

# *Purdue University*

## *Department of Statistics*

### **NEWSLETTER**



Summer 1996

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### *Calendar of Coming Events*

Statistics Department Picnic, Sunday, August 25, from 12:00-6:00 at Ross Hills.

Workshop on Default Bayesian Methodology, November 1-2, 1996 at Purdue University. For more information contact Shanti Gupta at (317) 494-6045 or Jim Berger at (317) 494-6036.

Statistics Department Holiday Party, Wednesday, December 4, 1996 at the Trails.

## *A Message from the Department Head*

Dear Alums and Friends,



*Mary Ellen Bock  
Department Head  
1995-present*

On July 1, 1995, I became the second head of the Statistics Department when Shanti Gupta stepped down. It is hard to follow in the footsteps of one of the most distinguished department heads in the country. Fortunately, his support and presence in the department make the job much easier.

An important goal for the department is the continued promotion of excellence in teaching and research. A high priority is maintaining an atmosphere of openness and understanding that makes the Purdue experience rewarding and stimulating for students, faculty and staff.

I have enjoyed the privilege of being at Purdue for more than twenty years and I am honored to be able to repay this by serving the department as its head.

With best regards,

Mary Ellen Bock

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*Mary Ellen Bock became the second head of the Purdue University Statistics Department on July 1, 1995. She received a Ph.D. in mathematics from the University of Illinois at Urbana in 1974 and joined the Department in August of that year. She has been a visiting faculty member at the University of Illinois Department of Mathematics and at Stanford University Department of Statistics. She served as Director of the Statistics and Probability Program at National Science Foundation in Washington, DC, from 1988 to 1990. She is a Fellow of the American Statistical Association, the Institute of Mathematical Statistics and American Association for the Advancement of Science, and she is an elected member of the International Statistical Institute. She serves on many national professional committees and boards. Her current research interests include statistical applications of wavelets and statistical analysis of genome data.*

## *A Message from our Former Department Head*

Dear Alums and Friends,

Greetings and Hello. As you are aware, after 27 years, I stepped down as Head of the Department of Statistics on July 1, 1995. But I am continuing research and teaching. Mary Ellen Bock is heading the department now and she is doing an excellent job.

Many distinguished and excellent faculty have served in the department over the years, too many to name individually.

It is with much gratification and pride that I look back upon several milestones in the progress of the department over the period of some thirty years from 1965.

- David Moore was hired as a faculty member in 1967. In addition to his research, David has contributed in many major and significant ways to the quality of undergraduate and graduate education in statistics. He is one of the world's leading figures in statistical education and was recently appointed by Purdue as Distinguished Professor of Statistics for excellence in teaching. David is the first Shanti S. Gupta Distinguished Professor of Statistics and, of course, I feel very honored that the Department and Purdue University attached my name to this chair.

- Professor George McCabe joined the faculty in 1970. He has very creditably built up the Statistical Consulting Service in cooperation with PUCC, Purdue University Computing Center.

- Professor James Berger joined the faculty in 1974. Jim was named the Richard M. Brumfield Distinguished Professor of Statistics in 1986 for his research contributions in Bayesian Analysis,

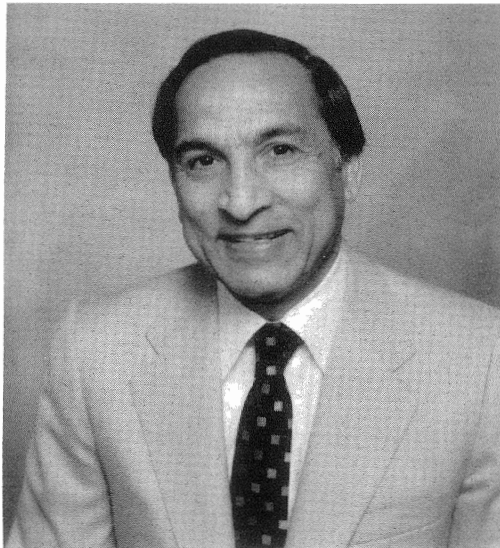
Decision Theory, and Foundations of Statistics. His contributions have played a prominent role in the current high national ranking of the department (among the top ten).

- The department has hosted five major international symposia called Purdue International Symposium on Statistical Decision Theory and Related Topics. Held in 1970, 1976, 1981, 1986, and 1992, these international symposia have been the world's leading major forums for research developments in statistical science. In June 1995, the department also hosted an international symposium on Multiple Decision Theory and a workshop on Intrinsic Bayes Factors.

- Our curriculum has undergone major changes. At the undergraduate level, we are also sponsoring a joint major in Actuarial Science.

This major in Actuarial Science (started in the late 80's) is interdisciplinary in nature and is jointly administered by the Departments of Mathematics and Statistics. The purpose of the program is to provide the broad quantitative background in statistics, mathematics and related areas that is necessary for success in the actuarial profession and also to provide the academic background needed to pass the first few exams.

- At the graduate level, our strong M.S. and Ph.D. programs have continued to flourish. During the period up to June 30, 1995, the department faculty turned out 158 Ph.D.'s. In addition, 342 M.S. degrees in applied and theoretical statistics were awarded.



*Shanti S. Gupta*  
*Department Head 1968-95*

## *A Message from our Former Department Head*

- The enrollments in statistics and probability courses have seen a substantial increase. During the academic year 1994-1995, the number of students enrolled in our courses stood at 2,157 (42 class sections) for the Fall semester and 2,257 (43 class sections) for the Spring semester, respectively. Our campus wide role in teaching of statistics courses has substantially increased since 1968-1969. A good deal of credit for this goes to David Moore, who served as de facto Associate Head of the department for about twenty-five years, 1970-1995. My sincere appreciation and thanks to David for the excellent contributions he has made to the department.

- Several faculty members have won national and international recognition for research, teaching, and professional service. Jim Berger received the COPSS President's Award in 1985 and was elected President of the Institute of Mathematical Statistics for 1995-96. This brings the department's number to two faculty members who have served and are serving as President of the IMS. It is also a matter of great pleasure for me to note that David Moore has been (recently) nominated to run for president-elect of the American Statistical Association for 1997-98. Other professional contributions of the faculty include two Editors of mainstream journals in statistics and probability, and also service by several colleagues on the editorial boards of leading statistics and probability journals.

- Another milestone in the history of the department was the creation of the Center for Statistical Decision Sciences in October 1987. This center, as part of the Department of Statistics, fosters research in Bayesian Analysis and Statistical Decision Theory through seminar activities and

workshops and conferences. Jim Berger and I have been the co-directors of the Center.

- It is with sadness I mention that several colleagues have passed away during the span of the past twenty years. Glen Baxter (1930-1983), K. C. S. Pillai (1920-1985), Prem Puri (1936-1989) and Myra Samuels (1940-1992) have all touched our lives and are missed. Memorial lectures, scholarships and prizes have been created to honor their memories.

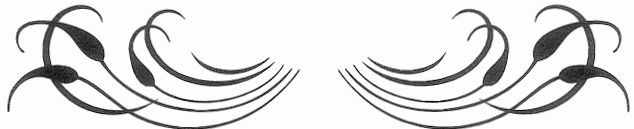
- Running a department of our size (a total of 20 faculty) does produce constant challenges and requires dedication and team support. The support that Norma and her team have provided to me for twenty-five years has just been great. I wish to acknowledge Norma's outstanding service and cooperation most sincerely.

- The department is, indeed, in very good hands. Please join me in wishing Mary Ellen all the success as Head of the Statistics Department.

Finally I want to close this by saying good-bye for now.

My very best wishes to you all,

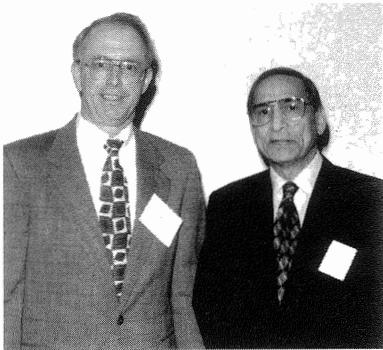
Shanti S. Gupta



## *Multiple Decision Theory and Related Topics: A Conference in Honor of Shanti S. Gupta*

The Department of Statistics and the Center for Statistical Decision Sciences at Purdue University hosted a conference on "Multiple Decision Theory and Related Topics" on June 8-10, 1995. The conference was in honor of Shanti S. Gupta, who was stepping down from the Headship of the Statistics Department at Purdue to devote full time to teaching and research. Professor Gupta was one of the founders of multiple decision theory, and has maintained leadership in the field through an exceptional research and educational program. In addition, he has contributed greatly to the profession and Purdue through his development of the Statistics Department at Purdue, and through numerous service contributions to the profession.

The conference organizing committee was James O. Berger (Purdue University), Gary



*Gary McDonald and Shanti S. Gupta*

McDonald (General Motors), Klaus Miescke (University of



*Ph.D. Graduate Students of Shanti Gupta (l-r): Tachen Liang, Austin Barron, D-Y Huang, Jason Hsu, Gary McDonald, Klaus Nagel, Roger Berger, Shanti Gupta, Raymond Carroll, Ming-Wei Lu, S. Panchapakesan, Tom Santer, W. T. Huang, John J. Deely and Jerone Deverman.*

Illinois at Chicago), S. Panchapakesan (Southern Illinois University), and Thomas Santner (Ohio State University). The conference consisted of 40 invited talks by leaders in the field, including talks aimed at assessing the current status of research in the area and assessing future needs. The following participated in the conference:

N. Balakrishnan (McMaster U), Austin Barron (American U), Susie Bayarri (U of Valencia), James O. Berger (Purdue U), Roger Berger (N. Carolina State U), Debasis Bhattacharya (Visva-Bharati U), Jan Bjornstad (U of Trondheim), Peter Bickel (U of California at Berkeley), Lawrence Brown (U of Pennsylvania), Christopher A.

Bush (Abbott Labs), Ray Carroll (Texas A&M U), Y. S. Chow (Academia Sinica, ROC), John J. Deely (U of Canterbury), Holger Dette (Technische Universitat Dresden), Helmut Finner (U of Trier), Nancy Flournoy (American U), Andreas Futschik (Vienna U), Mauro Gasparini (Purdue U), Leon Gleser (Pittsburgh U), Tony Hayter (Georgia Tech U), Jason Hsu (Ohio State U), Deng-Yuan Huang (Feng Chia U), Su-Yun Huang (Academia Sinica, ROC), W. T. Huang (Academia Sinica), Woo-Chul Kim (Seoul Nat. U), Ta-Chen Liang (Wayne State U), George McCabe (Purdue U), Gary McDonald (General Motors), Klaus Miescke (U of Illinois

*continued on page 11*

## *Intrinsic Bayes Factor Workshop*

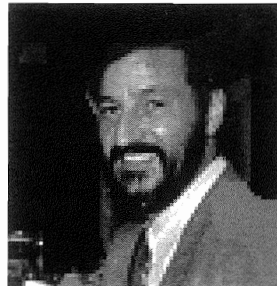
An intensive workshop on the recent approach to multiple model selection called “intrinsic Bayes factors” was held at Purdue University on June 10-12, 1995, following the Conference on Multiple Decision Theory and Related Topics. The event involved approximately 20 active researchers in development of intrinsic Bayes factors, a recent and promising methodology applicable to virtually any model selection problem.

Jim Berger led the workshop which was supported by the National Science Foundation, the National Security Agency, and Purdue University.



*Gabriella Salinetti  
University of Rome*

*Luis Pericchi  
Simon Bolivar University*



*Chimei Shui  
Purdue University*



The following either chaired sessions or spoke at the conference: James Berger (Purdue U), Fulvio DeSantis, (Carnegie-Mellon U) and Fulvio Spezzaferri (U of Rome), Jacek Dmochowski (Purdue U), Christopher Genovese (Carnegie-Mellon U), Edward George (U of Texas), Katsuaki Iwaki (Asia U and Purdue U), Elias Moreno (U of Granada), Jose Miguel Perez (Simon Bolivar U and Purdue U), Luis R. Pericchi (Simon Bolivar U), Gabriella Salinetti (University of Rome), Bruno Sanso (Simon Bolivar U), Chimei Shui (Purdue U), Julia Varshavsky (Purdue U), Larry Wasserman (Carnegie-Mellon U).

### *Faculty E-mail Addresses:*

James Berger	jberger@stat.purdue.edu	George McCabe	mccabe@stat.purdue.edu
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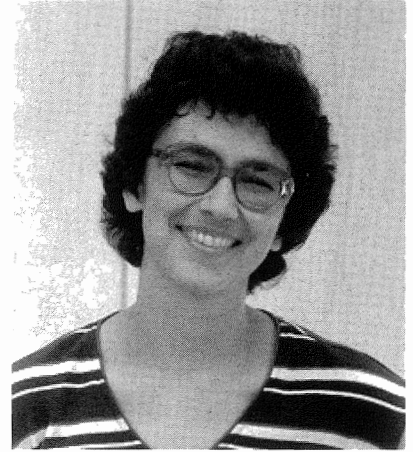
## *Memorial Lectures*

### *K. C. S. Pillai Memorial Lecture*

Professor B. L. S. Prakasa Rao of the Indian Statistical Institute, New Delhi, India, spoke on “Spatial Data Analysis”, Friday, April 12, 1996 in honor of Professor Pillai, who taught in the Statistics Department from 1962-1985.



*K. C. S. Pillai  
1920-1985*



*Myra Samuels  
1940-1992*

### *Myra Samuels Memorial Lecture*

The first Myra Samuels Memorial Lecture was Friday, March 22, 1996. The Nobel Prize winner Herbert Hauptman gave the address, “A probabilistic approach to the phase problem of

X-ray crystallography.” The Lectures were founded in memory Dr. Myra Samuels who worked for many years in the Statistics Department and was an Associate Professor in Veterinary

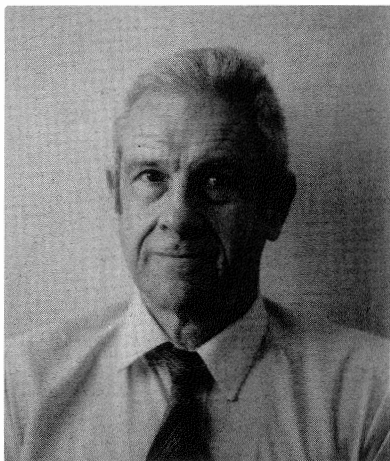
Pathobiology at the time of her death. The Myra Samuels Biostatistics Fund provides support for the Lectures.



*Beginning work on the  
Myra Samuels Garden*

The area between the Mathematical Sciences Building (which houses the Statistics Department) and University Street is undergoing a major renovation. The former bare sidewalks and grass are being replaced by a pleasing “garden” with benches, patios, walkways and plantings. In the center will be a plaque designating it as a memorial to Dr. Myra Samuels. The garden is supported by the Myra Samuels Garden Fund.

## *Interview with Lou Cote*



*Lou Cote was a faculty member when the Department of Statistics was created at Purdue. He also served as the department's graduate secretary until he retired. He is currently Emeritus Professor of Statistics.*

*Since Lou has retired he has had time to become more actively involved in the community. He is the secretary of the Indiana Civil Liberties Union, treasurer for Phi Beta Kappa and works with the West Lafayette, Indiana, Public Library. He also spends quite a bit of time repairing pocket watches, which he collects. For the last 25 years or so, Lou has continued to be an avid poker player with seven other statistics and mathematics faculty.*

*We were sorry to see Lou retire and his daily presence has been missed by all who worked with him. He does, however, occasionally stop by and even came out of retirement temporarily to teach a course for the department this past semester.*

*I interviewed Lou recently and I would like to share some of his thoughts and memories of the department.* — Mary Ellen Bock

**Mary Ellen:** Please tell us about yourself.

**Lou:** I was brought up in Detroit, Michigan. Both my parents were Canadian born but came to Massachusetts as infants. My father was French-Canadian but I resisted speaking French with him and have always regretted that.

I got a BA in Mathematics at the University of Michigan in February, 1943, and went into the army to learn meteorology. Most of my military duty was as a weather observer in a weather reconnaissance squadron in B-25's.

When I got out of the army, I went back to Michigan and got an MA in Math. I was a little at loose ends and thought that it might be more inspiring to get into something less abstract. So I applied to Columbia and North Carolina which were recommended to me by the statistics professors at Michigan. I think that at the time, 1948, the only statistics departments were at Berkeley, Columbia, North Carolina, possibly including Raleigh and Iowa State. Most statistics was taught in mathematics departments as in Michigan. I also took the advice of the department head, T. H. Hildebrandt, to get married before I left. (It turned out to be excellent advice because I married Lillian Gruntfest). I was accepted at both Columbia and Chapel Hill. We went to Columbia because Lillian had lived in New York for a time and her mother was living there.

At Columbia, Wald and Wolfowitz were working out statistical decision theory, but the general graduate curriculum was classical so I stayed mostly with probability. As graduation came closer, I began to look for a job. The beginning salary in those days was about \$4,000 for a 9-month position. It was not very much for even then. I went to the department head, Herb Robbins, and found him talking to Herb Solomon



## *Interview with Lou Cote (continued)*

from Stanford University. Solomon called Carl Kossack at Purdue who invited me to come. I remember the interview trip. The plane landed at Kokomo where I had about an hour's wait for the connection to West Lafayette. When I went outside I could smell the sweet clover. I said to myself that I never wanted to live in New York again.

**Mary Ellen:** What was the department like when you came to Purdue?

**Lou:** There wasn't a statistics department. The Mathematics Department had statistics courses, beginning with probability and mathematical statistics - MA 527 and MA 528, plus beginning applied statistics, MA 511. There were also statistical courses in regression, quality control, and experimental design, 512, 513 and 514, with more or less the same objectives as now. The instruction was all done by Mathematics Department professors who were part time in the Statistics and Computation Laboratory. The Lab offices were in the Engineering Administration Building. This outfit was Kossack's and he was able to get government contracts for military (I think) research. There were a number of clerks and graduate students who did things like computation on desk calculators and IBM card tabulators. We had consulting meetings once a week and took on campus projects. Most of these were Ph.D. research from Engineering and Agriculture.

I left Purdue for Syracuse University in 1956 and in 1960 I was asked to come back to Purdue, which I did. At the time, the Mathematics Department was in the School of Science, Education and Humanities and they were not getting along with the dean. Shortly after my return a review team from the American Mathematics Society recommended to President Hovde that the Mathematics Department be separated from the School of Science, Education and Humanities and put tempo-

rarily into Engineering with Paul Chenea, an engineer, as temporary head. It was being run day-to-day by a "troika" composed of Professors Jerison, Golomb and Henricksen. We worked on a new curriculum, including statistics, in a joint Mathematics, Statistics and Computer Science graduate committee. Separation of the three departments was gradual. In Engineering, the principal divisions are Schools, not Departments. Departments are parts of Schools. So the Mathematics Department became the Division of Mathematical Sciences. I suppose they were reluctant to call it a school because it was destined to become subject to the School of Science. In 1962, Felix Haas, who came from Wayne State University, became the Mathematics Department Head, and later Dean of a new School of Science. Anyway, we separated slowly and the separation is not complete even now, since we share the finance office with Mathematics.

**Mary Ellen:** Was Shanti Gupta here at that time?

**Lou:** No, he came in 1962 while Mathematics was still in the School of Science, Education and Humanities. We were all still half time in the Lab and in Mathematics until the three parts, Mathematics, Statistics and Computer Science began to separate. Shanti was made head as soon as we began listing our courses separately in the Mathematics pages of the catalog. Shanti, Sam Conte and Gerald MacLane were made heads of the Departments of Statistics, Computer Science and Mathematics, respectively, in the Division of Mathematical Sciences. Gerald MacLane headed the Division.

**Mary Ellen:** Was the Laboratory in the Division?

**Lou:** The Statistics and Computation Laboratory was never part of Math. Kossack was a friend of President Hovde and managed to have the lab directly under the president. So it simply stayed

## *Interview with Lou Cote (continued)*

Computing Center. (The Statistical Consulting Service is still in the Computing Center today.) They were given the responsibility for statistical consulting and our graduate students received assistantships through them.

**Mary Ellen:** What sort of computational facilities did the Lab have?

**Lou:** Purdue had a computer before I left for Syracuse. I think it was an Electro-Data machine. It was programmed by paper tape, the kind used in teletype machines. The head of the computation part of the lab was Al Perlis who went to Carnegie. When I got back we had, I think, two IBM machines and Saul Rosen was in charge.

**Mary Ellen:** Was Norma Lucas here when they created the department?

**Lou:** Norma was a secretary and Myrna Studden was head secretary. After Myrna left, we had another head secretary who stayed a short time. Norma then became the head secretary. That turned out to be very good for the department and she is now the department's administrative assistant.

**Mary Ellen:** How many courses in statistics were there before the department was created?

**Lou:** We had maybe six or eight courses, all in the Mathematics curriculum and they were used in the MS program for students who wanted to major in statistics.

**Mary Ellen:** Who taught experimental design?

**Lou:** Virg Anderson taught it. The regression course, MATH 512, was taught by a couple of people, Harley McKean and Paul Irick.

**Mary Ellen:** Did Anderson come after you came?

**Lou:** No, he was here before I first came. He, Carl Kossack, Irving Burr, Charlie Hicks, Harley McKean, Henry Teicher and Paul Irick (who went to U.S. Highway Research) were here. Morris Skibinsky and Om Agarwal got here when I did.

**Mary Ellen:** We now have a large number of introductory statistics courses for undergraduates.

Were such courses taught in the Mathematics Department?

**Lou:** No, there was no demand for undergraduate courses in statistics. It was thought of as a tool for graduate research. Later when other departments began to recognize the usefulness of statistics in their undergraduate curriculum, Shanti worked hard to see that the Statistics Department taught them.

**Mary Ellen:** What was it like for statistics graduate students?

**Lou:** The statistics graduate students in the 50's got their degrees in Mathematics. The MS program was not as large as it is now. The paper work for admissions and management of the graduate students was done in Mathematics by Merrit Webster. When the Statistics Department became more autonomous within the Division of Mathematical Sciences we formed our own Graduate Committee and Shanti asked me to take over the duties of secretary.

The Division Graduate Committee's first job was to set up MS and Ph.D. course programs. (Statistics graduate students still got their degrees in Mathematics until the departments formally separated). Several new statistics courses were introduced at this time. The first was a graduate probability course, MATH 519, as prerequisite for MATH 528, the mathematical statistics course. I think the stochastic processes course, MATH 532, was introduced at this time also.

**Mary Ellen:** When did the Applied Masters Program get started?

**Lou:** There were some students, even in the 50's whose intentions were to terminate with an MS. They often chose a statistics option in the Mathematics MS program. When we got our own Graduate Committee, we made the Applied Statistics MS program more distinct from the Ph.D. program. Still the Applied Stat MS was pretty mathematical. The program has always been popular with the industrial people who hired our stu-

## *Interview with Lou Cote (continued)*

dents, so we were never tempted to dilute the mathematics in it. George McCabe always made his assistants in the Consulting Service present the mathematical background of the methods they were using. The students knew that it was part of their job to understand the underpinnings of applied statistics.

**Mary Ellen:** You have met almost all of the students who came here. Can you recall a few?

**Lou:** Jim Norton who went to the IU Medical School's Psychiatric Research Group; Jim Stapleton, who, for a time, headed the Statistics Department at Michigan State; Patricia Conn who is now at IUPU-Fort Wayne; John Deely who was my graduate assistant in a calculus class is now at the University of Canterbury in Christchurch, New Zealand; and Judy Schaper, who has become a very successful independent consultant.

Others would be Jiunn Hwang who got a 100 on the Qualifying Examination. There was only one other student who has done this, Woo-Chul Kim.

Two statistics students who got married here were Mong-Na Lo and Wen-Jang Huang. Lisa Greisen was here at the same time.

The student who organized the Statistics Graduate Student Association was Larry Roi. Keith Crank came after him.

Danielle Bernstein got a MS here. Becky Elliot was a student with a good sense of humor. Betty Selles shared with me a liking of German lyric poetry.

I can't get away without mentioning Bruce Brown (now in Tasmania) and Sid Resnick, both of whom would discuss philosophy with me.

I must also mention Dan Mihalko with whom I often played poker. A student who came later in life to the department was Vedula N. Murty, who got a Ph.D. with Studden.

Peter Purdue was our first Irish student. He belongs here because of his name. Once I got him into my office with Peter Danaher from New Zealand and

Michael Brown from South Africa. Because I believed that there was no love lost between their respective countries and Mother England, I told them they all sounded like limeys to me. The joke fell flat because none of them knew what a limey was.

I can keep going on this list for a long time.

**Mary Ellen:** I think we are out of room. Thank you, Lou.



### *Conference in Honor of Shanti S. Gupta (continued from page 5)*

Chicago), David Moore (Purdue U), Klaus Nagel (Siemens AG, Germany), S. Panchapakesan (U of Southern Ill.), Marianna Penskaya, (Purdue U), Dimitris Politis (Purdue U), Andrew Rukhin (U of Maryland Baltimore County), Stephen Samuels (Purdue U), Thomas Santner (Ohio-State U), Tom Sellke, Purdue U), Radhey Singh (U of Guelph), Pranab K. Sen (U of North Carolina), Dongchu Sun (U of Missouri-Columbia), Ajit Tamhane (Northwest U), Brani Vidakovic (Duke U), and Philip L. H. Yu (U of Hong Kong).

The conference was supported by the National Science Foundation, the National Security Agency, and Purdue University.

## Selected Faculty Activities

### Professional Societies

Jim Berger is the President of the *Institute of Mathematical Statistics*. He also completed his term as the Chair of the *Section on Bayesian Statistics of the American Statistical Association* in December 1995.

Mary Ellen Bock is a member of the Board on Mathematical Sciences of the National Research Council. She also completed her term as the Chair of the *Section on Statistical Computing of the American Statistical Association* in December 1995.

Evelyn Crowley is the Secretary-Treasurer for the Statistical Computing Section of the American Statistical Association in 1996.

Burgess Davis is serving as Chairman of Institute of Mathematical Statistics Publications Committee.

David Moore has been nominated for president of ASA. He also completed a two-year term as president of the *International Association for Statistical Education* in August, 1995.

Philip Protter is on the Scientific Committee of the 24th Conference on Stochastic Processes and Their Applications (to be held June 16-20, 1997, in Viña del Mar, Chile).

Steve Samuels is Program Director at the National Science Foundation.

Tom Sellke is on the IMS organizing committee for Joint Statistical Meeting in Chicago, August 1996.



### Editorial Boards

Jim Berger is Associate Editor for the *Annals of Statistics* and *TEST*. He is also Coordinating Editor for the *Journal of Statistical Planning and Inference*.

Rebecca Doerge is the Technical Editor for *Journal of Quantitative Trait Loci*.

Chong Gu was Guest Associate Editor for *Statistica Sinica* on four submissions.

Shanti Gupta was Editor-in-Chief for the *Journal of Statistical Planning and Inference* from 1989-91 and is currently Coordinating Editor. He is also a member of the Editorial Board for *Statistics and Decisions* and *Sequential Analysis*.

George McCabe is Associate Editor, *Computational Statistics and Data Analysis*.

David Moore is the Associate Editor of *International Statistical Review* and of *Journal of Statistical Education*.

Philip Protter is Associate Editor, *Revista de Matemáticas Aplicadas* and also *Stochastic Processes and Their Applications*.

Steve Samuels is Associate Editor, *Chance Magazine*.



### David Moore's Distinguished Chair

David S. Moore was named the Shanti S. Gupta Distinguished Professor of Statistics. Moore joined the Purdue faculty in 1967 as an assistant professor of statistics. He was promoted to associate professor in 1971 and to professor in 1977.

Moore has developed videos for distance learning and put together "Against All Odds," a series of 26 half-hour programs for the Corporation for Public Broadcasting.

Colleagues praise Moore's teaching abilities with such comments as: "...he cares deeply for his subject, and also for his students and audiences" and "He is

## *Selected Faculty Activities*

one of those rare gifted individuals who has demonstrated that top-notch researchers can be top-notch teachers and can make a difference in improving the education system.” Moore says learning is a student’s responsibility. “Teachers can only provide an environment that encourages students to learn.”

tistical Society, England (plenary speaker); Texas Junior College Teachers Association; the Regional Conference for Isolated Statisticians (keynote).

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### *Visiting Faculty*

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### *Selected Invited Faculty Talks*

Jim Berger gave the Presidential Invited Address at the 50th Session of the International Statistical Institute, Beijing, China, August 1995. He also gave the keynote Address at the Conference on Statistical and Bayesian Methods in Hydrological Science, Paris, France, September, 1995. He gave a series of three lectures on *Bayesian Model Selection*, University of the Orange Free State, South Africa, November, 1995.

David Moore gave talks this year for the Joint Mathematics Meetings, San Francisco; Royal Sta-

In Fall 1995, several new visiting faculty members joined the department. Arup Bose, Visiting Associate Professor, (Ph.D., 1987; Indian Statistical Institute, Calcutta), was here during 1995-1996. Joining him as Visiting Professor was Jayanta Ghosh (Ph.D., 1964; Indian Statistical Institute). He visited here Fall Semester, 1995. Katsuaki Iwaki, Visiting Scholar, (M.S., 1984; Chiba University of Commerce), finished his two-year visit this summer. German Pliego, Visiting Assistant Professor, (Ph.D., 1991; Purdue), is visiting here during 1995-1997. Regis Serinko, (Ph.D., 1991; The Pennsylvania State University), visited here starting in Spring Semester 1995 and finished his visit in May 1996. Weizhen Wang, Visiting Assistant Professor, (Ph.D., 1995; Cornell), visited here during 1995-1996.

## *Faculty Research Interests 1995-1996*

**James O. Berger**, Professor and Brumfield Distinguished Professor of Statistics, *Decision Theory, Mathematical Statistics, Bayesian Analysis.*

**Mary Ellen Bock**, Professor and Head, *Nonparametric Regression, Statistical Computing, Genome Analysis.*

**Arup Bose**, Visiting Associate Professor (1995-1996), *U,M Statistics, Asymptotics in Dependent Models, Bootstrap, Central Limit, Edgeworth Expansions, Sequential Estimation.*

**Evelyn Crowley**, Assistant Professor, *Bayesian Analysis, Classification, Statistical Methods in Genetics.*

**Anirban DasGupta**, Professor, *Decision Theory, Mathematical Statistics.*

**Burgess Davis**, Professor (joint with Mathematics), *Probability.*

**Rebecca Doerge**, Assistant Professor (joint with Agronomy), *Statistical Issues in Quantitative Genetics, Resampling Methods, Regression.*

## *Faculty Research Interests 1995-1996*

**Mauro Gasparini**, Visiting Assistant Professor, *Bayesian Statistics, Statistical Computing, Reliability*.

**Jayanta K. Ghosh**, Visiting Professor (Fall 1995), *Bayesian Analysis, Asymptotics, Stochastic Modelling*.

**Chong Gu**, Assistant Professor, *Statistical Computing, Nonparametric Estimation*.

**Shanti S. Gupta**, Professor, *Selection & Ranking, Decision Theory, Reliability, Order Statistics*.

**Katsuaki Iwaki**, Visiting Scholar (1995-1996), *Bayesian Analysis*.

**Thomas Kuczek**, Professor and Associate Head of Statistical Consulting, *Experimental Design, Response Surface Alternatives to Taguchi, Probability Models in Biology*.

**Steven P. Lalley**, Professor (joint with Mathematics), *Ergodic Theory, Probability, Applications to Dynamical Systems & Geometry*.

**George P. McCabe**, Professor and Head of Statistical Consulting, *Applied Statistics, Biostatistics, Linear Models*.

**David S. Moore**, Professor, *Statistical Education*.

**German Pliego**, Visiting Assistant Professor (1995-1996), *Wavelets and Statistics*.

**Dimitris N. Politis**, Associate Professor, *Time Series, Resampling Methods*.

**Philip Protter**, Professor of Mathematics (joint with Statistics), *Probability Theory, Stochastic Integration and Differential Equations, Finance Theory, Numerical Analysis of SDEs, Weak Convergence*.

**Herman Rubin**, Professor, *Mathematical Statistics, Probability Theory, Numerical Methods, Robustness, Decision Theory*.

**Stephen M. Samuels**, Professor, *Probability Theory, Optimal Stopping, Probability Inequalities, Applied Statistics*.

**Thomas Sellke**, Professor, *Sequential Analysis, Probability Theory*.

**Regis Serinko**, Visiting Assistant Professor (1995-1996), *Inference for Dynamical Systems, Applied Ergodic Theory, Fractals*.

**William J. Studden**, Professor (joint with Mathematics), *Optimal Designs, Tchebysheff Systems, Spline Smoothing*.

**Grace F. Wang**, Lecturer, *Bayesian Reliability Analysis*.

**Weizhen Wang**, Visiting Assistant Professor (1995-1996), *Bioequivalence*.



## *News from the Statistical Consulting Service* *by Regina Becker*



*Regina Becker became the new manager of the Statistical Consulting Service staff in November 1995. She comes to us from Subaru Isuzu Automotive. She is an ASQC certified quality engineer and coordinated the ISO 9002 registration project at SIA. (ISO 9002 is an internationally recognized quality system standard that is currently being adopted by many manufacturing and service industries. Ford, GM and Chrysler require that all of their suppliers conform to this standard by 1997.)*

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The Statistical Consulting Service (SCS) has had a busy semester. The Software Consulting office in Math Science B5 is open from 10:00 - 4:00 daily and helps walk-in clients with a wide variety of statistical software problems. Software consulting is available all year, including the period between semesters. The Design Consulting service works with faculty, staff and graduate students throughout the university, offering advice on research design, analysis and interpretation. Seven design consultants are currently working with over 100 clients. George McCabe and Tom Kuczek participate in initial meetings with clients and consultants and discuss the progress of cases at our weekly meetings.

We will miss the consultants who are graduating this semester - Mary Guidinger, Chris Presley, Joy Rathnau, Oriel Strickland and Brian Yasz. Four new summer consultants, Renee Jones, Xun Lin, Karen Stechuchak, and Roland Thorpe, joined Kent Claussen, Anupama Joshi and Lin Li in June. Their training began in the Spring Semester; they

were matched up with a veteran consultant and attended some client meetings. This makes the transition between semesters easier.

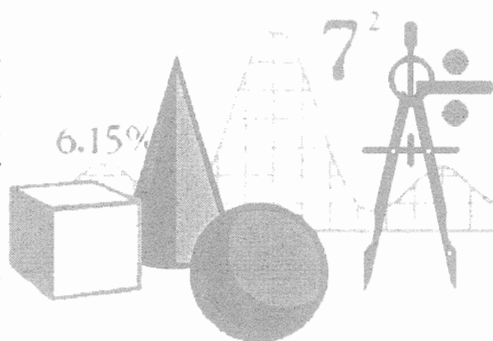
The consulting service is currently working on a CQI (Continuous Quality Improvement) project within the scope of the University-wide Excellence 21 initiative. We are creating a quality system that meets ISO 9002 guidelines. The system focuses on documentation of procedures, training and customer satisfaction, but requires that all aspects of the service be examined. Several student consultants participated in the first phase of the project. They have documented their work processes and have suggested many ways to improve the product. They have also learned about the ISO 9002 requirements; some of them will be working at companies that are preparing for ISO registration or recertification. Teena Seele, our SCS assistant, has also been part of the ISO preparation team and will focus on implementation of document control record retention.

## *About Our Actuarial Science Program*

While many statistics majors over the years have pursued actuarial careers, Purdue's formal Actuarial Science Program is comparatively new. Begun in 1988 under the watchful eye of counselor Keith Schwingendorf, the Actuarial Science Program is a joint program of the Statistics Department and the Mathematics Department. Professor Carl Cowen, Department of Mathematics, was appointed the first Director in the spring of 1992 and Professor Philip Protter was appointed Associate Director this spring.

One definition is that an actuary is a business professional who uses statistical, mathematical, and financial tools to assess the financial consequences of risk. With this in mind, students majoring in Actuarial Science take a variety of statistics, mathematics, and business courses that prepare them for an actuarial career as well as for the first few actuarial exams. In addition to the required courses, actuarial students are encouraged to take economics, computer science, communications, and more business courses to be well prepared for the profession. The goals of the program are that students will be well informed about the

career, have a high GPA, and will have passed two actuarial exams by January of their senior year. This May, 18 students finished their actuarial studies and all the graduates who have met these goals have found very good positions. Moreover, a substantial number of underclass students have found actuarial internships for the summer will enable them



to gain experience and help them determine whether they have chosen the right career.

The Actuary Club has been very active in the past few years in bringing companies to campus to interview (15 this spring), in letting other companies know about our students, and in providing opportunities for students' career development, for example, with interviewing or other workshops.

Purdue is fortunate to have an Actuarial Advisory Council con-

sisting of about a dozen actuarial executives to advise us on curricular and career issues. With the Council's help, the requirements for the major were substantially revised last year. Moreover, the program has been generously supported by a number of companies, both by financial assistance for scholarships and course development and by their participation in our program.

The Actuarial Science Program is in an exciting period of development and growth. More information about the program can be found at the Actuarial Science web site: <http://www.math.purdue.edu/~actuary>. If you are active in or interested in an actuarial area, let us hear from you!

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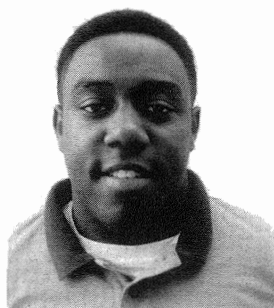
### *World Wide Web*

Here is the World Wide Web URL (address) for our server: <http://www.stat.purdue.edu>. It contains information about the faculty and students, the graduate program, etc.



## *Student News*

### *Coca-Cola Fellowship*



Graduate student, **Roland Thorpe**, is one of the first recipients of graduate fel-

lowships funded by the Coca-Cola Foundation. The recipients participated in Purdue's Historically Black Institutions Visitation Program and are enrolled in Purdue's Graduate School. Thorpe is a graduate of Florida A&M University, Tallahassee.

### *L. J. Cote M.S. Excellence in Statistics*

The recipient for 1995 was **Christine Hixon** and for 1996, **Mary Guidinger** and **Brian Yasz** shared the award.

This award is in honor of Louis J. Cote who retired from the Department of Statistics in June of 1991. He taught for Purdue Statistics Department for nearly 33 years.

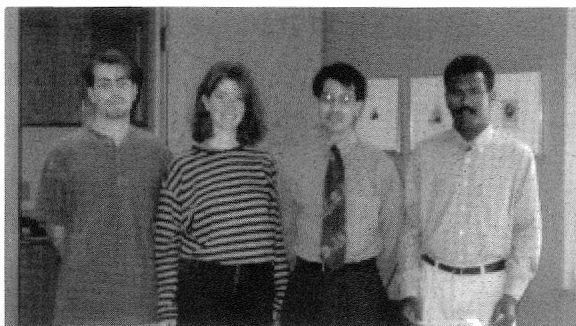


*School of Science  
Outstanding Senior  
Michael Bishop*

### *I. W. Burr Award*

The co-winners for 1995 were **Jacek Dmochowski** and **Julia Varshavsky**. The recipient for 1996 is **N. D. Shyamalkumar**.

This award was established in 1974 upon the retirement of the late Professor Irving W. Burr, an eminent statistician who taught at Purdue for nearly 35 years.



*Brian Yasz, Mary Guidinger, Gabriel Carrillo and N. D. Shyamalkumar*

### *V. L. Anderson Scholarship*

The 1996 recipient is **Gabriel Carrillo**.

The scholarship is in honor of Virgil Anderson who retired from the Department of Statistics in December of 1986 after nearly 36 years.

### *School of Science Outstanding Senior*

The 1996 recipient of this award is **Michael Bishop** who is in Actuarial Science.

### *Actuarial Science Awards*

This spring, the awards in the Actuarial Science Program, a joint program of Mathematics and Statistics, were presented by Greg Childs representing Lincoln National Corporation of Fort Wayne. Purdue Lincoln Scholars were **Gabriel Carrillo** and **Aaron Lambright** and Actuarial Achievement awardees, were **Laura Kisala**, **Donovan Lemelin**, and **Amy Schultz**. Actuarial Alumni Awards went to promising new students **Tze Chao Ng**, **Scott Sheefel** and **Sean Schindl**.

In addition, last fall, **Liliana Lopez** was awarded a Society of Actuaries and Casualty Actuarial Society Minority Scholarship, an award made to a few promising actuarial students nationally.

**Aaron Lambright** was selected for one of the State Farm Companies Foundation Exceptional Student Fellowships for Spring 1996. These nationally competitive fellowships are awarded to seniors whose major is related to business on the basis of academic achievement, leadership, and potential for business success.



# *Student News*

## *New Graduate Students*

Since August, 1995, 17 new graduate students joined the department. We were delighted to welcome: Andrey Chaskov (Russia), Georgios Chelidonis (Greece), Aaron Daly (Crown Point, IN), James Dobbin (West Lafayette, IN), Christine Emsley (Waterloo, IL), Hanaa Girgis (Egypt), John Hayes (Poynette, WI), Veronika Kourcheva (Russia), Ohjoon Kwon (Korea), Brian Lichy (Royal Oak, MI), Nitai Mukhopadhyay (India), Brian Munneke (Clearlake Oaks, CA), Karen Stechuchak (Auburn, NY), Jason Stover (Porterville, CA), Roland Thorpe (Macon, GA), Wen-Chi Tsai (ROC), and Liqing Yan (ROC).

## *New Graduates 1995-1996*



### *Doctorates*

Marcey Abate (Gupta and Kuczek) *The Use of Historical Data in Statistical Selection and Robust Product Design.*

Jacek Dmochowski (Sellke) *Properties of Intrinsic Bayes Factors.*

Dustin Ruff (McCabe) *Weighted Cramer-von Mises Estimators of a Distribution.*

Julia Varshavsky (Berger) *On the Development of Intrinsic Bayes Factors.*

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### *Masters*

Qiang Bai  
Lin Chen  
Sarat Dass  
Mary Guidinger  
Ruoh-Lin Hu  
Martin Olsak

Christopher Presley  
Joy Rathnau  
Dejun Tang  
Xuyan Xu  
Brian Yasz  
Ying Zhang

## *Distinguished Alumni Awards*

*The two statisticians receiving the most recent School of Science Distinguished Alumni Awards are Dr. Jerone Deverman and Dr. Donna Brogan:*



*Dr. Jerone Deverman  
1995*

Dr. Jerone Deverman is founder and principal consultant of Medical Data Systems in Albuquerque, New Mexico. He has over thirty years experience in computer systems, data processing, systems analysis, statistical analysis, mathematical modeling and computer simulations, operational testing and evaluation, and large data systems applications. He is well known for his expertise and statistical contributions in the field of large scale health care information systems

involving public, federal, and commercial programs such as Medicaid, Medicare, Blue Cross/Blue Shield, Health Maintenance Organizations, and Professional Review Organizations. He has made strong contributions in the statistical design and analysis of data arising in health care and medical insurance. Dr. Deverman is a frequent invited speaker at meetings of the International Foundation of Employee Benefit Plans, and he has spoken on analysis of health care claims data at national conferences. Dr. Deverman has been a member of the Purdue Alumni Association Board of Directors, and President of the Purdue Club of New Mexico. He is also an active participant in the School of Science Dean's Club and the President's Council.

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*Dr. Donna Brogan  
1996*



Dr. Donna Brogan is Professor, both in the Biostatistics Division of the Rollins School of Public Health and in the Winship Cancer Center in the School of Medicine at Emory University, Atlanta, Georgia. She is a distinguished scholar in biostatistical research and is an expert on the statistics of breast cancer. She has also been a leader in the advancement of women in the field of statistics. She received the B.A. in Mathematics from Gettysburg College in 1960, the M.S. in Statistics from Purdue University in 1962 and the Ph.D. in Statistics from Iowa State University in 1967. She has served as the Division Director of Biostatistics at Emory from 1991-

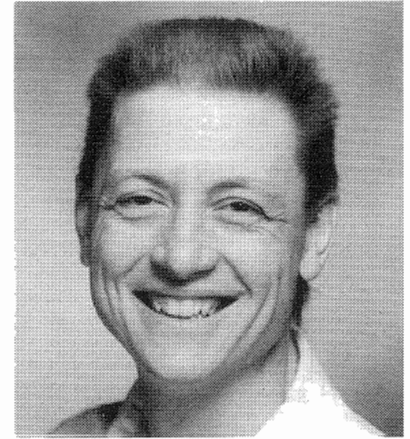
1994. In 1971 she was a co-founder of the Caucus for Women in Statistics, which honored her in 1991 for "fostering opportunities for women in the discipline and profession of statistics". She co-authored a basic epidemiology/biostatistics book in 1983 that was selected as book of the year by the *American Journal of Nursing*. She was elected a fellow of the American Statistical Association in 1985. The Committee of Presidents of Statistical Societies gave her the Elizabeth Scott Award in 1994 for "significant contributions to the recruitment and advancement of women in statistics". She received the Thomas Jefferson Award from Emory University in 1993 for dedication as scientist, teacher, administrator and citizen. She received the Distinguished Alumni Award from Gettysburg College in Pennsylvania in 1994. In 1995, Iowa State University engraved her name on its Plaza of Heroines, which honors outstanding women graduates and faculty.

## *Distinguished Alumni Awards*

*There have been five other School of Science Distinguished Alumni Awardees from the Department of Statistics.*



**Dr. Gary C. McDonald**  
General Motors Research  
Laboratories  
1990



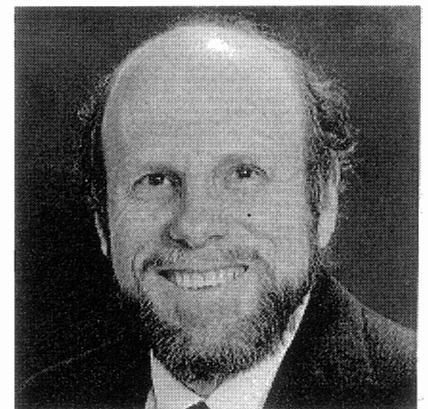
**Dr. Thomas Lorenzen**  
General Motors Corporation  
1992



**Dr. Robert J. Lundegard**  
National Institute of  
Standards and Technology  
1991



**Dr. Fred Leone**  
American Statistical  
Association  
1993



**Dr. Raymond J. Carroll**  
Texas A&M University  
1994



## Alumni News

**Marcey Abate** (Ph.D., 1995) is currently a Senior Member of the Technical Staff in the Statistics and Human Factors Department at Sandia National Laboratories located in Albuquerque, New Mexico. Most of her time is spent supporting the Federal Aviation Administration (FAA). She provides statistical support for an FAA safety analysis system and also assists the FAA in planning for data quality. Within Sandia, she is active in a laboratory directed research and development effort that is studying high precision measuring instruments. Marcey participates in the American Society for Quality Control and the American Statistical Association through section activities and presentations.



**Rich Benz** (M.S., 1994) has recently accepted a position as a statistician with Kimberly-Clark Corp. in Neenah, WI, May 1996. Rich is working for their Consumer and Product Information group helping to improve and develop new products. Formerly, Rich worked for DHL Worldwide Express in Tempe, AZ as a business analyst. During his time at DHL, Rich worked extensively with SAS to help and provide key business data to the local managers. Rich and his wife, **Naomi** (Buerck, M.S. 1994) had their first child,

Anna Marie born June 26, 1996. Naomi works for American Express in Phoenix, AZ and plans to start teaching at a community college in Wisconsin starting in the Fall of 1996.



**Mark Berliner** (Ph.D., 1980), has been a faculty member in the Department of Statistics, Ohio State University since finishing his Ph.D. at Purdue. His research interests primarily revolve around Bayesian analysis. In recent work, he has focused on statistical and probabilistic reasoning in dynamical systems and complex processes. In June, 1995, he began a 27 month appointment as Geophysical Statistics Project Leader at the National Center for Atmospheric Research in Boulder, CO. This project is a special National Science Foundation funded effort. The goals include further development and application of statistical analyses in the earth sciences, as well as helping to foster a lasting collaborative relationship between the mathematical/statistical modeling and atmospheric/oceanographic science communities.

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**Raymond Carroll** (Ph.D., 1974). Raymond started graduate school at Purdue in 1971, having graduated from the University of Texas. He had a great time in graduate school, with lots

of help and advice from more senior graduate students (especially Jerry Senturia, David Wolfson, D. Y. Huang and Tom Santner), lots of discussions with his office mates (Steve Fuhman and Sudjana) and fun with the youngsters (among them George Casella and Roger Berger). He and Leon Gleser were “new guys” the same year and they have kept up a now 25 year friendship. Another long-time friend, George McCabe, served on his wife’s Ph.D. committee. (Raymond found that statistical consulting and a happy marriage do not mix!). He graduated from Purdue in 1974, writing his dissertation with Shanti Gupta. Professor Gupta was a terrific influence on him and has continued to serve as a mentor. He has tried to pattern himself as an advisor of graduate students based on his role model.

From his first job at the University of North Carolina, in 1987 he moved to Texas A&M University in College Station, first as department head and then as a regular faculty member. His first love was fisheries science (which makes no sense, having grown up in the Texas Panhandle and having gone to graduate school in Indiana), which served as the motivation for almost all of his early work. He is a member of their university-wide faculties of Nutrition and Toxicology, which are his two main current interests

## Alumni News

in applied statistics. He recently helped the National Cancer Institute design a major study of cancer and nutrition among those over 50 years of age, and has been involved in helping develop the EPA's methodology for risk assessment of short-term inhalation of chemicals. Raymond can be reached on the internet at [carroll@stat.tamu.edu](mailto:carroll@stat.tamu.edu) and via the World Wide Web at the statistics department home page: <http://stat.tamu.edu/stat/> (then look for faculty).

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**George Casella** (Ph.D., 1977) has been at Cornell University in the Biometrics Unit since 1981 and has just received a promotion as the Liberty Hyde Baily Professor of Biological Statistics. He continues his research and has recent publication in *JASA* and *Biometrika*. His interests are in computational algorithms, high-accuracy approximations, empirical Bayes, and decision theory. He has recently given talks at Johns Hopkins, University of Manitoba, University of Chicago, Penn State and Florida State. He has just finished a book, "Theory of Point Estimation", Second Edition, with Erich Lehmann and is currently working on the second edition of his book with Roger Berger, "Statistical Inference." He became the Theory and Methods

Editor of *JASA*, January 1, 1996. George and his wife Anne have the "two cutest kids you ever saw", Benjamin, 4, and Sarah 2.

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**Shun-Yu Chen** (Ph.D., 1983) was a Professor in the Department of Mathematics at National Cheng-Kung University, Taiwan, from 1983 to 1985. In 1985, he became Professor and Chairman in the Department of Mathematics and then Professor and Chairman in the Department of Statistics in 1986 through 1992. In 1993, he became Professor and Dean in the College of Management Sciences where he remains.

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**Brad Evans** (Ph.D., 1995) went to work for Kellogg's as a statistician after receiving his degree. He was an intern with them from January 25-May 22, 1995.

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**Duncan Fong** (Ph.D., 1987) started his academic career at Penn State as an assistant professor and is now an Associate Professor of Management Science. Duncan has presented numerous papers at national and international conferences and has also given talks at U. Chicago, U. Montreal, U. British Columbia, Georgia Institute of Technology, U. Georgia, U.

Northern Illinois, Bowling Green University, Penn State and U. New Hampshire. His interests lie in both theoretical and applied statistics including Bayesian analysis, ranking and selection, decision theory, statistical computing and statistical applications in experimental economics, inventory and operations management.

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**Eric P. Fox** (M.S., 1987) is the Supervisor of the Engineering Statistics Group at Pratt & Whitney in West Palm Beach, FL. Pratt & Whitney designs and manufactures jet engines and space propulsion systems. The Statistics Group is comprised of ten statisticians all of whom have Master's Degrees in Statistics. The main functions of the Statistics Group include: (1) Assessment of safety risk for field problems and implementation of corrective actions, (2) Development of effective engine test programs with statistical sampling plans or experimental design, (3) Probabilistic analysis of engineering designs to optimize reliability, (4) Data analysis for trends and patterns, and (5) Development of statistical and mathematical software. Eric's technical interests include probabilistic design system development, probabilistic modeling of composite material

## *Alumni News*

failure modes, reliability certification test program construction, experimental design implementation and instruction, Bootstrapping methods, Bayesian statistical analysis, and general mathematical modeling. He is active within the Society of Automotive Engineers G-11 Probabilistic Methods Subcommittee on Probabilistic Methods, the American Institute of Aeronautics and Astronautics, and the American Statistical Association.

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**Christine (Hixon) Smiley** (M.S., 1995) is a consultant with Kestnbaum and Company in Chicago Illinois. The firm specializes in database marketing, which involves using information about one's customers to better market to them. She has worked with a variety of clients, including catalog companies, banks and retail stores. Her projects have entailed a wide range of data analysis using SAS, including linear regression modeling, logistic regression, cluster analysis, factor analysis, and correspondence analysis. She has built several regression models using customers' past catalog transactions to predict who is most likely to buy from the next catalog. She has attended four direct marketing conferences as well as the SAS Users Group conference in Chicago. Christine married Ken Smiley on March 23, 1996.



**Wen-Jang Huang** (Ph.D., 1983) was the founding Chairman of the Department of Applied Mathematics, National Sun Yat-sen University in Kaohsiung, Taiwan, R.O.C. from 1987-1993. He received the Honorable Award from the Chinese Statistical Association for contributions in statistics developments and statistics education in Taiwan in 1992. In the academic year of 1992, 1993 he received the Distinguished Research Award from the National Science Council of the Republic of China. From 1993-1995, he served as the Chief Editor of the Journal of Chinese Statistical Association. In 1994, he served as the chairman of the committee of the Statistics Division of the National Science Council of the Republic of China.

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**Mike Morrow** (M.S., 1991) went to work in the Applied Statistics Group at Eastman Chemical Company in Kingsport, Tennessee after graduation. At that time, Eastman Chemical Company was the Chemicals Division of Eastman Kodak located in Rochester, New York. In January of 1994, Eastman Chemical Company was spun off by Eastman Kodak and is now a publicly owned company represented as EMN on the New York Stock Exchange. The applied statistics group is an internal statistical consulting

group at Eastman. Currently Eastman has 14 statisticians, eight of whom work in the Applied Statistics Group. The primary products of Eastman are chemicals, fibers and plastics. Mike has worked in the fibers and plastics areas providing statistical support to managers, teams and individuals. He has also worked in a variety of functions in the company including research, development, manufacturing and analytical services. Primarily he persuades clients to use statistical techniques in the development and improvement of new and current products and processes, developing and evaluating analytical techniques and the delivery of statistical training courses. The majority his work centers around design and analysis of experiments, empirical modeling, variation studies and statistical control. He emphasizes the planning stage of experimentation. Through a coaching process, he tries to enable clients to design and analyze their own experiments.

Mike and Professor Tom Kuczek, Purdue University, have worked together building a model for Industry/Academic collaboration work since he graduated. As a result of this, they were one of 20 pairs to receive a grant from NSF to further collaborative efforts. A result of this grant is the publication of a book of case studies.

## Alumni News

Tom, Marcey Abate (Ph.D., 1995) and Mike authored a case study that will be part of this publication. He has made presentations on Applications of Statistics in Industry, Design of Experiments and basic statistics at various universities (Purdue included) and even some local high schools. Mike is most interested in design of experiments, especially in the case where randomization restrictions or other causes create non-independent error estimates. He has found that this is more typical than not in working with his clients. In most of these cases, the replication required in a split-plot design is not practical or economical. He has attempted a couple of alternatives to the total replication required in split plot designs.

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**Chris Rellinger** (M.S., 1995) is currently working in Chicago at Kestnbaum & Co., a database marketing consulting firm. He uses techniques such as regression, logistic regression, factor analysis, and cluster analysis to help companies improve their marketing to and communication with customers. Chris was married December 30, 1995, to Dawn Hoffman.

**Tom Santner** (Ph.D., 1973) taught at Cornell from 1973-89 in the Department of Operations Research. He spent a year at NIH on leave in 1978-79 and a year visiting the Biostatistics Department at the University of Washington in 1981-82. He then spent six months visiting Purdue. Tom has been at Ohio State University since 1989 first as Director of the Consulting Service and currently as Chair for the past four years. Next year he will go on sabbatical to Munich.

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**Ken Smiley** (M.S., 1995) moved to Chicago after graduation and began working for Information Resources, Inc. This Chicago-based company provides a variety of information, software and consulting services with a particular focus on the consumer packaged goods industry. Their services include proprietary databases, advanced analytic and software application products to assist clients in testing, executing, monitoring and evaluating sales, marketing and distribution programs and these services are marketed in 26 countries worldwide. At IRI he works in a small group within the R&D department that focuses on a variety of internal development issues. He uses SAS quite extensively and has had the opportunity to attend

a SAS programming class in Chicago at the SAS Institute Training Center as well as attend the 21st Annual SAS Users Group International Conference. Ken married Christine Hixon on March 23, 1996.

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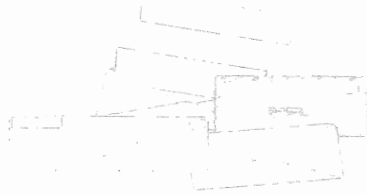
**Julia Varshavsky** (Ph.D., 1995). She came to Purdue in the Fall of 1990, having emigrated from Moscow, Russia, the previous year. Her thesis work was done in the field of Bayesian Analysis, which eventually (among other factors) helped her get a job with Eli Lilly and Company, where she works now as a clinical statistician.

*We want to hear from  
you! Look for the  
Alumni Reply Form on  
page 26 and send us  
your news!*



# *Alumni Reply Form*

Please complete and return this form for our alumni files. Include news (professional and/or personal) of your current activities, or suggestions for the next issue of newsletter. Mail it to Teena Seele, Department of Statistics, Purdue University, 1399 Mathematical Sciences Building, W. Lafayette, IN 47907-1399 or fax it to 317-494-0558.



Name \_\_\_\_\_ Degree(s) and year(s) \_\_\_\_\_

Residence \_\_\_\_\_ Home Phone \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Position \_\_\_\_\_

Business Address \_\_\_\_\_ Business Phone \_\_\_\_\_

\_\_\_\_\_ Fax Number \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Internet/Commercial Electronic Mail Address \_\_\_\_\_

**Please include some information about yourself:**

(unless you request otherwise, we will assume it may be mentioned in future Newsletters.)

If you need more room, please continue on the reverse side.

*Alumni Reply Form (continued)*



# *Alumni News*

## *We Will Miss You*



On January 3, 1996, Thomas J. Lorenzen of General Motors died of cancer. He was 43. Tom is probably best remembered for his work in design of experiments and statistical process control. Tom was born in DeKalb, Illinois on July 31, 1952. He grew up in Hartford, Wisconsin, where his father was also his high school math teacher. His interest in mathematics took him to Purdue University, where he received a B.S. in mathematics in 1973. He decided to continue for a Ph.D. in probability and statistics and completed the program in 1976.

Tom joined the General Motors Research Laboratories in 1976. He received a GM Research award for an outstanding theoretical development, the John M. Campbell Award, and the Wilcoxon Prize for a publication in *Technometrics*.

In 1992, he received the Distinguished Alumni Award from the School of Science. He was also an Adjunct Professor at Wayne State University and Oakland University. He served as an associate editor for *Technometrics* from 1983 until 1988, and for *JASA*, from 1990 until 1993.

Harold Gugel passed away Thursday, April 11, 1996. He was an alumni of the Purdue Statistics Department and received his masters degree in May 1964. He retired from General Motors and shortly thereafter was diagnosed with cancer. He refused to let that affliction slow him down much and died at home at the age of 56.



# *Gifts to the Department*

## *1995-1996 Gift Contributors*

*We thank the following individuals who have donated to the following funds.*



### ***Virgil L. Anderson Scholarship***

Mr. and Mrs. James P. Greaton  
Mr. Charles R. Seitz Jr.

### ***Matching Gifts***

Providian Corporation

### ***Shanti S. Gupta Fund***

Dr. and Mrs. V. L. Anderson  
Mrs. Julia Friedman Arbaugh  
and Mr. Karl Edward Arbaugh  
Mr. Alfred W. Arsenault Jr.  
Dr. Austin M. Barron  
Professor Robert Bechhofer  
Dr. and Mrs. James O. Berger  
Dr. Roger L. Berger  
Professor Mary Ellen Bock  
Mr. Thomas Warner Broene  
Mr. Peter G. Bryant  
Dr. Raymond James Carroll and  
Dr. Marcia Gail Ory  
Ms. Jennifer Chan  
Dr. Fu-Chuen Chang and Ms.  
Tsi-Shu Huang  
Dr. Jeesen Chen  
Dr. and Mrs. Louis J. Cote  
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## *Meet the Office Staff*

*Norma Lucas: Administrative Assistant*

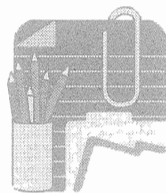


Norma has been with the Statistics Department for 26 years. She assists the Department Head. (She actually runs the department, according to the Head!) She supervises the clerical staff.

*Teena Seele: Information Processing Systems Operator IV*



Teena has been with Purdue for 20 years, 14 of those in the Statistics Department. She backs up Norma and along with her departmental duties, she is the secretary for the Statistical Consulting Service.



*Angie Sondgerath: Secretary IV*



Angie has been with the Statistics Department for 10 months. In July, she became the department Graduate Secretary and does departmental work as well.

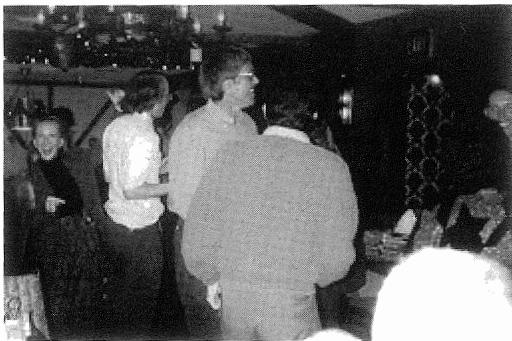
*April Houser*



April left the Statistics Department in July after 3 years to join the staff in the Purdue University Development Office.

## *Scenes from the 1995 Holiday Party*

*The Statistics Department 1995 Holiday Party was held at Bruno's Swiss Inn in Lafayette, Indiana.*



The Statistics Department Newsletter is published semiannually for alumni and friends of the Statistics Department at Purdue University.

We welcome your comments and suggestions for future newsletters. Please send email to [seele@stat.purdue.edu](mailto:seele@stat.purdue.edu), send a fax to 317-494-0558, call 317-494-5324 or write to

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