

# Genetics and Genomics (G2) Seminar Series



**INSTITUTE FOR GENOME  
SCIENCES AND SOCIETY**  
TEXAS A&M UNIVERSITY

The Interdisciplinary Faculty of Genetics  
Genetics Graduate Student Association

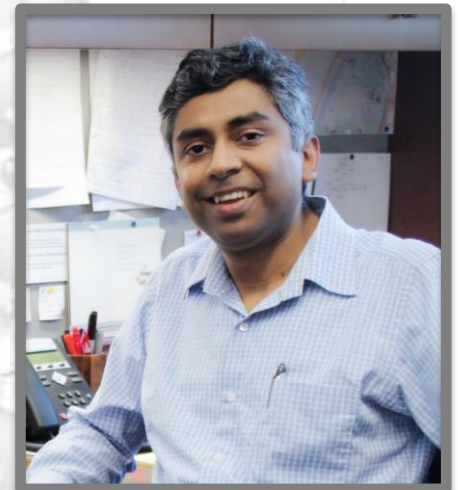


## Discovering New Proteins and Pathways Driving Mitochondrial Energy Metabolism

**Dr. Vishal M. Gohil**

**Department of Biochemistry and Biophysics,  
Texas A&M University**

Research in the Gohil lab focuses on uncovering the role of evolutionarily conserved proteins and phospholipids in biogenesis of the mitochondrial respiratory chain (MRC), the main site of cellular respiration and energy production. The lab uses an integrative approach based on clues from evolutionary history, subcellular proteomics, and human genetics to discover novel proteins required for MRC biogenesis. With this approach, the Gohil lab discovered a family of proteins required for copper delivery to one of the MRC complexes and determined the specific phospholipid requirements for MRC function and formation. The lab utilizes multiple model systems, including yeast, zebrafish, and human patient cell lines, to determine the role of these conserved proteins and phospholipids in mitochondrial bioenergetics, organismal development, and human disease pathogenesis, respectively. The ultimate goal of the lab is to develop better diagnostic and therapeutic options for human mitochondrial disorders.



**Monday, March 26, 2018**

4:00 p.m.

**Auditorium/Room 108**

**BioBio Building**

Refreshments at 3:30 p.m. in the lobby.

Host: Dr. David Threadgill  
[dwthreadgill@tamu.edu](mailto:dwthreadgill@tamu.edu)

—Genetics

Texas A&M Institute for Genome  
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