

## Three postdoctoral positions in Plant RNA biology in Texas A&M University

Three postdoctoral positions are available in the laboratory of Dr. Xiuren Zhang in Department of Biochemistry and Biophysics, Texas A&M University (<http://plantrnasilencing.tamu.edu>). The Zhang lab utilizes a combination of molecular, biochemical, genetic, and high-throughout sequencing approaches to understand the functions and mechanisms of RNA silencing including epigenetics and posttranscriptional gene silencing in plants, with recent expansion into RNA biology exemplified by functions and mechanisms of RNA secondary structures in different organisms. In particular, the Zhang lab has set up close collaboration with the cryo-EM, single-molecule and computational and medical experts within and/or outside the school to lift our research to a higher level. The successful candidates will actively participate in, but not be limited to, the following projects:

- 1) Comprehensively study several novel genes and components in RNA silencing identified through our genetic and biochemical screening systems (**Zhang, et al., 2017. eLife; Zhang, et al., 2017. PNAS; Ma, et al., 2018. Dev Cell; Li, et al., 2020. Nature Plants. Sun, et al., 2020, submitted**).
- 2) Emerging roles of RNA secondary structures in plant development, stress responses, and human diseases (**Wang, et al., 2018. Nature; Wang, et al., 2019. Methods**).
- 3) Host-virus interaction (**Castillo, et al., 2015, eLife; Hu, et al., 2019, PLoS Pathogen**). The Zhang lab has identified new additional host targets of viral suppressors; and is ready to explore the functional relevance of these *bona fide* targets in the host-viral interaction.

Applicants should possess a Ph.D. degree with solid training in biochemistry, molecular biology, genetics, and/or computational analysis with at least one first-authored publication(s) in a prestigious journal from their PhD work. Candidates should be highly motivated and ambitious with excellent oral and written English. One position would favor the candidates with extensive biochemical and molecular expertise (i.e. molecular cloning, functional analysis, protein purification, enzymatic kinetics, and possibly structural analysis). Another candidate with knowledge and experience with big data analysis is a plus. The last one favors the candidate with experience in host/microbe interaction. However, candidates are strongly encouraged to develop their own identities in research directions using our platform.

Applications are accepted immediately until the positions are filled. Salary will be very competitive. The initial appointments are for two years and reappointment will depend on satisfactory job performance and mutual agreement. Interested applicants should send a CV, brief summary of research experience, and contact information for at least two references by email to [xiuren.zhang@tamu.edu](mailto:xiuren.zhang@tamu.edu).