Rice University Summer Institute of Statistics
Research Program for Undergraduates
--RUSIS--
May 23rd – July 29th, 2011

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 will be held at Rice 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 2011. 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 $4,000* stipend, plus up to $600.00 for travel expenses and $850.00 towards summer rent. The deadline for applying is March 1st, 2011. Date for notification of acceptance is April 1st, 2011.
* Taxes may be deducted from this amount.

Typical Summer Schedule

RUSIS will start with courses in computation (e.g. S-plus, Mathematica, Latex) and probability, stochastic processes and statistical inference. The computation course will run for approximately 3 – 4 weeks. The courses will run
for 3 weeks and several ideas from extreme value theory, survival analysis, and multiple comparisons will be introduced. A typical schedule will look as follows:

<table>
<thead>
<tr>
<th>Monday – Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>9:30 – 12:00 Probability- stochastic processes – statistical inference course</td>
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<td>12:00 – 1:00 Lunch</td>
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<td>1:10 – 2:30 Computation short course by Graduate student</td>
<td>1:10 – 2:45 Distinguished Scientist Lecture Series</td>
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<td>2:45 – 4:00 Computation Homework Assignment under TA supervision</td>
<td>2:45 – 4:00 Meet as a group with mentors and TA to discuss various topics: improving program; projects; watch videos (Fermat’s last theorem); etc.</td>
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**Tentative Invited Guest Lecturers for the 2011 RUSIS:**

**Luis Tenorio** – Colorado School of Mines  
**Hadley Wickham** – Rice University  
**Leonardo Dueñas-Osorio** – Rice University

**Research Projects**

During the 4th week of the program, students will begin work in groups – assisted by the faculty – on statistical problems with applications on 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 merits it, publication in a professional journal.

**Applications** --- Applications may be found at [www.stat.rice.edu/~jrojo](http://www.stat.rice.edu/~jrojo)

**Or contact**

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