# THE BRADLEY LECTURE

Sponsored by
The Department of Statistics and
The Statistics Club

Friday, April 13, 2012

Hotel Indigo Athens, Georgia

This year's distinguished guest speaker is

**Dr. R. Dennis Cook**,

Professor, School of Statistics, University of Minnesota

**RSVP** required for Lecture and Dinner

# **Bradley Lecture Overview**

We are proud to announce the 20<sup>th</sup> Annual Bradley Lecture sponsored by the Department of Statistics and the Statistics Club, University of Georgia. The event honors former faculty member Dr. Ralph A. Bradley, who was born on November 28, 1923 in Smith Falls, Ontario, Canada, and who grew up in the village of Wellington. After graduating from Queen's University in 1944 with an honors degree in mathematics and physics, he served in the Canadian Army from 1944 to 1945, and afterwards earned his Masters of Arts degree in 1946. He received his PhD in 1949 at the University of North Carolina Chapel Hill, and went on to a very distinguished career. He was founder of the Department of Statistics at Florida State University and served as its chair from 1959 to 1978. He joined UGA in 1982.

Dr. Ralph Bradley made many contributions to the field of statistics as a researcher in design of experiments, nonparametric statistics, sequential analysis and multivariate analysis. He also had an exemplary record of service to the profession of statistics as a member of ASA, IMS, ISI, as well as by serving as president of ASA in 1981.

The Bradley Lecture provides an opportunity for UGA graduate students to interact with the speaker, who is an eminent statistician of their choice. After the seminar in the afternoon, the speaker gives an after-dinner presentation and often stays for the next day's spring picnic to mingle with faculty and students.

We hope you'll join us for what should be an informative and exciting event!

John Stufken, Ph.D. Professor and Head Department of Statistics

#### The Lecture

The 2012 Bradley Lecture will be presented by Dr. R. Dennis Cook, Professor at the School of Statistics, University of Minnesota. The lecture will be held at Hotel Indigo's Rialto Room in downtown Athens, Georgia on April 13, 2012.

#### Title: "Envelope Models and Methods"

Outline: We will discuss a new approach to estimation in the classical multivariate linear model that yields estimators of the coefficient matrix with the potential to be substantially less variable asymptotically than the standard estimators. The new approach arises by recognizing that the response vector may contain information that is immaterial to the purpose of estimating the coefficients, but can still introduce substantial extraneous variation into estimation. This idea leads to a general construct -- an envelope -- for removing the immaterial information and effectively reducing the dimension of the parameter space. Emphasis will be placed on the fundamental concepts and their potential impact on data analysis. Recent work in the area will be described.

#### **Dinner & After-Dinner Talk**

Title: "Dimensions of Statistics"

Outline: We will explore various dimensions that statistics has assumed in literature, society and, to a lesser extent, science. The discussion will be light and unstructured, and consist in part of vignettes illustrating attitudes about statistics and its potential on professional and personal planes.

## **Biographical Sketch**

Dennis Cook is a Professor of University of Minnesota. He served a ten-year term as Chair of the Department of Applied Statistics, and a three-year term as Director of the Statistical Center, both at the University of Minnesota. His research areas include dimension reduction, linear and nonlinear regression, experimental design, statistical diagnostics, statistical graphics and population genetics. Every statistician in this world has used his seminal Cook's distance as a regression diagnostic. He is author or co-author of two text books and two research monographs. He has served as Associate Editor of the Journal of the American Statistical Association, The Journal of Quality Technology, Biometrika, Journal of the Royal Statistical Society and Statistica Sinica. He is a three-time recipient of the Jack Youden Prize for Best Expository Paper in Technometrics as well as the Frank Wilcoxon Award for Best Technical Paper. At the 2005 Joint Statistical Meetings, he presented the prestigious COPSS Fisher Lecture. He is a Fellow of ASA and IMS, and an elected member of the ISI.

#### The Picnic

Join us for an enjoyable afternoon BBQ in a great setting. Mingle with the guest speaker, faculty members, and graduate students, while watching the students show off their "skills" in outdoor grilling! The picnic will be held on April 14, 2012, from 11:00am to 3:00pm at nearby Memorial Park in Athens, Georgia. Visit Memorial Park's webpage for address information: http://www.accleisureservices.com/memorialpark.shtml

## **Schedule of Events**

Friday, April 13, 2012

### Hotel Indigo, Rialto Room

4:30pm to 5:30pm – Bradley Lecture by Professor Dennis Cook

5:30pm - Happy Hour

6:00pm - Dinner and after-dinner talk

## Saturday, April 14, 2012

11:00am to 3:00pm – Bradley Spring Picnic at Memorial Park, Shelter # 1

## **RSVP** is Required

Please RSVP if you plan to attend either or both events below:

- Bradley Lecture
- Bradley Dinner Buffet (with after-dinner talk). The dinner buffet will feature meat entrees along with a vegetarian option.

Dinner Buffet: \$20 per faculty member or visitor; \$10 per student

Cash and checks payable to "University of Georgia" are accepted.

Please RSVP to Chris O'Neal at <a href="mailto:cricket3@uga.edu">cricket3@uga.edu</a>. If you have questions, please call Julie Davis or Tim Cheek at 706.542.5232.