

## Raymond J. Carroll Receives 2003 Sacks Award



Alan Karr, Ray Carroll and Jerry Sacks

By action of the Board of Trustees of NISS, the 2003 Jerome Sacks Award for Cross-Disciplinary Research is presented to Professor Raymond J. Carroll, of the Department of Statistics at Texas A & M University, in recognition of his outstanding cross-disciplinary contributions to the statistical sciences, epidemiology, public health, nutrition, molecular cell biology and environmental toxicology.

Carroll will receive a check for \$1,000 and a certificate. His name will be added to plaque in the NISS Building that lists the names of all recipients of the award.

### Award Citation

Reflecting perfectly the spirit of the award, his research touches on a wide range of areas and has had significant practical impact.

Professor Carroll is a leading expert in the design and analysis of nutrition data. His research on nonlinear measurement error models is well known to everyone, and has transformed the way nutrition data are measured, reported and understood by public health professionals. This work bridges statistical science and nutritional epidemiology, and has led to fundamental breakthroughs in both disciplines.

More recently, he has developed a deep interest in molecular cell biology and how it relates to nutrition and colon carcinogenesis. He is a leading force behind a joint research venture that includes researchers from statistics, electrical engineering, nutrition and toxicology. In a reversal of the usual paradigm, he has generated biological hypotheses and proposed experiments that his nutrition colleagues are willing to run in support of the statistical modeling of these biological processes.

In addition to his scientific contributions and collaborations across the world, Professor Carroll is a committed educator, with more than 20 Ph.D. students over the last 25 years, many of whom are now making their own contributions to the statistical sciences. He has created a bioinformatics training program that is developing researchers capable of living in the cross-disciplinary worlds of statistics, nutrition and cancer.

Many individuals have developed strong theoretical research records, many have developed strong applied research records, and many have developed strong pre- and post-doctoral training programs. Fewer succeed in more than one of these dimensions, and very few have become leaders in all three. Raymond Carroll's theoretical research is superb, his cross-disciplinary research is of fundamental importance to his collaborators, and he has developed an exemplary program of cross-disciplinary education. Everything he does is with enthusiasm and passion. He is a most deserving recipient of the Sacks Award for 2003.

**Following the presentation of the award Dr. Carroll made these remarks:**

I am very happy to have won this award. Last month at the Purdue Statistical Symposium, Jerry and I went for drinks and dinner, and I had just learned that I had won the award and that he did not know. So, I wanted to jump up and down on a table to celebrate, but could not!

One of the things I am most pleased about is to have been considered to be at least in the realm of Jerry Sacks in terms of research. I knew Jerry by reputation when I was a graduate student, and I was awed by the quality of his work in mathematical statistics and the clarity with which he presented his work. Together with his former student, Cliff Spiegelman, I wrote a paper with Jerry in the 1980's, and learned first-hand the power of his intellect and his ability to solve hard theoretical problems. What has always impressed me, though, is that he left a career full of honors and distinction in order to move into cross-disciplinary research. This was risky, and few people have the courage to make the change or the ability to pull it off so fabulously.

Cross-disciplinary research is hard--fun, but hard. It is full of risks: you cannot tell a priori whether the people you are starting to work with are really good, and are really serious about statisticians as colleagues rather than as p-value producers. We now see the fruits of what Jerry's move all around us, including NISS and now SAMSI. I thus think it is totally appropriate to have a cross-disciplinary research award named after Jerry Sacks.

So, you cannot believe how honored and happy I am to have won this award. Thank you.