Hello Hokies! The application deadline for the prestigious Dennis Dean Undergraduate Research and Creative Scholarship Conference is about a month away! Please see the newsletter below for more information about the application process and contact Keri Swaby at kswaby@vt.edu if you have any questions or concerns. Other than that, this newsletter features research programs at VT for students interested in Crash Injury Biomechanics, Software Engineering, and Machine Learning. This newsletter also features research programs beyond VT in the areas of Microbial Biofilm, Physics, Astronomy, Plant Biology, Statistics, Urban Ecology, Environmental Science, Computational Methods with applications in Materials Science, Data Analytics for STEM and Social Sciences and Business majors. Programs that are considering applications from international students are marked with asterisks(**). This newsletter ended with a paper opportunity calling for submissions relating to Community Change, Policy, and Governance.

We’re constantly tweaking this newsletter to keep it fresh and engaging. Let us know what you think about the newsletter by taking the quick survey at the end of the newsletter! (5 minutes read)

In today’s edition:

1. **OUR Office Bulletins**
   1. Office Hours
   2. Dennis Dean Undergraduate Research and Creative Scholarship Conference

2. **Research Programs at VT**
   1. Crash Injury Biomechanics Undergraduate Research Assistant**
   2. Software Engineer Spring/Summer Co-Op, Machine Learning**

3. **Research Programs Beyond VT**
   1. Early Collaborative Research Experience in Microbial Biofilms
   2. Physics and Astronomy REU
   3. American Society of Plant Biologists Research Fellowship**
   4. The Increasing Statistical Preparation in Research Education for Underrepresented Undergraduates (INSPIRE U2) Program
   5. Urban Ecology and the Environment Research Program
   6. Computational Methods with Applications in Materials Science Research Experience
   7. Data Analytics for STEM, Social Sciences, and Business Majors Research Program at NC A&T State University

4. **Paper & Presentation Opportunity**
1.1 Office Hours & Survey
Office hours will be held virtually at this point until further notice. You need to be logged into your VT Zoom account before opening the link. (ID number: 540 231 3580)
Wednesday, March 16, 9:00 a.m.-10:00 a.m.
Thursday, March 24, 2:00 p.m.-3:00 p.m.
Friday, April 1, 12:00 p.m.-1:00 p.m.
We can always be reached at ugr@vt.edu if you need help with undergrad research experience.

1.2 Dennis Dean Undergraduate Research and Creative Scholarship Conference
The annual Dennis Dean Undergraduate Research and Creative Scholarship conference will take place in person throughout the day on Friday, April 29 in the Commonwealth Ballroom in Squires Student Center. This program is designed to be an accessible and open opportunity for students to present and share their work with peers and the VT Community at large. Click here to learn more about the program. The deadline is Apr. 10, 2022, at 11:59 PM.

2.1 Crash Injury Biomechanics Undergraduate Research Assistant**
The undergraduate research assistant will perform vehicle crash reconstructions, crash test analysis, and occupant injury evaluation for Summer 2022. The research is conducted within the Center for Injury Biomechanics at Virginia Tech. Our current project aims to understand how the characteristics of road geometry, vehicle parameters, and driver state contribute to run-off-road crashes. We further seek to understand how these characteristics modify guardrail design and performance tests. Click here to learn more about the program. The deadline is Mar. 31, 2022, at 11:55 PM.

2.2 Software Engineer Spring/Summer Co-Op, Machine Learning**
The TORC Robotics is seeking a Machine Learning Software Engineer Co-Op to assist with the design, development, and maintenance of machine learning
algorithms for our self-driving vehicles. Click [here](#) to learn more about the program. The deadline is **Aug. 26, 2022, at 2:00 PM.**

### 3.1 Early Collaborative Research Experience in Microbial Biofilms

The research program, in collaboration with the Binghamton Biofilm Research Center, brings together researchers from more than four departments to research novel control strategies that can be used to address problems created by and solve problems with, microbial biofilm communities. Click [here](#) to learn more about the program. The deadline is **Mar. 18, 2022.**

### 3.2 Physics and Astronomy REU

Available research projects in this program span a wide range of physics and astronomy topics, from ultrafast laser spectroscopy to detecting neutrinos, from active galactic nuclei to computational materials physics. Click [here](#) to learn more about the program. The deadline is **Mar. 15, 2022.**

### 3.3 American Society of Plant Biologists Research Fellowship**

The program funds undergraduate students so they can conduct research in plant biology early in their college careers. SURF recipients must present their research at ASPB's annual Plant Biology meeting in the year following the fellowship award. Click [here](#) to learn more about the program. The deadline is **Mar. 14, 2022 (11:59 PM EST).**

### 3.4 The Increasing Statistical Preparation in Research Education for Underrepresented Undergraduates (INSPIRE U2) Program

This special initiative plans to take in 8 rising female sophomore students from underrepresented groups. The participants will be exposed to statistical programs and analytical techniques, including modern techniques not commonly included in the undergraduate curriculum, such as moderated mediation. Click [here](#) to learn more about the program. The deadline is **Mar. 15, 2022.**

### 3.5 Urban Ecology and the Environment Research Program
The program offers an integrative summer research program aimed at developing early-career undergraduate students into mature and thoughtful environmental scientists - many of our research projects have a strong evolutionary focus, and investigate how plants and animals adapt to urban environments. Click here to learn more about the program. The deadline is Apr. 1, 2022.

3.6 Computational Methods with Applications in Materials Science Research Experience
The major concentration will be in computational methods and their applications in materials science. In addition to gaining experience in using computational simulation and data analysis tools, students will gain knowledge in using high-performance computing. Click here to learn more about the program. The deadline is Mar. 15, 2022.

3.7 Data Analytics for STEM, Social Sciences, and Business Majors Research Program at NC A&T State University
This is a ten-week program in Data Science and Analytics for mathematics, computer science, engineering, physical, biological, and social sciences, technology, and business majors. The program will engage student interns via information technology and cloud computing in investigative research that entails developing tools in data analytics. Click here to learn more about the program. The deadline is Mar. 18, 2022.

4. Paper & Presentation Opportunities
• Community Change, Virginia Tech Institute for Policy and Governance | Deadline March 31, 2022

Let us know what you think about the newsletter by taking this quick survey!

--
You received this message because you are subscribed to the Google Groups "undergraduateresearch-g@vt.edu" group.
To unsubscribe from this group and stop receiving emails from it, send an email to undergraduateresearch-\text{-}g+unsubscribe@vt.edu.