LU-PRISM 2020 Information Sheet

LU-PRISM (***L**ongwood **U**niversity **P**erspectives on **R**esearch **I**n **S**cience & **M**athematics*)

LU-PRISM is an undergraduate summer research program where you can work one-on-one with a Longwood faculty member and conduct transformative, cutting edge research.

Applications are due to Dr. Sarah Porter by November 8th, 2019 at 5pm (portersg@longwood.edu)

Program details:

- Duration: 8 weeks (May 18 – July 10, 2020)
- Student stipend: $3,500
- Housing stipend: $1,500
- Meal stipend loaded on Lancer Card: $400
- Students must be continuing Longwood undergraduates (not graduating in May 2020)

The titles and areas of the research projects available are summarized below.

Faculty Mentor	**Subject area**	***Project Title***
Dr. Dale Beach	Biology	*Exposing the Hidden Genetic Character of Non-Model Organisms*
Dr. Robert Blaisdell	Kinesiology	*The effects of mouth guard use for sport performance enhancement on indices of neuromuscular force and power*
Dr. Ben Campbell	Science Education	*Layers of Conceptualization: Secondary Science Teachers' Planning and Instruction of a Chemistry Topic*
Dr. Julian Dymacek	Computer Science	*Constrained Non-negative Matrix Factorization*
Dr. Sujan Henkanaththegedara	Biology/Environmental Science	*An Assessment of Aggressive Interactions between Native and Invasive Crayfish using a Novel Video Tracking System*
Dr. Steven Hoehner	Math	*The Geometric Balls and Bins Problem in Low Dimensions*
Dr. Chris Labosier	Environmental Science	*Thermal Safety and Risk of Children's Outdoor Playhouses*
Dr. Jeffrey Ledford	Math	*Non-local Kernel Approximation*
Dr. Dina Leech	Environmental Science	*Fish Foraging and Freshwater 'Browning': The Balance Between Visual, Chemical, and Mechanical Cues in Searching for Zooplankton Prey*
Dr. Erin Shanle	Biology	*Modeling the pathogenicity of single nucleotide polymorphisms in DNA damage response proteins*
Dr. Jonathan White	Chemistry	*Characterization of cellular targets and derivatization of a choline-appended Pt anticancer therapeutic*
Dr. Andrew Yeagley	Chemistry	*Investigating aliphatic phosphazenes as quaternary amine cation (QAC) mimics*

While participating in the LU-PRISM program, students MUST:

- Enroll in a one-credit research course in the coming spring (Spring 2019) with their PRISM research mentor serving as the instructor. This will fulfill Goal 14 of the Gen Ed requirements.
- Give a short (10 minute) oral presentation outlining their project and goals for the summer during the university-wide Spring Symposium for Research and Creative Inquiry in April 2020.
- Present their research at the PRISM poster session in July 2020.
- Summarize their research in a final manuscript written in a style consistent with their discipline.
- Participate in weekly professional development sessions during the summer
- Attend once a month workshops in the spring semester
- May not register for an in-person summer class during the PRISM program