

Postdoctoral Scholar for the Study of Differentiation Control in Development and Disease: Chicago, IL, United States

How do progenitor cells know when and where to differentiate? Are there common molecular mechanisms that control differentiation in diverse lineages? How does dysfunction of these molecular mechanisms contribute to diseases, including dysmorphologies, cancer, and adult organ degeneration? Can modulation of these pathways improve organ regeneration?

Applications are invited for postdoctoral positions for research and training in the Moskowitz laboratory (<http://moskowitzlab.uchicago.edu/index.html>) at The University of Chicago on the molecular mechanisms controlling differentiation timing. The successful candidate will join our NIH funded investigation of the genomic and molecular analysis of differentiation timing in diverse lineages (e.g. bioRxiv 736322; doi: <https://doi.org/10.1101/736322>). We are investigating a generalizable molecular mechanism underlying differentiation timing control, with implications for organ development, adult stem cell maintenance, organ regeneration, and cancer biology.

The laboratory integrates genomics, bioinformatics, molecular biology, mouse genetics, human genetics, and embryonic stem cell differentiations to investigate basic principles of developmental biology. The laboratory is affiliated with the Departments of Pediatrics, Pathology, and Human Genetics and the Institute for Genomics and Systems Biology (<http://www.igsb.org>) at the University of Chicago. We are affiliated with graduate programs in Development, Regeneration and Stem Cell Biology (<https://drsb.uchicago.edu>) and Genetics, Genomics and Systems Biology (<https://ggsb.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 field 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.

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: Differentiation, Genetics, Genomics, gene regulatory network, Heart, Development, Developmental Biology, regeneration, degeneration, Congenital Heart Disease, Cardiac, morphogenesis, cardiology, organogenesis, molecular mechanism

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