A Unique Interdisciplinary Research Experience

The deadline to apply for Summer 2023 is

Friday, March 3, 2023

Visit our web site for application materials and more information about the program

http://bme.rpi.edu/reu

or contact:

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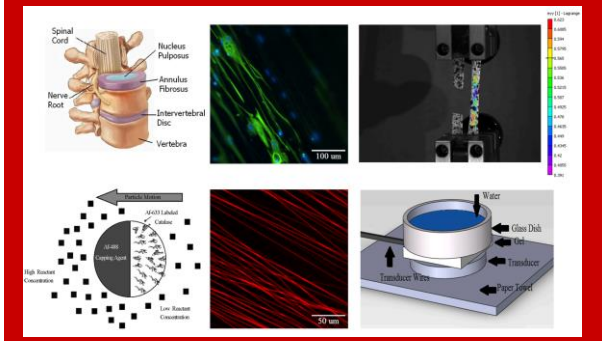
Come join us for

Regenerative and Biocomputational Engineering



Research Experiences for Undergraduates (REU)

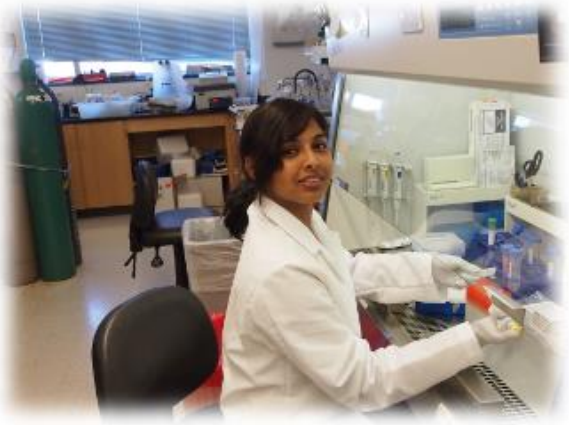
Summer 2023
(05/29/23-08/04/23)

Sponsored by the National Science Foundation

Why Should I Apply?

If you've ever considered a career in research, an undergraduate research experience is a great place to start. Our program gives you the opportunity to work side by side with our faculty and graduate students in the Center for Biotechnology and Interdisciplinary Studies at RPI to investigate a broad range of important and interesting problems at the forefront of Biomedical and Chemical Engineering.

Not only will you gain valuable hands-on experience, you'll also have the opportunity to see first hand some of the world class research underway at RPI and find out how discoveries made here help benefit society.



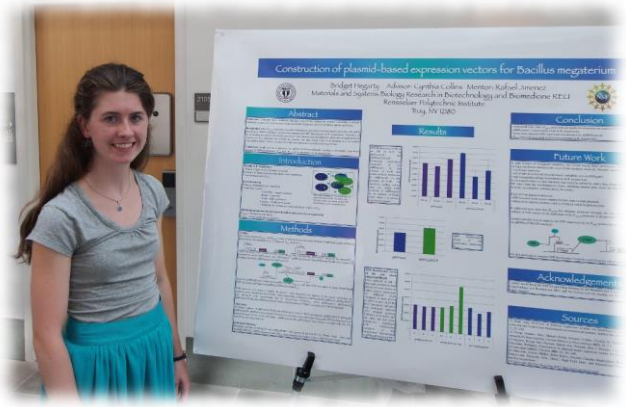
We'll help you learn more about research careers and show you how to create a winning graduate school application. You'll also have the opportunity to participate in fun activities and interact with dozens of fellow undergraduate researchers from all over the country. At the end of the program, you'll get a chance to present your results at a poster session.

What Will I Do?

Serious about research? So are we. Take your pick of cutting edge projects to suit just about any interest. Examples of project areas include:

- Increasing Stability of Transplanted T-cell Population by Predicting Cytokine Stimulating Levels Through Neural Network Model
- Construction of Plasmid-based Expression Vectors for *Bacillus megaterium*
- Frequency Dependent Properties of the Intervertebral Disc
- Kinetics and Associated Toxicity of Amyloid-$\beta_{1\text{-}42}$ Aggregation with α-B crystalline
- Dental Cleaning with Ultrasound
- Quantification of Catalase-Powered Janus Nanoparticle Diffusion
- Non-contacting Material Characterization of Novel Nanofibrous Biomaterials using Digital Image Correlation (DIC)
- Printing Endothelial Cells in Alginate Beads

Many of our students go on to present their results at national and international conferences, and publish them in scientific journals. This can really look good on your resume!



How Does it Work?

Each participant will receive a stipend of $6,000 for participation in the ten-week program held during Summer 2023. Additional benefits include housing, partial meal and travel allowances, participation in campus-wide REU activities, and full access to university recreational facilities.

To participate in the program, students must:

- Be US citizens or permanent residents
- Have a desire to participate in research
- Be majoring in biomedical engineering, chemical engineering or a related discipline (e.g. biology, chemistry, physics, or another field of engineering)
- Have a 3.3 GPA or greater and have junior or senior status with at least 60 semester hours (or equivalent quarter hours) completed toward their degree by the start of the program
- Provide application and all required supporting documentation by specified deadlines