Systems Medicine Student Research Symposium
2023 April 19 @ 16:30 • Pulmonary Conference Room (M-449)

16:30  Opening remarks
Reinhard Laubenbacher, Director, Laboratory for Systems Medicine

16:40  A Ternary Network Simulating Low Shear Stress and Hypoxic Cell Signaling Pathways in Pulmonary Endothelial Cells
Sharanya Chatterjee, Freedom High School
Isabella Delbakhsh, Lake Highlands High School
Mentors: Henrique de Assis Lopes Ribeiro and Melody Walker

16:50  Localized Prediction to Interpolate between Case-Based Reasoning and Machine Learning
Xinyi Zhang, College of Liberal Arts and Sciences
Collaborator: Tara Hashemian
Mentor: Jason Cory Brunson

17:00  A Boolean Gene Regulatory Network in Airway Epithelial Cells Infected with SARS-Coronavirus: Construction and Validation
Achyudhan Kutuva, Department of Microbiology & Department of Statistics
Mentor: Henrique de Assis Lopes Ribeiro

17:10  The Utility of the Functional Route Modulus for Boolean Network Analysis
Igor Sokolov, Department of Mathematics
Collaborator: Luis Sordo Vieira
Mentor: Jason Cory Brunson

17:20  Boolean Networks and Dynamic Modularity
Hemangi Patel, Orlando Science School
Samyukta Kandarpa, Orlando Science School
Mentor: Matthew Wheeler

17:30  Modeling Bleomycin Induced Pulmonary Fibrosis
Sofia John, Department of Statistics
Mentors: Luis Sordo Vieira and Matthew Wheeler

17:40  Sarcoïdosis Modeling Project: Striving for Solutions to Sarcoïdosis
Chhavi Pokharna, Orlando Science High School
Bhavya Kambara, Land O’ Lakes High School
Collaborator: Divya Patel
Mentor: Helen Moore

17:50  Racial Ethnic Disparities in Post–Lung Transplant Outcomes
Abhinav Penmetcha, Department of Biology
Omolola Suleiman, Department of Biology
Collaborator: Divya Patel
Mentor: Jason Cory Brunson

18:00  Closing remarks
Helen Moore, Associate Professor, Laboratory for Systems Medicine

18:10  Open discussion and Reception