

Call for Student Applications for

LU-PRISM 2019

Duration: 8 weeks (May 20 – July 12)

Student stipend: $3,500 (+ room and board)

Application Deadline: 5pm on Monday, November 5, 2018

Have you started making plans for the coming summer? Would you like to be involved in transformative, cutting edge research AND get paid to do it? If your answer is ‘YES’, then continue reading!

You are cordially invited to apply to LU-PRISM (***L****ongwood* ***U****niversity* ***P****erspectives on* ***R****esearch* ***I****n* ***S****cience &* ***M****athematics*), our residential summer research program. This program combines practical training in specific research techniques with activities designed to put the research into the context of larger goals of modern science, technology, health, and mathematics. The titles and areas of the research projects available are summarized below.

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| ***Project Title*** | ***Faculty (Project Area)*** |
| *Exposing the Hidden Genetic Character of Non-Model Organisms* | Dr. Dale Beach  (Biology) |
| *Constrained Non-negative Matrix Factorization* | Dr. Julian Dymacek  (Computer Science) |
| *Evaluating Control and Mitigation Techniques for Mosquitoes in Rainwater Harvesting Systems* | Dr. Kathy Gee  (Integrated Environmental Science) |
| *An Analysis of Neurogenesis in a Mouse Model of Chemotherapy Related Cognitive Impairment* | Dr. Maxwell Hennings  (Psychology) |
| *Shake a tail feather: finding the function of bird tails in slow flight* | Dr. Brandon Jackson  (Biology) |
| *Spectroscopic and Chemometric Analysis of Petroleum Products for Forensic, Environmental, and Industrial Applications* | Dr. Sarah Porter  (Chemistry) |
| *A Randomized Double-Blind, Placebo-Controlled Crossover Study of Low-Dose Creatine on Cognitive Function Before and After Athletic Competition* | Dr. Troy Purdom  (Exercise Science) |
| *Investigating the effects of bromodomain cancer mutations on the activity of p300* | Dr. Erin Shanle  (Biology) |
| *Investigating the effects of cancer mutations on DNA damage response proteins in yeast* | Dr. Erin Shanle  (Biology) |
| *Chemical design of single molecule electronic device* | Dr. Ben Topham  (Chemistry) |
| *Synthesis of a cancer-targeting, choline-appended Pt anticancer therapeutic and characterization of its DNA target binding and cellular toxicity* | Dr. Jonathan White  (Chemistry) |
| *The Geometry of Curves in Surfaces in 3-dimensional Lie Groups* | Dr. Thomas Wears  (Mathematics) |

This program is eight weeks long and will run from May 20, 2019 until July 12, 2019. During this time, participants will receive a stipend of $3500! In addition, the program will provide a generous housing and meal stipend to help defray the cost of living expenses.

Students who apply to the program must be continuing Longwood undergraduates (cannot have graduated prior to December 2019) and be US citizens or permanent residents. Completed applications, including unofficial transcripts and one page narrative statement, are due no later than ***5pm on Monday, November 5, 2018***. **Information on how to submit these materials and what is expected of students participating in this program is detailed in the student application.**

Only 14 students will be chosen to participate in this program. Undergraduate scholarly research is one of the most important things you can do to distinguish yourself from other students applying to graduate schools, professional schools, and post-baccalaureate employment. Don’t let this opportunity pass you by! Apply today!