

Plan to attend the Saturday Workshop on MicroRNA (March 19<sup>th</sup> from 9 am-5 pm)

Title: "MicroRNA: From Theory to Practice"

- Basic Biology of miRNAs (Biogenesis and Mechanism of Action)
- Target Discovery (Computational Approaches)
- microRNAs in CNS (Target Discovery and Validation)
  - Nervous System Development
  - Acute Neurological Injury/ Neurodegenerative Disease
  - Neuroprotection
  - Therapeutic Target and Tool (Round Table)

Rolf Renne (Professor of Molecular Genetics and Microbiology, University of Florida) will start off by describing the basic biology of microRNAs (how are they made, why are they made, how do they work?).

Anton Enright (European Bioinformatics Institute) will discuss miRNA target analysis both computational (What is available, where they are available, how do you use them, how do you interpret them?) and experimental and their strengths and limitations.

Nora Perrone-Bizzozero (Professor of Neurosciences at the University of New Mexico) discuss her use of the algorithms for target discovery followed by experimental validation utilizing both in vitro and in vivo methodologies using her unpublished work on addiction as the back drop.

Ronald Hart (Professor of Cell Biology and Neuroscience, Rutgers University) and Jason Dugas (Research Scientist, Department of Neurobiology, Stanford University) will discuss their microRNA work relating to stem cells/neuronal development and oligodendrocyte development/myelin formation, respectively.

Frank Sharp (Professor of Neurology, University of California-Davis) will describe his work on microRNA expression profiling of ischemic stroke, intracerebral hemorrhage, and kainate-induced seizures.

Julie Saugstad (Senior Scientist and Director, Molecular Neurobiology at the RS Dow Neurobiology Laboratories) will describe her work on microRNA in neuroprotection.

Every lecture will have a "methods" component to it, using specific work as illustrative. The workshop will end with a round table discussion on the potential for microRNAs to be therapeutic targets and or/ therapeutic tools.