



**Rice University Summer Institute of Statistics  
Research Program for Undergraduates**

**-- RUSIS --**

**May 17<sup>th</sup> – July 23<sup>rd</sup>, 2010**

**⊙ 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 2010. 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 **\$4,000.00\*** stipend, plus up to \$550.00 for travel expenses and a \$880.00 payment towards summer rent. The deadline for applying is March 15<sup>th</sup>, 2010. Date for notification of acceptance is April 15<sup>th</sup>, 2010.

\* 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:

Monday – Thursday	Friday
9:30 – 12:00 Probability- stochastic processes – statistical inference course	9:30 – 12:00 Probability- stochastic processes – statistical inference course
12:00 – 1:00 Lunch	12:00 – 1:00 Lunch
1:10 – 2:30 Computation short course by Graduate student	1:10 – 2:45 Distinguished Scientist Lecture Series
2:45 – 4:00 Computation Homework Assignment under TA supervision	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.

**Tentative Invited Guest Lecturers for the 2010 RUSIS:**

- Luis Tenorio** – Colorado School of Mines
- Anna Baron** -- University of Colorado, Denver
- Leonardo Dueñas-Osorio** – Rice University

 **Research Projects**

During the 4<sup>th</sup> 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.

***NOTE:*** There will be an opportunity to participate in a professional conference in Guanajuato, Mexico (CIMAT) during the summer. All expenses will be paid, but you will need to have the proper documentation to travel to Mexico and back into the United States. You will need to send proof of required documentation by April 15<sup>th</sup>. I cannot advise as to what the required documentation is. I recommend that you check with the proper authorities. If you are a minor, you will need to have written permission from your parents to travel to Mexico.

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

**Or contact**

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