzheimer's Disease. *Scientific Reports (Nature)*, 6, 18725; doi: 10.1038/srep18725. PMID: 26729583
3. Zhang L., Zhang S., Maezawa I., Trushin S., Minhas P., Pinto M., Jin LW., Prasain K., Nguyen TDT., Yamazaki Y., Kanekiyo T., Bu G., Gateno B., Chang KO., Nath KA., Dzeja P., Pang YP, Hua DH, and Trushina E. (2015) Modulation of mitochondrial complex I activity averts cognitive decline in multiple transgenic mouse models of familial Alzheimer's Disease. *EBioMedicine*. 2(4):294-305. PMID 26086035.



Burke
Neurological
Institute
The science hope demands



Weill Cornell
Medicine