

Postdoctoral Position - Epigenetic Alterations in the Pathology of Neurodegeneration

The Desplats Lab has a postdoctoral position open for immediate starting. The lab is interested in understanding how altered epigenetic mechanisms may contribute to adult neurodegenerative disorders, and we have a long-standing trajectory on unraveling disease mechanisms associated with alpha-synuclein misfolding and accumulation (*PNAS* 2009, 106(31): 13010-5; *JBC* 2012 287(38): 31691-702), including pioneering epigenetic analysis in Parkinson's and Alzheimer's diseases (*Epigenetics* 2013, 8(10): 1030; *Alzheimers Dement.* 2017 13(6):689-700; *Epigenetics* 2019, 14(4):365-382; *Alzheimers Dement* 2021, 13(1):e12156).

The study is based on modulation of DNA methylation in the context of neuroinflammation in Alzheimer's disease, applying cellular and mouse models, CRISPR and Cre/flox tools, in addition to transcription and epigenetic analysis. Another aspect of the study is exploring epigenetic signals as biomarkers for diagnosis and disease progression, a highly-innovative and fast-paced project.

We are looking for a self-motivated individual with strong creative and critical thinking; detail-oriented and goal-driven researcher who is an exceptional team player.

Qualifications

- Recent Ph.D. in neurosciences, molecular or cell biology.
- Hands-on experience on cutting-edge technology for transcriptional and epigenetic analysis, like ChIP-seq; RNA-seq; ATAC-seq and similar techniques.
- Advanced skills in tissue culture, including gene modulation and CRISPR.
- Candidates with a proven record of proficient data analysis using complex bioinformatic pipelines will be prioritized.
- Expertise in mouse models of neurodegeneration, including stereotactic injections, brain sectioning and immunostaining.
- Excellent written communication skills and team-work.

If you are interested in joining a growing and vibrant lab with a passion for translational science and to enjoy the highly collaborative neuroscience community of San Diego, please contact the PI at pdesplat@uscd.edu including c.v. and a brief description of research interests.