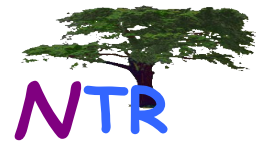


NeuroTherapeutics Research Institute
Interdisciplinary Post-doctoral Training Program
In FXTAS and fragile X research



Post-doctoral training opportunities are now available in a unique interdisciplinary training program in FXTAS and fragile X research. The training program is a core component of a newly funded NIH Interdisciplinary Research Consortium, which led to the creation of the NeuroTherapeutics Research Institute (NTRI; “*en-tree*”). The research/training hub is at UC Davis, with participation of U Washington, U Colorado, Scripps (Florida) and Erasmus MC (Rotterdam).

The principal objective of NTRI research is the development of targeted molecular therapeutics for the late-onset neurodegenerative disorder ***fragile X-associated tremor/ataxia syndrome*** (FXTAS). FXTAS is one of the more common *single-gene* disorders leading to tremor, ataxia, and dementia; the same gene (fragile X mental retardation 1 gene, *FMR1*) is also responsible for the leading form of inherited mental impairment (fragile X syndrome) and is the leading, known single-gene cause of autism. Research within NTRI will also focus on fragile X syndrome and developmental issues in premutation carriers.

One important aspect of FXTAS is that its pathogenic mechanism involves a toxic RNA gain-of-function due to overexpression of the expanded (CGG repeat) *FMR1* mRNA. By contrast, fragile X syndrome is caused by transcriptional silencing of the same gene.

NTRI seeks trainees who are basic neuroscientists with a focus on cognitive, cellular, or molecular systems; and clinical neuroscientists (psychology, psychiatry, pediatrics, neurology). The interdisciplinary training will involve dual-mentorship research bridging two or more of the disciplines in this consortium, which spans molecular genetics and systems neuroscience conducted in animal models, human clinical and cognitive phenotyping, non-invasive neuroimaging and clinical trials, as well as formal seminar training. A key element of this unique training program is that it will support trainees who can bridge different laboratories to work together on the fundamental problem being addressed by this consortium, namely the development of targeted treatment approaches for disorders of the fragile X gene.

Although the training program is limited to postdoctoral fellows with no more than 3 years of post-doctoral experience who are US citizens, exceptional candidates who are not US citizens will also be considered and, if accepted, will be supported by additional funds.

Candidates should send a letter of interest together with their CV's to the director of the NTRI training program, Dr. Cameron S. Carter, Imaging Research Center, University of California at Davis, 4701 X Street Sacramento CA 95817 [cameron.carter@ucdmc.ucdavis.edu]; or to the Director of NTRI, Dr. Paul J Hagerman [c/o ejbecker@ucdavis.edu].

For further information on NTRI, see: www.ucdmc.ucdavis.edu/NTRI