Postdoc Position
Vanderbilt University School of Medicine

Job Title	Postdoc Position
Department	Pharmacology and Biochemistry
	http://blindlab.org
Institution	Vanderbilt University School of Medicine
	Nashville, Tennessee
Date Posted	May 8, 2020
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Biology - Computational
	Biology - Biochemistry
Job Website	https://gradschool.vanderbilt.edu/postdoctoral/opportunity-detail.php?id=432
Apply By Email	ray.blind@vanderbilt.edu

Job Description

Greetings! My lab has an open postdoc position to study how 2nd messenger signaling molecules generated in chromatin alter histone acetylation and gene expression.

We recently discovered a new gene regulatory mechanism in human glioblastoma cell lines. This new mechanism revolves around a kinase our lab studies, which is well known to generate inositide 2nd messenger signaling molecules (both membrane phosphoinositide lipids and water-soluble inositol phosphates). We discovered this kinase is recruited to thousands of transcriptional start sites, regulating gene expression in a kinase-dependent manner by altering histone acetylation.

Your project will be to follow up on this initial discovery by perturbing the established system in various ways, determining how those perturbations alter various measures of gene expression output. A

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unique tool available to you is a new chemical-genetic inhibitor of the kinase we developed, to ask how rapidly inhibiting kinase activity alters the kinetics of gene expression and histone acetylation in human cell lines. These kinetic analyses will establish which chromatin events the kinase mediates first, establishing causality. All major tools to address the questions have been developed by strong preliminary studies in our lab, which we are currently writing up for the first big paper from my lab! Yay!

The ideal candidate will need to have an interest in helping others in the lab and have skills in mammalian cellular biochemistry, gene expression analysis, epigenetics/genomics and/or HDAC biology. Experience with or eagerness to learn chromatin immunoprecipitation (ChIP), transcriptome (RNA-seq), global run-on (GRO-seq), Hi-C, RT-qPCR, qPCR and other gene expression analyses is ideal.

If you're doubting your fit, I encourage you to apply. I have many other projects in structural biology, genomics and drug design/screening you might be a great fit for!

Thank you!

Ray Blind

http://blindlab.org

EEO/AA Policy

Vanderbilt University is an equal opportunity, affirmative action employer. Women, minorities, people with disabilities and protected veterans are encouraged to apply.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact Ray Blind
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