About the DERI Program

The Dean's Early Research Initiative brings high school students to our labs and lets them dig into real-world engineering research through one-year research fellowships. With guidance from graduate student mentors, DERI fellows work on a research project for a total of 60 hours during the summer then continue their fellowship into the school year.

2019 DERI Ceremony

3:00 p.m. Guests arrive
https://vcu.zoom.us/j/97821771389?pwd=UVNDT3QvMGIxNHZJSUc1MkN6S045QT09
Password: 2dap37=kzT

3:05 p.m. Opening Remarks
Dr. Barbara D. Boyan, Dean
College of Engineering

3:15 p.m. Certificates awarded to DERI Fellows
Dr. Gregory Triplett, Professor and Senior Associate Dean for Academic Affairs
Electrical and Computer Engineering
Director, Commonwealth Graduate Engineering Program
College of Engineering

3:30 p.m. Presentation by DERI Fellow
Manaswini Tadigadapa
Mentors: Sarah Saunders and Dr. Joao Soares
Project title: In Vitro Growth and Development of Engineered Tissue Vascular Grafts

Ramya Aluri
Mentors: Ivan Carmona and Dr. Ravi Hadimani
Project title: Study of Focallity Factors in Coils for Transcranial Magnetic Stimulation on Small Animals

3:35 p.m. Introduction of new DERI Fellows

3:50 p.m. DERI Fellows will be available for break-out room sessions

DERI Fellows completing the program

Ramya Aluri, Study of Focallity Factors in Coils for Transcranial Magnetic Stimulation on Small Animals
Mentors: Ivan Carmona and Dr. Ravi Hadimani

Mark Carnes, EEG Decoding of Motor Imagery for BCI Applications
Mentors: Thibault Roumengous and Dr. Carrie Peterson

Bethany Costello, Materials for Nuclear Applications: Energy and Radiation Shielding
Mentors: Rajnikant Umretiya and Dr. Jessika Rojas Marin

Adeline Cullen, Nanomaterial Toxicity, Nanomedicine, Nanoinformatics
Mentors: Shuyu Tian and Dr. Nastassja Lewinski

Dominic Dao, Blockchain Analytics: Security and Scalability
Mentors: Phuc Thai and Dr. Thang Dinh

John Follis, Fabrication of Luminescent MOFs (Metal-Organic Frameworks) Membrane for H2S Sensing Application
Mentors: Zan Zhu and Dr. Wei-Ning Wang

Amisha Gandhi, Improving Neurorehabilitation by Integrating Virtual Reality Embodiment with Neuroimaging and Neuromodulation
Mentors: Christopher Lynch and Dr. Carrie Peterson

Amanda He, Exploring the Effect of Substrate Viscosity on Cellular Traction Force Generation
Mentors: Thomas Petet and Dr. Chris Lemmon

Mary Caroline Heinen, Materials for Nuclear Applications: Energy and Radiation Shielding
Mentors: Rajnikant Umretiya and Dr. Jessika Rojas Marin

Rebecca Hendricks, Effect of Hydrogel Stiffness on Neutrophil Activation
Mentors: Jefferson Overlin and Dr. Rene Olivares-Navarrete

Jordan Jennings, Multifunctional Magnetic Materials Systems for Diverse Applications in the Power and Energy Sector
Mentors: Dustin Clifford and Dr. Radhika Barua

Jayla Johnson, Regulation of MSC activity by macrophage-derived exosomes
Mentors: Jefferson Overlin and Dr. Rene Olivares-Navarrete

Marina Kapitanov, Investigating Cellular Response on Additively Manufactured Titanium Alloy Implants
Mentors: Dr. Joshua Cohen

Justin Phillips, Social Entrepreneurship
Mentors: Dr. Doug Miller

Norris Pride, Optical Metamaterials for Controlling the Flow of Light
Mentors: Dr. Nathaniel Kinsey

Yusef Qazi, Analyzing Rotational Dynamics Utilizing an Inertial Measurement Unit and Implementing Statistical Algorithms to Provide RealTime Data Output
Mentors: Dr. Tamer Nadeem

Shivram Ramkumar, An Analysis of Twitter Users' Political Views using Cross-Account Data Mining
Mentors: Dr. Carol Fung

Thomas "Finn" Rowley, Image-Based Computational Modeling in Cardiovascular Engineering
Mentors: Johane Bracamonte and Dr. Joao Soares

Idriss Shively, API Crystallization Via Slug-Flow
Mentors: Mingyqo Mou and Dr. Mo Jiang

Alexander Sosnkowski, An Analysis of Twitter Users' Political Views using Cross-Account Data Mining
Mentors: Dr. Carol Fung

Manaswani Tadigadapa, In Vitro Growth and Development of Engineered Tissue Vascular Grafts
Mentors: Sarah Saunders and Dr. Joao Soares

Gayatri Tyagi, Multi-Phase Droplet Interactions with Fibrous Surfaces
Mentors: Henry Holweger and Dr. Hooman Tafreshi

2020-21 DERI Fellows

Ebunoluwa Akadiri
Mentor: Cydney Dennis and Dr. Barbara Boyan

Joshua Alexander
Mentor:Johane Bracamonte and Dr. Joao Soares

Jadon Bjurman-Birr
Mentor: Douglas Krug and Dr. David Shepherd

Alexander Demchenko
Mentor: Dr. Carol Fung

Stephen Durham
Mentor: Dr. Nathaniel Kinsey

Samuel Ferri
Mentor: Milos Manic

Chirstopher Juhasz
Mentor: Dr. Lane Carasik

Helen Hall
Mentor:Jianping Chen and Dr. Wei-Ning Wang

Boden Kahn
Mentor: Dr. David Shepherd

Bradley King
Mentor: Dr. Irfan Ahmed

Preetham Madesh
Mentor: Dr. Carol Fung

Vineet Marri
Mentor: Dr. Michael Peters

Natalie Martin
Mentor: Dr. Lane Carasik

Chirayu Nimonkar
Mentor: Dr. Ravi Hadimani

Dennis Plotnikov
Mentor: Dr. Bridget McInnes

Caroline Rucker
Mentor: Dr. Priscilla Hwang

Eleanor Sabalewski
Mentor: Jingyao Deng and Dr. Joshua Cohen

Alex Scott
Mentor: Noor Al-Mulla and Dr. Nastassja Lewinski

Surya Shanmugaselvam
Mentor: Dr. Thang Dingh

Gavin Telfer
Mentor: Zan Zhu and Dr. Wei-Ning Wang

Lydia Thesier
Mentor: Dr. Radhika Barua

Aiden Willet
Mentor: Mingyao Mou and Dr. Mo Jiang

Katie Zhang
Mentor: Dr. Carol Fung