SCHOOL OF PUBLIC HEALTH
INDIANA UNIVERSITY
Department of Epidemiology and Biostatistics
Bloomington

Research for Undergraduates Summer Institute of Statistics
Oregon State University -- RUSIS@OSU
May 10th – July 15th, 2022

Length of Program

This is a 10-week summer program. The goal is to prepare undergraduate students for a graduate research career in the Statistical Sciences, especially those students from underrepresented minority groups. **RUSIS@IU** will be held at Indiana University, and students will have access to cutting-edge computational facilities and state-of-the-art teaching classrooms.

Eligibility

Undergraduate Students must be US citizens or Permanent Residents, and must not hold any undergraduate degree by the end of the summer of 2022. Students majoring in mathematics, computer science, statistics, or related fields and who have had the calculus sequence and a course in linear or matrix algebra are eligible to apply.

Amount of Award and Deadline for Applying

Students will receive a **$5,000*** stipend, plus up to $600.00 for travel expenses. The program will provide lodging and meals for students at the University dormitories. The deadline for applying is March 15th, 2022. Date for notification of acceptance is April 1st, 2022.

* Taxes may be deducted from this amount.

Typical Summer Schedule

RUSIS@IU will start with courses in computation (e.g. R, Python, Mathematica or MatLab, Latex) and probability, stochastic processes and statistical inference. The computation course will run for approximately 3 – 4 weeks.

The statistics courses will run for 3-4 weeks and several ideas from extreme value theory, survival analysis, and multiple comparisons will be introduced. An example of a typical schedule looks as follows:

Monday – Thursday	Friday
9:00 – 12:00 Probability- stochastic processes – statist inference course	**9:00 – 12:00** Probability- stochastic processes – statistical inference course
12:00 – 1:00 Lunch	**12:00 – 1:00** Lunch
1:10 – 4:00 Computation short course by graduate students	**1:10 – 3:30** Computational short course by graduate students
4:00 – 5:00 Computation homework assignments under TA supervision	**3:30 – 5:00** Meet as a group with mentors and TA to discuss various topics: improving program; Graduate school; projects; watch videos (Fermat's last theorem); etc.

Research Projects

During the 4th week of the program, students will begin research work in groups. Projects will be selected from areas including, but not limited to, **Extreme Value Theory, Multiple Comparisons, Multivariate Survival Analysis,** and other biomedical and statistical problems**.** It is expected that the research work will lead to a presentation at a National meeting and, when the work is of sufficient merit, to a publication in a professional journal.

Applications --

Contact

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