

Two post-doctoral positions in the Menet lab Mechanisms underlying circadian gene expression in the mouse

The Menet lab is seeking two postdoctoral associates to work on two newly funded projects that investigate the mechanisms underlying rhythmic gene expression in the mouse.

One project extends on our findings showing that the 24-hour rhythm of food intake drives a large fraction of the mouse liver cycling transcriptome independently of the liver circadian clock (*Greenwell et al., Cell Reports, 2019*), and seeks to characterize the role of mTOR and other signaling pathways into how rhythmic systemic signals drive rhythmic transcription and contribute to the rhythmic regulation of various cellular, physiological, and behavioral processes in the mouse.

The second project stems from our molecular characterization of how the core circadian transcription factor CLOCK:BMAL1 drives rhythmic transcription (*Trott and Menet, PLoS Genetics, 2018; Beytebierre et al., Genes & Development, 2019*), and seeks to determine how CLOCK:BMAL1 regulates the chromatin environment, nucleosome positioning, and enhancer activity over the 24-hour day.

Both projects utilize contemporary techniques and approaches, including various state-of-the-art and in-house-designed high-throughput sequencing technologies. More details about our projects can be found on our website <https://www.menetlab.com>.

Interested candidates should have a Doctoral degree (PhD, MD, MD/PhD or equivalent) and background in molecular and cellular biology. While experience in bioinformatics is not required, the successful candidates will be expected to learn bioinformatics and coding in R or other languages.

Application Instructions: Interested candidates should submit the following documents by email to menet@bio.tamu.edu:

- (1) a cover letter outlining your research interests and career goals.
- (2) a CV that includes research experience, technical and soft skills, and a list of publications.
- (3) the contact information of three professional references. Reference letters are not required at this stage, but will be during the final selection process.

Review of applications will begin immediately and will continue until the two positions are filled.

About the lab and Texas A&M University: Our lab offers a dynamic, collegial and multicultural environment that fosters interactions, scientific discussions, and collaborations. We are affiliated with the Department of Biology (<https://bio.tamu.edu>) and the Program of Genetics (<https://genetics.tamu.edu>). We are also part of the Center for Biological Clocks Research (<https://clocks.tamu.edu>), which brings together ten labs working on biological rhythms (Bell-Pedersen, Earnest, Hardin, Jones, Keene, Li, Menet, Merlin, Sato, and Zoran). Texas A&M is a Tier 1 research institution that ranks 14th in the US for research expenditure with more than \$1.131 billion in 2020. Texas A&M hosts many state-of-the-art research facilities, including a genomics core, a High-Performance Research Computing core, a rodent phenotyping core, and metabolomics and mass spectrometry cores. Bryan-College Station, home of Texas A&M, is a vibrant, dynamic, and rapidly growing community that offers cultural diversity, entertainment, job opportunities, and overall quality of life. Located in the heart of the Houston-Dallas-Austin triangle, the region offers the modern amenities of a big city with a warm, small-town charm, and low cost of living, making it an ideal place to live. Texas A&M University is committed to enriching the learning and working environment for all visitors, students, faculty, and staff by promoting a culture that embraces inclusion, diversity, equity, and accountability. Diverse perspectives, talents, and identities are vital to accomplishing our mission and living our core values.

