**Postdoctoral Scholar for the Study of Gene Regulatory Networks Controlling Cardiac Rhythm, Function, and Disease: Chicago, IL, United States**

What are the genomic principals of the gene regulatory networks that control cardiac

rhythm and function in the adult heart? How do perturbation of these networks cause

arrhythmias or heart failure? Can we define pathologic networks specific to disease

and intervene to improve cardiac rhythm or heart function?

Applications are invited for postdoctoral positions for research and training in the

Moskowitz laboratory at The University of Chicago to investigate these questions

([http://moskowitzlab.uchicago.edu/index.html](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=ZJFss-1O5xsnZtGyEx7ZKsZ9RwAEr_Pqvu-KmdXv_CfF0yGla2TXCA..&URL=http%3a%2f%2fmoskowitzlab.uchicago.edu%2findex.html)). We seek a motivated and well-trained

individual to join a NIH funded investigation of the gene regulatory networks controlling

heart rhythm and arrhythmias ([https://elifesciences.org/articles/31683](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=q2wsVVgrhOhnOZw_4bPWi-iEuWpf73xuJA1nw5BrpvnF0yGla2TXCA..&URL=https%3a%2f%2furldefense.proofpoint.com%2fv2%2furl%3fu%3dhttps-3A__elifesciences.org_articles_31683%26d%3dDwMFaQ%26c%3dNd1gv_ZWYNIRyZYZmXb18oVfc3lTqv2smA_esABG70U%26r%3d8VjFb-wExzmJJ8UM5HLb1cf-JKe6-ixM4ijbt7Mxwu8%26m%3d1NqzYJIw0h4bwPNEuLBIw0OOGOUX8rm4uuBPTgzsRUA%26s%3dAwkHra1BAktEHHTboUhgj3BTnKhtF7457W0iIbYRdgk%26e%3d) and

[https://stm.sciencemag.org/content/8/354/354ra115](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=pQ55tYzjqfA8cG6uhKOJ9VrtfoxR6k00WGmFud1NMSXF0yGla2TXCA..&URL=https%3a%2f%2furldefense.proofpoint.com%2fv2%2furl%3fu%3dhttps-3A__stm.sciencemag.org_content_8_354_354ra115%26d%3dDwMFaQ%26c%3dNd1gv_ZWYNIRyZYZmXb18oVfc3lTqv2smA_esABG70U%26r%3d8VjFb-wExzmJJ8UM5HLb1cf-JKe6-ixM4ijbt7Mxwu8%26m%3d1NqzYJIw0h4bwPNEuLBIw0OOGOUX8rm4uuBPTgzsRUA%26s%3dGETYJ-h5N1ac4DkN_fDdRtXkzwRDlRKBxO6W4lVDbjI%26e%3d)). We have pioneered a novel

approach for identification of functional enhancers and associated long non-coding

RNAs (lncRNAs). We will investigate the gene regulatory networks controlling cardiac

rhythm and function, and define the molecular mechanisms underlying cardiac

arrhythmias and heart failure that result from network dysfunction. These novel

approaches are applicable to human genetics, transcriptional regulation, and RNA

biology, and will impact cardiovascular genetics and human molecular

genetics more broadly. The laboratory integrates genomics, bioinformatics, molecular biology, mouse genetics, human genetics, and embryonic stem cell differentiations to investigate basic principles of gene regulation in the context of the adult heart.

Our laboratory is affiliated with the Departments of Pediatrics, Pathology, and Human

Genetics, the Institute for Genomics and Systems Biology ([http://www.igsb.org](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=9BQ3Ls583AWdh0qeEMAU2UhQIYSaMJ1MUkli6VDnhFrF0yGla2TXCA..&URL=https%3a%2f%2furldefense.proofpoint.com%2fv2%2furl%3fu%3dhttp-3A__www.igsb.org%26d%3dDwMFaQ%26c%3dNd1gv_ZWYNIRyZYZmXb18oVfc3lTqv2smA_esABG70U%26r%3d8VjFb-wExzmJJ8UM5HLb1cf-JKe6-ixM4ijbt7Mxwu8%26m%3d1NqzYJIw0h4bwPNEuLBIw0OOGOUX8rm4uuBPTgzsRUA%26s%3docp1r4GqOryd-0xokT4eMwjGnU5wranT-rqZNeStbMk%26e%3d)), and

graduate programs in both Development, Regeneration and Stem Cell Biology

([https://drsb.uchicago.edu](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=XwdBRXFimY3e4rhLZSrwlEV2tqlr-L3zyiXBLzUj947F0yGla2TXCA..&URL=https%3a%2f%2fdrsb.uchicago.edu)) and Genetics, Genomics and Systems Biology

([https://ggsb.uchicago.edu](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=sHikLMINCu6xQsMhp_hJJtrMk7xa-bq4b3uJ-lzrLq_F0yGla2TXCA..&URL=https%3a%2f%2fggsb.uchicago.edu)). We are located in the Knapp Center at the University of

Chicago.

Highly motivated candidates with a recent PhD in developmental biology, molecular

biology, genetics, pathology, cardiology or related fields and with at least one first author paper in an English language journal are encouraged to apply. Experience with

genomics, molecular biology, mouse genetics, and/or bioinformatics is sought.

Molecular biology skills are essential. Please send a letter describing research

experience/interest, CV, and contact information for three references electronically to:

[cpaez@peds.bsd.uchicago.edu](https://mail.uchospitals.edu/owa/14.3.361.1/scripts/premium/redir.aspx?C=aQy8XbABsX8lURprqiOgfV2qx0l7zw6Al1EvNJLc3M_F0yGla2TXCA..&URL=mailto%3acpaez%40peds.bsd.uchicago.edu).

Please address correspondence to:

Ivan Moskowitz, M.D., Ph.D.

Professor and Vice Chair for Research

Departments of Pediatrics and Pathology

The University of Chicago

900 East 57th Street, KCBD Room 5102

Chicago, Illinois 60637

Key words: Genetics, Genomics, Heart, Cardiac, Cardiac Rhythm, Arrhythmia, Atrial Fibrillation, Cardiac Function, Heart Failure, electrophysiology, RNA, non-coding RNA, long non-coding RNA, lncRNA, cardiology, molecular mechanism, gene regulatory network

The University of Chicago is an Affirmative Action/Equal Opportunity Employer.