Annual Report
2005-2006

Statistics and Applied Probability
University of California, Santa Barbara
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Big changes were in the air during the whole past year: 2005-06 was a year of bringing Financial Math to a new level in the Department and at UCSB. The Department expanded in so many ways that we ran out of office space.

To begin with, in Winter 2006 we welcomed our new faculty member, Dr. Jean-Pierre Fouque, Professor of Statistics and Applied Probability, Associated Editor of the *Annals of Applied Probability*, whose resume lists over 60 publications, including the well-known Cambridge University Press book, *Derivatives in Financial Markets with Stochastic Volatility* (joint with G. Papanicolaou and R. Sircar). Dr. Fouque has already assumed the lead of our graduate and undergraduate programs in Financial Mathematics and Statistics. He is also the first Director of the newly established interdisciplinary Center for Research in Financial Mathematics and Statistics (CRFMS).

Although CRFMS is only a few months old, it already has a full scope of activities: Spring quarter saw meetings of the founding members of CRFMS, weekly seminars, numerous short-term visitors from Princeton, Stanford, UC Irvine, Columbia University, etc. The Center successfully sponsored the nomination of Dr. Bruno Dupire, Bloomberg LP New York, a major Wall Street figure, as one of the 2006-07 Regent's Lecturers. Dr. Dupire will be visiting our campus in Spring 2007.

In Summer 2005, will continue handling our actuarial program.

The official CRFMS Inauguration event is planned for October 16th, 2006, featuring lectures by three distinguished speakers: Peter Carr (Bloomberg and NYU), Thaleia Zariphopoulou (UT Austin), and Peter Cotton (Morgan Stanley).

Other exciting events were the election of Dr. Yuedong Wang as a Fellow of the American Statistical Association and the promotion of two of our junior faculty, Dr. Drew (Andrew) Carter and Dr. Dawn Holmes, to tenured positions.

Last March we hosted the 3rd Annual Sobel Lecture, delivered by Dr. Raymond Carroll, Distinguished Professor of Statistics, Nutrition, Toxicology and Epidemiology & Biostatistics; Director of the Bioinformatics Training Program and Core Director of the Center for Environmental and Rural Health at Texas A & M University.

Both undergraduate and graduate programs seem to have reached a healthy equilibrium. For several years our graduate enrollment in Fall has been at the steady level of 50-60 students, with 8 PhD degrees awarded during the year. We also graduated 16 students with the terminal MA degree in Applied Statistics. The undergraduate actuarial program remains at about 50 students, but we added about 30 majors and another 30 premajors in Financial Mathematics and Statistics. Three graduating Financial Math and Stats seniors were supported by the Barbara and Robert Lowes Scholarship this year: Jens Olsen, Jesse Gardeman and Daniel Romotsky.

We are now looking forward to a new productive academic year. Future attractions include the October 16th CRFMS Inauguration Day and Spring public lectures by our distinguished Regents' Lecturer, a department-wide wireless network, a new webpage design, new students and new courses, recruitment of a new faculty and more! Read about it next summer in the 2006-07 Annual Report!
Computing Facilities

Over the course of the year the performance of the compute cluster has been enhanced to handle more users running heavier computational jobs.

The department added wireless access to the graduate tower cubicle area, front office, and computer lab. This secure setup allows authorized staff, faculty and graduate students to utilize a private wireless network in the department.

The computing section of the department website was overhauled to include the most recent information and documentation, especially related to the cluster.

The Computing Team created a new computer lab image for easier access to statistical applications and faster logins.

Statlab Report

StatLab continues to attract a large number of clients, both faculty and students from within UCSB, as well as an occasional consulting from the SB community. This year has been typical with many walk-in clients from various departments such as Education, Geology, Geography, Computer Science to name a few. Professor Yuedong Wang (F) and Professor Jammalamadaka (WS) served as the StatLab Directors with graduate-students Deepali Paradkar (FWS), Homin Jang (F), Edward Montoya (W) and Aleem Siddiqi(S) helping out with the more routine statistical consulting activities. This we believe is one of the most useful services this department provides for a research campus such as ours.
**Faculty**

Guillaume Bonnet, PhD University of North Carolina, Chapel Hill 2002
Andrew V. Carter, PhD Yale University 2000
János Engländner, DSc Technion, Haifa, Israel 1997
Raisa E. Feldman, DSc Technion-Israel Institute of Technology 1987
Jean-Pierre Fouque, PhD Universite de Paris VI 1979
David Hinkley, PhD London University 1969
Dawn Holmes, PhD University of Bradford 2000
John Hsu, PhD University of Wisconsin, Madison 1990
Sreenivasa Rao Jammalamadaka, PhD Indian Statistical Institute, Calcutta 1969
Wendy Meiring, PhD University of Washington 1995
Yuedong Wang, PhD University of Wisconsin 1994

**Emeritus Faculty**

Joseph Gani, Professor Emeritus; PhD Australian National University 1955; DSc, University of London 1970
Svetlozar Rachev, PhD Lomonosov University, Moscow 1979; DSc Steklov Institute, Moscow 1986
James Robertson, PhD Indiana University 1964

**Visiting Faculty**

Bjornstad, Jan
Radu Lazar
Hyunyoung Choi

**Graduate Students**

John Can Arikli
Biliana Bagusheva
David Baker
Nathan Bennett
Elaina Deabay
Samuel Frame
Fuying Gao
Hamid Ghofrani
Kathryn Grace
Michael Grebeck
Richard Harang
Mohammad Hassanpour
Ching-Chi Huang
Homin Jang
Yihua Jiang
Visnja Juric
Naohisa Kaneda
Aleksandr Keyfes
Shahryar Khorsandarvan
Mee-Kyung Kim
Nancy Kim
Eli Kollman
Leslie Kwor
Noureddine Laanaoui
Dong Haeng Lee
Jeongjun Lee
Xiaofang Lei
Edwin Lopez
Qun Luo

**Staff**

Claudia Carlson, Management Services Officer
Juliana Espinosa, Undergraduate Program Assistant
Gail Kelley Murray, Graduate Program Assistant
Troy Small, Computer Systems Administrator
Dënna Zamarron, Financial/Personnel Coordinator

**Student Staff:**

Adriana Solano, Staff Assistant
Deanna Jean R. Sarreal, Student Assistant
Angela Yamagata, Student Assistant
Deanna N. Scott, Actuary President
Degrees Awarded 2005-06

Bachelor of Arts/Science

Statistical Science, B.S.
Chim, Vannak
Lau, Sze Man
Matthews, Eli Michael
Pluhar, James William Jr
Custer, Robyn Louise
Tong, Hank Yale
Wu, Ruey Bin
Beaudoin, Shauna Jean
Calcagno, John Richard
Copper, Steven Matthew
Lee, Michelle Nayoung
Murillo, Franco Rodrigo
Rubinshteyn, Mikhail
Schmeichel, Nathan Andrew
Scott, Deanna Nicole
Vickery, Conrad Lee Jr

Statistical Science, B.A.
Popular, Wade Lincoln
Plog, Kevin Winters
Masumi, Satoshi

Financial Mathematics & Statistics, B.S.
Grubwieser, Stephanie Ann
Becker, Ashley Rose
Reyes, George Angelo
Rodriguez, Alberto Nino
Baez-Winkelman, Christopher Mig
Black, Natalie Helene
Bravo, Eric Joseph
Chong, Kevin
Gardeman, Jesse Mats
Irwin, Christopher Dylan
Jenkins, Alexander Livingston
Johnson, Peter Francis
Katzen, Daryn Thomas
Nunez, Michael David
Olson, Jens Patrick
Price, Robert Matthew
Romotsky, Daniel Ian
Scheppmann, Eric Robert

Minors
Boyadjian, Isabel Anahid
Perucho, Mark Anthony Yadao
Wold, James Thomas
Baldinger, Ivan Sanderson
Fan, Lulu

Rama Thogarati Prize
Awarded to

Robyn Custer

The Rama Thogarati Prize is awarded annually to a senior undergraduate student for high academic achievement. The prize is in memory of Rama Thogarati, a graduate student.

Lowes Scholarship
Awarded for Support in 2006-2007

Wan Chen
Shushan Sadjadi
Greg Trowbridge

The Robert and Barbara Lowes Scholarships in Financial Mathematics and Statistics are awarded each year to talented undergraduate students enrolled in the major.

Masters of Arts
Elaina Deabay
Kathryn Grace
Nancy Kim
Leslie Kwor
Xing Liu
Edwin Lopez
Neha Pandey
Byung-Dong Seo
Song Shi
Marick Sinay
Dezhong Wang
Seth Wayland
Bei Wu
Junqing Wu
Jingjing Zhang
Minjun Zhang
PhD Degrees Awarded
Tiejun Tong
Jiacheng Yuan
Xiaofang Lei
Michael Grebeck
Samuel Frame
Anna Chernobai
Mohammad Aleemuddin Siddiqi
Alexander Villacorta

Ruth and Joe Gani Prize
Awarded to
Tiejun Tong

Awarded for excellence in research, selected by the faculty for the best PhD dissertation.
Colloquia

Fall Quarter

October 3, 2005, Christof Weinhardt, University of Karlsruhe (TH), Germany School of Economics and Business Engineering Information Management and Systems, CAME - Computer Aided Market Engineering

October 3, 2005, Stefan Seifert, University of Karlsruhe (TH), Germany School of Economics and Business Engineering Information Management and Systems, Posted Price Offers in Internet Auction Markets

October 12, 2005, Dale Umbach, Ball State Univ., Some Properties of Skew-Symmetric Distributions

October 26, 2005, Hira L. Koul, Michigan State University, Goodness-of-fit testing in interval censoring case 1

November 2, 2005, Joe Romano, Stanford, Generalized Error Control in Multiple Hypothesis Testing

November 9, 2005, Willa Chen, Texas A&M, Efficiency in Estimation of Long Memory

November 14, 2005, Guillaume Bonnet, UCSB, The Long Time Behavior of a Stochastic Lotka-Volterra System with Jumps

November 16, 2005, Hyunyoung Choi, UCSB, A Bayesian Methodology of Random Intervention Model with Panel Data: Impact Study on Interest Rate Futures Market

Spring Quarter

April 5, 2006, Kevin Plaxco, UCSB Department of Chemistry and Biochemistry, My protein folds faster than yours: using protein folding rates to test protein folding theories.

April 12, 2006, John Boscardin, UCLA Biostatistics, Seemingly simple questions: models for multivariate repeated measures data

April 26, 2006, Jeff Dozier, Bren School, UCSB, "Historical trends in the Sierra Nevada snow cover",


May 17, Valdo Durrleman, Stanford University, "Coupling Smiles"

May 22, 2006, Ronnie Sircar, Princeton University, Impact of Risk Aversion on Credit Derivatives

May 24, 2006, Levon Goukasian, Pepperdine University, "Optimal Risk Taking with Flexible Income" (joint work with J. Cvitanic of Caltech and F. Zapatero of USC)

May 31, 2006, Ker-Chau Li, UCLA Statistics, Likelihood of false positives in hypotheses with strongest evidence from multiple testing: the p-value memoryless conversion approach

June 7, 2006, Nan Chen, Columbia University, IEOR, A tale of two simulations

June 12, 2006, Suhas Nayak, Stanford University, Stochastic volatility surface estimation

June 21, 2006, Chuan-Hsiang Han, Department of Quantitative Finance, National Tsing-Hua University, Taiwan, Option pricing, Hedging, and efficient Monte Carlo methods

Winter Quarter

February 8, 2006, Jan Bjornstad, Visiting Professor at UCSB and Director of Research for Statistical Methods, Central Bureau of Statistics, Norway, Likelihood theory for prediction

February 15, 2006, Kenneth J. Hochberg, Bar-Ilan University, Israel, Hierarchically Structured Branching-diffusing Systems

March 8, 2006, Ingo Ruczinski, Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, Logic Regression

March 14, 2006, Raymond J. Carroll, Distinguished Professor of Statistics Professor of Nutrition and Toxicology, Department of Statistics, Texas A&M University, "Measuring Diet"

March 15, 2006 SOBEL LECTURE, Raymond Carroll, Distinguished Professor at Texas A & M University, Semiparametric methods for gene-environment case-control studies
Research Interests

GUILLAUME BONNET
Research interests include: statistical analysis of high dimensional data and infinite dimensional probability models with applications in population genetics and Internet traffic.

ANDREW CARTER
Research interests include: asymptotic statistical inference, comparisons of statistical experiments, density estimation and nonparametric function estimation.

JANOS ENGLANDER
Research interests include: working on problems related to different kinds of spatial stochastic processes with a strong emphasis on their relation to linear and nonlinear partial differential equations. As far as applications concerned, my main interest lies in different models of mathematical finance.

RAISA E. FELDMAN
Research interests include: stochastic differential equations with non-Gaussian noises, time series, filtering problems.

JEAN-PIERRE FOUCHE

JOSEPH GANI
Dr. Gani has been working on an ecological model for a plantation-nursery system, as well as some epidemic models for SARS and the spread of HIV by infected syringe needles. He has also written on the development of Statistics at the Australian National University since 1952.

DAVID V. HINKLEY
Research interests include: resampling methods, model selection, nonparametric curve fitting (including wavelet methods), comparisons between objective Bayes and frequentist inference.

DAWN HOLMES
Main research interest is Bayesian Networks. Recent work in this area includes estimating priors using the maximum entropy formalism, quantum computing and maximum entropy in Gaussian networks. Other interests include: How humans process causal knowledge, foundations of Bayesianism, Brouwer’s programme and intuitionistic Markov chains. Issues in statistical education.

JOHN HSU
Dr. Hsu continues to work on Bayesian estimation of covariance matrices. The Bayesian estimation for the linear mixed effects models, with a very flexible prior structure, has been fully developed. He is also working on a project of Bayesian methods in estimating ordered mortality rates. The project is interesting, however, the computation is challenging due to the constraints of the parameters.

S. RAO JAMMALAMADAKA
Dr. Jammalamadaka continues to be interested on topics related to directional data, spacings and nonparametric goodness-of-fit. As part of the ITR project on biomolecular images, techniques of clustering and pattern recognition for high-dimensional data were investigated.

WENDY MEIRING
Research interests include: spatial/temporal data analysis, geophysical model evaluation, and functional data analysis in the environmental sciences.
S.T. RACHEV
General research projects: non-Gaussian models in mathematical and empirical finance, financial econometrics, factor models for asset returns, market and credit risk management, operational risk assessment and forecast, asset liability modeling, optimal choice of performance measures, momentum and risk-neutral strategies, statistical arbitrage, optimal portfolio theory for highly volatile markets, option pricing with stable GARCH-type processes for the underlying risk factors, statistical tests for CAPM and APT in the presence of heavy-tailed distributed financial returns, Bayesian methods in finance, stability of stochastic models.

YUEDONG WANG
Research interests include: smoothing spline, smoothing spline ANOVA, generalized linear model, mixed-effects models, model selection, survival data, longitudinal data, spatial-temporal data, computational statistics, statistical software, microarray data analysis and biostatistical modeling (circadian rhythm, hormone pulses).
Publications

ANDREW CARTER
A continuous Gaussian process approximation to a nonparametric regression in two dimensions, Bernoulli, Vol 12, No. 1, Feb. 2006. pp. 143-156

JANOS ENGLANDER
Non Existence of Solutions in (0,1) For K-P-P-Type Equations for all \( d \geq 1 \) (with Peter L. Simon), Electronic Journal of Differential Equations, Vol. 2006, No. 09, pp. 1-6
Law of large numbers for a class of superdiffusions (with A. Winter), Annales de l'institut Henri Poincare (B) Probabilites et Statistiques, Vol 42/2 pp 171-185

JEAN-PIERRE FOUQUE

JOSEPH GANI
A continuous time Markov chain model for a plantation-nursery system (with L. Stals), Environmetrics 16 (2005) 849-861

DAVID HINKLEY
Bootstrap diagnostics and Remedies (with A. Canty, A.C. Davison, V. Ventura), Canadian J. of Statist., 23

DAWN HOLMES
Review of ‘Applied Bayesian Modeling and ausal Inference from Incomplete Data Perspectives’ Wiley

JOHN HSU
Bayesian Analysis of the Additive Mixed Model for Randomized Block Designs (with Jen廷g Wang), Australian & New Zealand Journal of Statistics, 48, 225-236

S.RAO JAMMALAMADAKA

S.T. RACHEV
Fat-Tailed and Skewed Asset Return Distributions: Implications for Risk Management, Portfolio selection, and Option Pricing, JohnWiley, Finance, 2005 (with Menn C. and Fabozzi F.)
The proper use of risk measures in portfolio theory International Journal of Theoretical and Applied Finance, 8( 8 ), 1107-1133, 2005 (with Ortenbelli, S., Stoyanov, S., Fabozzi, F. and Biglova, A.)
The impact of different distributional hypothesis on returns in asset allocation. Finance Letters, 3 (1),
17-27, 2005 (with Bertocchi M., Giacometti R., Ortobelli S.)
Stochastic programming methods in asset-liability management, Investment Management and Financial Innovations, 1, 82-90, 2005 (with Grebeck, M.)
Distributional Analysis of the Stocks Comprising the DAX 30, Probability and Mathematical Statistics, 25(2), 363-383, 2005 (with Hoechstoetter, M., Fabozzi, F.)
Credit Portfolio Risk and PD Confidence Sets through the Business Cycle, Journal of Credit Risk, 1 (4), 2005 (with Trück S.)
Calibrated FFT-based Density Approximations of \(\alpha\)-Stable Distributions: Computational Statistics and Data Analysis, 50 (8), 1891-1904, 2006 (with Menn C.)
Hausen, F., Rachev S. and Trück S., Performance-Analyse und Style Factors von Hedgefonds, Risiko-Manager, 3(6), 2006
Hausen, F., Rachev S. and Trück S., Klassifikation und Anlagestrategien von Hedgefonds, Risiko-Manager, 2(6), 2006

YUEDONG WANG
Estimating residual variance in nonparametric regression using least squares (Tiejun Tong, Yuedong Wang), Biometrika, 92, 821-830
Rejoinder to "On Analyzing Circadian Rhythms Data Using Non-linear Mixed Models With Harmonic Terms" (Yuedong Wang, Chunlei Ke and Morton B Brown), Biometrics, 61, 1120-1122
Array CGH Data Analysis (Yuedong Wang and Sunwei Guo), DNA Microarrays, U. Nuber (eds), BIOS Scientific Publishers, 281-289
Detecting Pulsatile Hormone Secretions Using Nonlinear Mixed Effects Partial Spline Models (Yu-Chieh Yang, Anna Liu, Yuedong Wang), Biometrics, 62, 230-238
The prevalence of endometriosis in women with chronic pelvic pain (Guo SW and Wang Y), Gynecologic and Obstetric Investigation, 62, 121-130
Work Accepted For Publication

GUILLAUME BONNET
The Burger Superprocess (with R. Adler), *Stochastic Processes and Their Applications*

JANOS ENGLANDER
The compact support property for measure valued processes (with R.G. Pinsky), *Annales de l'institut Henri Poincare (B) Probabilites et Statistiques*

JEAN-PIERRE FOUQUE
A Martingale Control Variate Method for Option Pricing with Stochastic Volatility (with C.H. Han), *ESAIM. Time Reversal Super Resolution in Randomly Layered Media (with J. Garnier and K. Sølna), Wave Motion*

S.RAO JAMMALAMADAKA
The effect of wind direction on Ozone levels—a case study (with U. Lund), *Environmental and Ecological Statistics*
Small sample asymptotics for higher order spacings (with R. Gatto), Advances in Distribution Theory, Order Statistics and Inference (Eds. Castillo et al)
An asymptotically distribution-free test of symmetry (with M.Ekstrom), *Jour. of Stat. Planning and Inference*

WENDY MEIRING

S.T. RACHEV
Modeling Catstrophe Claims with Left-Truncated Severity Distribution, *Computational Statistics* (with Chernobai, A., Burnecki, K., Trck S. and Weron R.)

Computing the portfolio Conditional Value-at-Risk in the a-stable case (with Stoyanov, S., Samorodntsky, G., Orotbelli S., *Probability and Mathematical Statistics*
Calibrated FFT-based density approximations for alpha-stable distributions (with Menn C.) *Computational Statistics and Data Analysis*
Credit Portfolio Risk and PD Confidence Sets through the Business Cycle, *Journal of Credit Risk* (with Trueck S.)

YUEDONG WANG
Sources of Heterogeneities in the Estimation of Prevalence of Endometriosis in Infertile and Previously Fertile Women (Guo SW and Wang Y), *Fertility and Sterility*
Presentations

GUILLAUME BONNET
The long time behavior of a Stochastic Lotka-Volterra system with jumps, Department of Statistics and Applied Probability Colloquium, UCSB
The long time behavior of a Stochastic Lotka-Volterra systems with jumps, Department of Mathematics Probability Seminar, University of Wisconsin, Madison

ANDREW CARTER
Approximating nonparametric regression experiments by continuous Gaussian processes when the variance is unknown, Thirtieth Conference on Stochastic Processes and their Applications, Santa Barbara, CA (contributed paper)
Asymptotic Approximation to a Nonparametric Regression Experiment with Unknown Variance, JSM, Section on Nonparametric Statistics. Seattle, WA. (contributed paper).

JANOS ENGLANDER
Existence and uniqueness problems concerning a class of semilinear equations (invited speaker), EQUADIFF Conference, Comenius University, Bratislava
Branching Brownian motion in random media, Technical University of Budapest

JEAN-PIERRE FOUCHE
SAMSI Workshop on Credit Risk, November 1, 2005.

DAWN HOLMES
Optimizing Inequality Constrained Priors in Bayesian Networks, 25th International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering (MaxEnt 2005), San Jose State University, San Jose, CA, (Refereed )

JOHN HSU
Illustrations of Bio-related Data Analysis Methods (contributed poster with W.Meiring, Y.Wang, BioDiscovery Symposium, UCSB

S.R. JAMMALAMADAKA
Department of Mathematics, Hong Kong Polytechnic University, “General Censoring Schemes,” August 24, 2005.
Department of Mathematics, Universiti Brunei Darussalam, Brunei, “Near Matches and Applications,” August 31, 2005.

WENDY MEIRING
A Study of Roadside Remote Sensing Mobile Emissions Data, Joint Statistical Meetings, Minneapolis, Minnesota
Illustrations of Bio-Related Data Analysis Methods"=(Wendy Meirng, Yuedong Wang and John S.J. Hsu), BioDiscovery Symposium, UCSB

S.T. RACHEV
Portfolio Optimization, Factor models and Momentum Strategies, University of Sofia, Faculty of Mathematics
Stable Models for Intergrated Risk Management, University of Bergamo, Italy
Portfolio Management in Volatile Markets, Barclays Global Investors, London, UK
Momentum Strategies and Risk Adjusted Portfolio Measures, 10th Karlsrue Econometric Workshop, Risk Assessment: Decisions in Banking and Finance
Risk Management, Portfolio Management and Option Pricing, Hector School, International Department, University of Karlsruhe
Momentum Strategies using Risk-adjusted Stock Selection Criteria, CARISMA, New Directions in Financial Modelling London

YUEDONG WANG
Optimal shrinkage estimation of variances with applications to microarray data analysis, Academy of Mathematics and Systems Science, Chinese Academy of Science
Building Models With Smoothing Spline ANOVA Decompositions, Academy of Mathematics and Systems Science, Chinese Academy of Science
Semi-parametric Nonlinear Mixed Effects Models and Their Applications, New Frontiers of Statistics Workshop in Beijing
Detecting Pulsatile Hormone Secretions Using Nonlinear Mixed Effects Partial Spline Models, Joint Statistical Meetings in Minneapolis

Spline Smoothing with Correlated Random Errors, Boeing Math Group
Statistical Methods for Array-based Comparative Genomic Hybridization Analysis, FDA
Optimal shrinkage estimation of variances with applications to microarray data analysis, Department of Statistics, UCR
Optimal shrinkage estimation of variances with applications to microarray data analysis, Department of Statistics, Texas A&M University
Optimal shrinkage estimation of variances with applications to microarray data analysis, Human Genetics Center, The University of Texas-Houston Health Science Center
Other Professional Activities

JEAN-PIERRE FOUQUE
Appointed for a three year term (2006-2009) as a member of the Pure and Applied Mathematics Grant Selection Committee (GSC 337) at the Canadian Natural Sciences and Engineering Research Council (NSERC). 
Co-editor of the volume Advances in Econometrics: Econometrics of Risk Management (Volume 22, 2007) to be published by Elsevier Science.
Associate editor of the Annals of Applied Probability (2006-)

DAWN HOLMES
Reviewer: International Journal of Knowledge-Engineering Systems
Reviewer: Journal of Statistics Education
Associate Editor (continuing) International Journal of Knowledge-Engineering Systems
Appointed to Editorial Board Neurocomputing 2006 Elsevier B.V
Member of the International Program Committee Knowledge-Engineering Systems - 2006 Conference

S.RAO JAMMALAMADAKA
Dr. Jammalamadaka continues his collaborations with the ECE, CS and MCDB faculty on the NSF-funded ITR project on biomolecular imaging, which collects and analyzes retinal image and microtubular data. During the year, he also continued guiding students under the IGERT program on digital multimedia, which spans a large number of departments on the campus.
Dr. Jammalamadaka is the President-Elect during this year of the international professional statistical organization called the International Indian Statistical Association (see http://www.stat.ohio-state.edu/~hnn/IISA.html and is also the Program Chair for their upcoming Biennial meeting in Cochin India (January 2-5, 2007).
He continues to be an Associate Editor for Statistics and Probability Letters and Jour of Nonparametric Statistics, besides providing referee services to a large number of other journals. During this period, he served as an External Reviewer for the Department of Mathematics and Statistics at the primary campus of the University of Nevada at Reno.
He also served on the NSF Panel for Mathematical Statistics, and reviewed other proposals for the NSF for CAREER Awards.
Administrative Staff

In fall 2005, Juliana Espinosa’s article was published in the Foreign Affairs Undergraduate Journal here at UCSB. Her article, “Sweden: Pre-EMU Referendum” analyzes the effects of Swedish political parties on the “no” majority vote to joining the European Monetary Union.

This past year, Juliana has placed a greater emphasis on recruitment for the Actuary Club and as director, has encouraged new students to join both the club and the major. She also proctors actuary exams for the Society of Actuaries in the department for better convenience to the students.

Denna Zamarron was selected from a large applicant pool to participate in the Leadership Development Program. This is a one-year professional development program that is designed to prepare participants to pursue leadership positions in the administration of academic departments. Only 10-15 individuals college-wide are selected each year to receive advanced training in the deepest, darkest secret inner workings of the university system.

After completing the requirements of the Business Officers Institute as a prerequisite, Denna was enrolled in the Financial Management Certificate Program which is an advanced program that transitions to management. The topics include: Ethics & Fraud in the Workplace, UC Budget process, UC tax issues, Resource Management, Data Integrity and the Computing Environment, Disaster & Business Continuity Planning.

Last year, Gail Kelley Murray processed approximately 100 graduate applications received from all over the world. She has attended classes on Graduate procedures, being educated on the latest changes implemented by the Graduate Division. In her spare time, Gail took courses in the Religious Studies Department at UCSB and served as Editor of her church newspaper.

Troy Small installed a wireless network in the department. Everywhere you look, the Department is adorned with amplifiers and antennas—the latest décor for the modern office. Troy also updated the computer section of the department’s web site to include more thorough and updated information.

Claudia Carlson teamed up with graduate student, Hoon Rhew, to make the Department’s web site more professional and user friendly. She redesigned the Rachev Room to better suit the way the students use it and arranged for additional computing in the student conference room. Major renovations were required this year for incoming faculty and for the CRFMS Center.

The administrative staff members work hard to smooth the way for faculty and students to meet difficult bureaucratic requirements. They actively keep up with all the changes by attending workshops and taking additional courses. They are a valuable asset to our department.

The staff members enjoying a tropical lunch at the beach hosted by Dr. Rachev.
Committees and Service

**Department Chair**
Raya Feldman

**Academic Advising Committees**
*Undergraduate Programs*
David Hinkley, Director of Undergraduate Studies
Dawn Holmes, Undergraduate Advisor

*Graduate Programs*
John Hsu, Graduate Advisor
Drew Carter, Recruiting and Admissions

**Colloquia**
Wendy Meiring, Chair

**Faculty Computer Liaison**
Guillaume Bonnet

**Concurrent Enrollment Liaison**
Dawn Holmes

**Library Representative**
Janos Englander

**Qualifying Exam Committees**
*Applied Statistics*
Yuedong Wang, Chair
John Hsu
Wendy Meiring

*Theoretical Statistics*
David Hinkley, Chair
Drew Carter
S.Rao Jammalamadaka

*Probability*
Raya Feldman, Chair
Janos Englander
Guillaume Bonnet

**Search Committee**
Guillaume Bonnet
Raya Feldman
Jean-Pierre Fouque
David Hinkley

**Statistical Laboratory**
Yuedong Wang, Director (Fall)
S.R. Jammalamadaka (Winter/Spring)

**Student Representative**
Roberto Rivera

**TA Training**
Dawn Holmes, Faculty Liaison
Eli Kollman, Lead TA

**Gani Dissertation Prize Committee**
Wendy Meiring, Chair
Drew Carter
John Hsu

**University Committees**

**Faculty Legislature Representative**
Wendy Meiring

**UCSB University Fellowship Committee**
John Hsu

**Member, Council on Planning and Budget, and its Committee on Capital and Space Planning**
S.Rao Jammalamadaka
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Graduate Program: Gail Kelley-Murray
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Faculty Recruitment: Juliana Espinosa
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