

Postdoctoral Researcher Position
available in the Laboratory of Dr. Mingyi Xie

Assistant Professor, Department of Biochemistry and Molecular Biology,
Cancer Center, School of Medicine, University of Florida

Function and biogenesis of alternatively-processed microRNAs

Integrator complex-mediated RNA processing and gene regulation

Applicants should submit the following to mingyi.xie@ufl.edu:

- 1) Cover letter stating: laboratory experience in **RNA/protein biochemistry** and **bioinformatics**; your long-term career goals; date of availability to begin postdoc research/technician
- 2) Curriculum vitae (including publications and awards/honors)
- 3) List of at least three references

Dr. Mingyi Xie was trained in the laboratory of Dr. Joan Steitz at Yale University (2010-2016), where he documented two surprising microRNA (miRNA) biogenesis pathways:

- *Herpesvirus saimiri* (HVS)-miRNAs are processed by the host Integrator complex, a 14-subunit complex best known for executing the 3'-end cleavage of cellular small nuclear RNAs (snRNAs) (Cazalla, Xie and Steitz-***Molecular Cell***-2011; Xie et al.,-***Genes & Development***-2015).
- Mammalian m⁷G-capped precursor miRNAs are generated from RNA polymerase (Pol) II transcription initiation sites. Whereas the nuclear-cytoplasmic export of capped pre-miRNAs is mediated by Exportin-1 (Xie et al.,-***Cell***-2013; Xie and Steitz-***RNA Biology***-2014).

The Xie lab's immediate research goal is to further delineate the unique modes of miRNA production, including Integrator-mediated RNA metabolism, and understand the functions of these special miRNAs in herpesviruses and their hosts. Such research will allow the design of therapies for related oncogenic herpesviruses and cancers.

University of Florida (UF) is a vibrant intellectual community with many cross-disciplinary interactions. UF is ranked as top-50 world university and top-15 public university in the United States by USNEWS. Gainesville is a delightful and family-friendly city that is 1.5 hours away from major cities like Orlando, Jacksonville and Tampa Bay.

Visit <http://biochem.med.ufl.edu/research/faculty/primary-faculty/mingyi-xi-ph-d/> and xie.biochem.med.ufl.edu for more information

