

## **Stem Cell and Cancer Metabolism**

Postdoctoral positions are available in the laboratory of [Michalis Agathocleous](#), at Children's Research Institute, UT Southwestern Medical Center. [Our laboratory](#) studies the role of metabolism in stem cells and cancer cells (Nature 549:476, Nature Cell Biology 14:859, Development 141:697). We recently developed techniques to measure metabolites in rare cell populations, including hematopoietic stem cells (Nature 549:476). These techniques make it possible to investigate the roles of metabolites in stem cell function and cancer initiation. We have uncovered several cell-type specific metabolic pathways not previously implicated in stem cell biology. These findings provide a rich set of hypotheses for unknown roles of metabolites in different cell types.

Questions we are pursuing include a) investigating the role of ascorbate (vitamin C) in hematopoiesis and leukemia, b) comparing the metabolism of cancer cells to the metabolism of the normal stem and progenitor cells that give rise to cancers, and c) discovering new roles for metabolites in stem cells. Our research uses methods from stem cell biology, mouse genetics and metabolomics.

We are part of a [Research Institute](#) with a track record of impactful discoveries, collaborative research and training postdoctoral fellows who go on to independent faculty positions. We have access to several shared facilities including metabolomics, next-gen sequencing, imaging, transgenic mouse core, and flow cytometry.

Candidates must hold a Ph.D. and/or M.D. degree and have a record of scientific productivity. Experience in molecular biology or biochemistry or stem cell biology or cancer biology is desirable.

Information on our postdoctoral training program and benefits can be found in our [Postdoc Handbook](#) or at <http://www.utsouthwestern.edu/postdocs>. Interested individuals should send a CV, a description of past research and of future research interests, and a list of three references to:

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