PCE_3 Seminar Series

Thurs, June 24th

1 p.m. EST/10 a.m. PST

More information & registration:
prebioticchem.info/seminar-series/index.html

Tyler Roche

Graduate Student

Georgia Institute of Technology, Hud Lab

"Ketoses: The Key to Prebiotic Nucleoside Formation?"

Bryce Clifton

Graduate Student

Georgia Institute of Technology, Hud & Grover Labs

"Achieving multiple rounds of nucleic acid replication in a prebiotic solvent: A solution to the product inhibition problem"

Topical introduction by Nicholas Hud, Regents Professor, Georgia Institute of Technology

Tyler Roche

Tyler Roche is a fourth-year Georgia Tech Chemistry and Biochemistry Ph.D. candidate and Astrobiology Fellow. His current research focuses on the origins of life, specifically the chemical reactions leading to the formation of proto-nucleic acids and other prebiotic monomers. Using analytical techniques such as HPLC-MS and NMR spectroscopy, Tyler aims to understand the complex reactions of prebiotic nucleophiles and electrophiles. His projects include the prebiotic roles of ketose sugars in the origins of aldose nucleosides, as well as the chemical evolution and formation of proto-genetic polymers that could have preceded RNA. After obtaining his degree, Tyler hopes to teach Astrobiology as an interdisciplinary and exciting subject to students of science.

Bryce Clifton

Bryce E. Clifton graduated with a B.S. in Biochemistry at California State University, Northridge. He is a PhD candidate in the School of Chemistry and Biochemistry at the Georgia Institute of Technology under advisors Prof. Nicholas V. Hud and Prof. Martha A. Grover. Bryce is interested in the origin of nucleic acids, and researches the "strand inhibition problem" of replication by studying nucleic acid folding in alternative solvents.

Nicholas Hud

Nicholas Hud is Regents' Professor of Chemistry and Biochemistry at Georgia Tech, and was Director of the NSF-NASA Center for Chemical Evolution from 2007-2020. Prof. Hud has studied the physical properties of DNA and RNA since his time as a graduate student. For almost twenty years, Prof. Hud's research has focused on questions related to the origin of life, and particularly the origin of RNA and polypeptides. Prof. Hud received his B.S. degree from Loyola Marymount University and his Ph.D. from the University of California, Davis. He was an NIH postdoctoral fellow in the Molecular Biology Institute at UCLA.