

# **UCLA**

## **Statistics Newsletters**

### **Title**

Statistical Moments - Spring/Summer 2007

### **Permalink**

<https://escholarship.org/uc/item/8qt9w9m4>

### **Author**

UCLA Department of Statistics

### **Publication Date**

2007-04-07

# Statistical Moments



## IN THIS ISSUE

<b>Statistics News</b>	<b>2</b>
<b>Faculty News</b>	<b>3</b>
<b>Student News</b>	<b>3</b>
<b>Staff News</b>	<b>7</b>
<b>Department News</b>	<b>7</b>
<b>Alumni News</b>	<b>8</b>
<b>Teaching</b>	<b>8</b>
<b>Research</b>	<b>9</b>
<b>Recent Papers</b>	<b>9</b>
<b>Bits &amp; Bytes</b>	<b>10</b>
<b>Just for Fun</b>	<b>11</b>
<b>Giving</b>	<b>12</b>

Past, Present and Future Statistics at UCLA

## Greetings from the Chair



Jan de Leeuw

In this column I usually give a little "state of the department" overview. Statistics is the youngest and smallest department in the Division of Physical Sciences in the College of Letters and Sciences. Next year we have our tenth birthday. We are doing well in most respects, although there are some worries.

Let's start with the worries. Dick Berk, one of our senior faculty members, left this year and we still have not replaced him. It takes at least one more year to find a replacement. Since the statistics workload (the number of student contact hours per faculty member) is already among the highest in the Division, this is a concern. Second, if we hire a replacement, or if we grow the graduate program even more, we cannot find any space to actually house these replacements or additions. We are at the limit.

I will make some comparisons with 1998, when we started, and this year. Our undergraduate majors started in 2004-2005 with 8 students. We now have about 30, of which 15 are graduating. We started a minor in 1999, and there now are about 30 minors. The graduate program started in 1998 with 40 applica-

tions, 18 admissions, and 9 students that came. This year we had 186 applications, 64 admissions, and 32 new students. We now have about 70 graduate students, divided about equally over the MS and PhD programs. Five PhD students and 9 MS students are graduating. In 1998 we had a lower division enrollment of 2000, an upper division enrollment of 600, and a graduate course enrollment of about 150. This is now 2500 for the lower division, 800 for the upper division, and 1000 for the graduate division. Thus total course enrollment has gone up from 2750 to 4300, a growth of 56%. Faculty has grown from 12 in 1998 to 17.33 this year, a growth of only 45%, which means that workload has increased. We intend to continue to increase enrollments, although not very rapidly, because we currently do not have the faculty to accommodate this.

Our research is organized in five centers. We have one for Statistics in Biology, for Image and Vision Sciences, for Computational Statistics, for the Teaching of Statistics, and for Environmental Statistics. PhD students and MS students take core courses in their first year. After the first year MS students find a thesis advisor and write a thesis in the second year. PhD students find a dissertation advisor and advance to candidacy at the end of the second year. After that, they become associated with one of the Centers, where they spend an additional two to three years.

Statistics as a discipline is in a very good position these days. Although we are handicapped by the fact that we are new and small and have a relatively low

status, more and more departments realize that they need statistics and should not teach it themselves. More and more research is truly interdisciplinary and statistics blossoms in that context. More and more data keeps coming in from sensors, internet counters, satellites, surveys, and monitors. And these data need to be analyzed. Our graduating MS students have no trouble finding interesting and well-paying jobs. Our graduating PhD students usually get into postdoc or even tenure-track positions at very good institutions. Our future is bright.

## Statistics News

### The 6th International Conference on Energy Minimization Methods in Computer Vision and Pattern Recognition

The 6th International EMMCVPR Conference is being conducted August 27-29, 2007 at EZhou, Hubei, China.



Many problems in computer vision and pattern recognition can be formulated in terms of probabilistic inference or optimization of energy functions. EMMCVPR 2007 will address the critical issues of representation, learning, and inference. The first major theme is how to represent visual problems in terms of probabilistic inference using sophisticated probability distributions defined over structured relational systems, such as graphs and generative grammars. The second theme is the development of effi-

cient learning and inference algorithms using advanced techniques from statistics, computer science, and applied mathematics. A third theme is the use of datasets with groundtruth to act as benchmarks for evaluating algorithms and as a way to train learning algorithms. A fourth theme is the relation of high-level vision to more general cognitive processes, including functional and semantic level descriptions in real world scenes. Additional topics include issues such as image parsing, cue integration, and the trade-offs between bottom-up and top-down processing.

The event is being organized by Alan L. Yuille (UCLA), Song-Chun Zhu (UCLA, Lotus Hill Institute), Daniel Cremers (University of Bonn), and Yongtian Wang (Beijing Institute of Technology).

For more information on the event please visit the [EMMCVPR web site](http://www.emmcvpr.org/)<sup>1</sup>.

### SOCR Events SOCR CAUSEway Workshop2007

The SOCR CAUSEway Workshop is being conducted August 6-8, 2007 at UCLA.

The 2007 joint SOCR/CAUSEway continuing education workshop aims at demonstrating the functionality, utilization and assessment of the current UCLA, SOCR and CAUSEweb resources. This workshop will be of most value to AP teachers and college instructors of probability and statistics classes who have interests in exploring novel IT-based approaches for enhancing statistics education. The workshop will provide an interactive forum for exchange of ideas and recommendations for strategies to integrate computers, modern pedagogical approaches, the Internet and new student assessment techniques.

Presenters will include:

- *Ivo Dinov*, UCLA Statistics and Center for Computational Biology
- *Juana Sanchez*, UCLA Statistics
- *Nicolas Christou*, UCLA Statistics
- *Rob Gould*, UCLA Statistics
- *Brian Jersey*, St. Mary's College of California
- *Amie Che*, UCLA Statistics
- *Mahtash Esfandiari*, UCLA Statistics



For more information please see the [SOCR CAUSEway Workshop home page](#)<sup>2</sup>. A flyer is [also available](#).

### SoCal Statistics Conference

The UCLA Department of Statistics is in the process of organizing a graduate student conference, to be held at UCLA on January 25-26, 2008, and will feature students' research in areas such as statistics, applied math, computer science, and electrical engineering. Generally, any research that touches on data analysis, machine learning, signal processing, inference or statistical computing, be it algorithmic, theoretical or applied, would be a great contribution. Activities of the conference would include a keynote speaker, student talks, poster sessions, and a banquet. The purpose of this conference is to bring together graduate students from Southern California universities and to learn about the research that is being done in other universities. This is a great networking opportunity and will give students valuable experience in orally presenting their own work.

<sup>1</sup> <http://www.emmcvpr.org/>

<sup>2</sup> [http://wiki.stat.ucla.edu/socr/index.php/SOCR\\_Events\\_Aug2007](http://wiki.stat.ucla.edu/socr/index.php/SOCR_Events_Aug2007)

Please check the [SoCal Statistics Conference web site](#)<sup>3</sup> for further information.

## Faculty News

### Peter Bentler: Recipient of the 2007 American Psychological Association's Distinguished Scientific Award for the Applications of Psychology



Peter Bentler

We are pleased to announce that [Peter Bentler](#) has been selected as one of the two recipients of the 2007 American Psychological Association (APA) Distinguished Scientific Award for the Applications of Psychology. Dr. Bentler will share his award with Karl G. Joreskog, Ph.D.

*"The Distinguished Scientific Award for the Applications of Psychology honors psychologists who have made distinguished theoretical or empirical advances in psychology leading to the understanding or amelioration of important practical problems."<sup>4</sup>*

The awards ceremony will be held at the upcoming [APA Convention in San Francisco](#)<sup>5</sup>, August 17–20, 2007.

### Juana Sanchez Appointed Director of the International Statistical Literacy Project

[Juana Sanchez](#) has been appointed Director of the [International Statistical](#)

[Literacy Project \(ISLP\)](#)<sup>6</sup> for the period Jan 2007- Dec 2011 by the Executive Committee of the [International Association for Statistics Education \(IASE\)](#)<sup>7</sup>.

The IASE is one of the sections of the [International Statistical Institute](#)<sup>8</sup>.

The ISLP is an ongoing project of the IASE. It has as a mission to promote statistical literacy around the world, bring together resources and institutions that work on or need statistical literacy resources and conduct activities in the countries where statistical meetings take place to promote literacy among those with less access to the Internet. The forum of the ISLP is a web page at <http://www.stat.auckland.ac.nz/~iase/islp/> which is wiki based. This web page is currently under development but it contains already the most comprehensive worldwide database of statistical resources around the world, thanks to the previous director, Carol Blumberg, who created another version of that page at Winona University.

To learn more about the vision and plans of ISLP for the next 4 years, read the IASE Review 2006, <http://www.stat.auckland.ac.nz/~iase/publications/review/2006.pdf>.



Juana Sanchez

To stay tuned to ISLP activities in countries near you, visit the ISLP web page frequently.

### Mahtash Esfandiari receives Professional Development Award

We are pleased to announce that [Mahtash Esfandiari](#) has been selected to receive a 2006-2007 Professional Development Award. A reception to honor this year's award recipients was held Tuesday, May 30th.

*"UCLA created this award in accordance with the UC-AFT<sup>9</sup> Memorandum of Understanding in order to provide support for the professional development of non-senate faculty members."<sup>10</sup>* The



Mahtash Esfandiari

monetary award will assist with curriculum development, books, software, etc.

More information about the award can be found at the [Faculty Diversity award site](#).

## Student News

### Commencement 2006 Review

The Department of Statistics celebrated its largest commencement ever on June 17, 2006 at the Institute of Pure and Applied Mathematics (IPAM).

Our vice chair of graduate studies, [Mark Hansen](#), introduced the ceremony with a philosophy of the proliferation of

<sup>3</sup> <http://socialconf.stat.ucla.edu/>

<sup>4</sup> From <http://www.apa.org/science/sciaward.html>

<sup>5</sup> <http://www.apa.org/convention07/>

<sup>6</sup> <http://www.stat.auckland.ac.nz/~iase/islp/>

<sup>7</sup> <http://www.stat.auckland.ac.nz/~iase/>

<sup>8</sup> <http://isi.cbs.nl/>

<sup>9</sup> <http://www.uc-afi.net/>

<sup>10</sup> Excerpted from <http://faculty.diversity.ucla.edu/programs/NSF.htm>

information in the 21st century and its connection to the field of statistics.

[Chris Barr](#) was awarded Teaching Assistant of the Year. The ceremony ended with refreshments and a reception.

### Adam Sugano: Collegium of University Teaching Fellow

[Adam Sugano](#) has been awarded a teaching fellowship by the [Collegium of University Teaching Fellows](#)<sup>11</sup> committee.



Adam Sugano

*"The CUTF is an innovative program that creates unique learning opportunities for both graduate teaching fellows and undergraduate students on campus. Through the program, some of UCLA's very best advanced graduate students have the opportunity to develop and teach a lower division seminar in their field of specialization on a one-time only basis. This experience serves as a 'capstone' to the teaching apprenticeship, preparing them for the academic job market and their role as future faculty. At the same time, undergraduates enrolled in CUTF seminars have the chance to take courses that are at the cutting edge of a discipline, and to experience the benefits of participating in a small-seminar environment."<sup>12</sup>*

Adam's accepted proposal is entitled "The Dare to Move: Seeing Life through the Eyes of Risk". Its subject can best be summarized by an excerpt from Adam's proposal:

*"Mathematics, probability, and statistics have a role in every decision we make. Whenever a choice is being considered there are a host of fundamental statistical and probabilistic concepts that are driving this decision making process. A process that is all predicated upon our subjective view of risk. It is my hope that this seminar will open students' eyes to the prevalence of risk in everyday life and give them a fuller appreciation*

*for the history of risk and the sophisticated methods developed to manage its stirring nature."*

*"This course will serve as a solid introduction into the history of risk, its reasons for development, the statistical ideas that comprise it, and the implications toward rational thought that evolve from it. Although this class is listed as a Statistics course and will require much comprehension of various statistical concepts, mathematical and computational rigor will not be a focus. Instead, students will be evaluated on their ability to comprehend the underlying statistical thinking that has helped develop the analysis of risk and to showcase this comprehension through a series of papers and class discussions."*

The course is a 5 unit course, will meet two days a week, and will be conducted in the Winter/Spring 2007 term.

Adam is a second year in the Statistics department and has a strong interest in teaching. He first heard about the CUTF program at a Statistics 370 seminar given by [Katherine Tranbarger](#), a previous CUTF recipient and graduate from UCLA Statistics.

### Frederick Phoa Awarded 2006 Joint Research Conference Student Scholarship

We are glad to announce that [Frederick \(Kin Hing\) Phoa](#) has won the 2006 Joint Research Conference student scholarship. The 2006 Joint Research Conference on Statistics in Quality, Industry and Technology was jointly sponsored by the Quality and Productivity Section of the American Statistical Association (ASA), the Physical and Engineering Sciences Section of ASA, and the Institute of Mathematical Statistics (IMS). Frederick was one of the 15 students who won this year's scholarships, which cover registration fees and local living expenses. Frederick gave a contributed talk on "Two Applications of Using Quaternary Codes to Nonregular Designs". The conference was held on June 7-9, 2006 in Knoxville, Tennessee. Information about the conference and the scholarship can be found at

<http://2006jointresearch.bus.utk.edu/>. Frederick also attended and gave a contributed talk at the 2006 International Conference on Design of Experiments and Its Applications, held on July 9-13, 2006 in Tianjin, China.

### Balmaceda Memorial Awards

This year, three Balmaceda Memorial awards were given, and the recipients were [Shuojun Wang](#), [Nick Birch](#), and [Esa Eslami](#).

The awards are entirely merit-based and go to Masters students who are finishing their first year. The winners receive \$1000 each at the beginning of their 2nd year, to help support their continued education and research.

### Commencement 2007

The Department of Statistics held its annual Commencement Celebration at 1:00 PM on Saturday, June 16, 2007 in Mathematical Sciences Building room 4000A.



The number of students completing the undergraduate major and minor as well as the graduate majors was once again the highest in its ten year history. This special event commemorates the achievement of our students and department. Scheduled speakers included department chair [Jan de Leeuw](#), and undergraduate vice chair [Rob Gould](#). The department also awarded the honor of Teaching Assistant of the Year to [Kevin Nichols](#).

This year, fifteen students received the Bachelor's of Science degree in Statistics. The undergraduate statistics major is

<sup>11</sup> <http://www.oid.ucla.edu/Cutf>

<sup>12</sup> From Overview at <http://www.oid.ucla.edu/Cutf>

a young program that has grown immensely in its short history. Commencement 2007 sent off the Department's third graduating class. The following students have completed their degree requirements or are expected to complete their degree requirements by Summer 2007:

- ♦ Xiao Han Cai
- ♦ Desiree Cua
- ♦ Shawn Chuong Hoang Le Do
- ♦ Ka Tang Ho
- ♦ Ling Jing
- ♦ Irina Kukuyeva
- ♦ Matthew Ryan Kugizaki
- ♦ Daniel Trong Hien Nguyen
- ♦ Ai Kun Li
- ♦ Cui Li
- ♦ Junyi Qiu
- ♦ Kevin David Vallec
- ♦ On Yee Wong
- ♦ Zaic Kelvin Wong
- ♦ Lulu Zhang

Seventeen students have completed their degree requirements or are expected to complete their degree requirements with a minor in statistics by Summer 2007. These students are:

- ♦ Jia Chen
- ♦ Ricardo Chen
- ♦ Vicki Wai Kai Choi
- ♦ Myley Dang
- ♦ Nicholas Degoede
- ♦ Bei Hu
- ♦ Ling Dorcas Kwan
- ♦ Jingjing Li
- ♦ Xiaoqiu Li
- ♦ Ana Luisa Lopez
- ♦ Jennifer Nicole Regalado
- ♦ Roman Semenov
- ♦ Goqiang Song
- ♦ Daniel Tsz Fung Tang
- ♦ Nicha Tantipinichwong
- ♦ Christopher Michael Toretsky
- ♦ Judy Jiezhen Wu

Twelve students have completed their degree requirements or are expected to receive their Masters of Science degree in Statistics by the end of Summer 2007:

- ♦ Yizheng Cai
- ♦ Angela Chang
- ♦ Joshua Columbus Chang

- ♦ Yan Chen
- ♦ Jacquelinac Da Costa
- ♦ Chuyun Hsieh
- ♦ Yuwei Jin
- ♦ Frank A. Lee
- ♦ Catherine Leung
- ♦ Meena Mani
- ♦ Jason Bryan Monroe
- ♦ Yu-Hui Pan

Four students have completed their degree requirements or are expecting to complete their Ph.D. in Statistics by the end of Summer 2007. Their names, dissertation titles and advisor's names are:

- ♦ **Dr. Jinhui Li**  
Analysis of Longitudinal Data with Missing Values, Advisor: Dr. Yingnian Wu
- ♦ **Dr. Angela Paige Presson**  
Statistical Methods for Complex Disease Analysis, Advisor: Dr. Kenneth Lange
- ♦ **Dr. Brian Kriegler**  
Cost-Sensitive Stochastic Gradient Boosting Within a Quantitative Regression Framework, Advisor: Dr. Richard Berk
- ♦ **Dr. Wei Sun**  
Statistical Strategies in eQTL Studies, Advisor: Dr. Ker-Chau Li

#### Updates on Graduates

- ♦ Jinhui Li has accepted a full-time position as Biostatistician in the Oncology Department at Johnson & Johnson Pharmaceutical Research and Development, L.L.C.
- ♦ Wei Sun has accepted a position as full-time Assistant Professor for the Department of Biostatistics & Genetics at University of North Carolina.
- ♦ Brian Kriegler has accepted a post-doctorate position at University of Pennsylvania to work with Richard Berk.
- ♦ Angela Presson has been offered a position as Assistant Professor in the UCLA Department for Biostatistics. Angela has also been offered a post-doctorate position in the UCLA Human Genetics department.

Congratulations on all of your accomplishments! We all applaud and admire your immense achievements.

#### A Busy Year for Graduate Students

This school year, many of our current graduate students have made some remarkable accomplishments. Congratulations to each of you!

#### Academic, Professional and Personal Achievements

Annie Chu, Sheela Nair, Fred Phoa, Jacob Porway, Kent Shi, Adam Sugano, and Nathan Yau have all advanced to candidacy.

Dave Zes, Mike Mason, Jamie Barron, Nathan Yau and Jiashen You were Masters students and have been accepted to the Ph.D. program to complete their studies. Jason Monroe has completed his M.S. and will be pursuing a Ph.D. in Epidemiology at UCLA.

Wei Sun presented his paper, *Detection of eQTL Modules Mediated by Activity Levels of Transcription Factors* (Abstract #308280) at JSM 2007 Salt Lake City during Session 202090 on Tuesday, July 31 at 2 PM.

Chris Barr presented his paper *An Application of Voronoi Diagrams to Modeling Earthquake Catalog*, co-authored with Dr. Rick Paik-Schoenberg at JSM 2007 in Salt Lake City.

Annie Chu presented *Bias in the Estimation of Self-exciting Point Process Models for Earthquake Occurrences*, a joint effort with Dr. Alejandro Veen and Dr. Rick Paik-Schoenberg at JSM 2007 in Salt Lake City. Annie also presented a poster titled SOCR: Web-Based Statistical Tools, a joint effort with Jenny Cui and Dr. Ivo Dinov at the AMS Joint Mathematics Meetings in New Orleans, January 2007.

Jae Brodsky presented her paper, *The Relevance of Migraine in Patients with Meniere's Disease* at the 58th meeting of the American Academy of Neurology.

Adam Sugano and Dr. Hal Stern of UC Irvine authored a chapter titled *Inference about Batter-pitcher Matchups in Baseball from Small Samples* for the book *Statistical*

*Thinking in Sports* by Ruud Konig and James Albert to be released this July.

Brian Kriegler completed a one-semester post-doctorate at Claremont McKenna College in the Reed Institute for Applied Statistics with Janet Myhre. Brian also worked as an associate with the RAND Corporation in Santa Monica during summer 2006. At JSM 2006 in Seattle, Brian presented results from his research on a Los Angeles County homeless study with Richard Berk and Don Ylvisaker. He also testified as an expert witness for a “wage and hour” class action lawsuit. Brian also ran the Portland Marathon in October 2006!

Jean Wang graduated with a B.S. in Statistics in 2005, as part of the Department’s first graduating undergraduate class. Her article, *What Came First: The Chicken or the Egg?* written under the guidance of Dr. Juana Sanchez, appears in *STATS: The Magazine for Students of Statistics*, Issue 47. Jean will be joining the Department in fall 2007 as an M.S. student.

Zhangzhang Si and Jacob Porway will be traveling to China this summer with the Vision Lab to continue research on object recognition and classification and to assist on an image labeling software application. More information is available at <http://www.lotushill.org>.

Earvin Balderama is developing a research symposium with Mark Hansen for students of Statistics and related fields. Our department will host the event in January 2008 and will feature talks and poster sessions.

Robert Bexton’s book *The Everything Guide to Personal Finance for Single Mothers: A Step-by-Step Plan for Achieving Financial Independence* coauthored with Susan Reynolds was released in May.

Ryan Rosario will be working with the Center for Environmental Statistics in conjunction with Academic Technology Services to develop a series of support pages for GIS software and R.

Ariana Anderson will be working with the Empirical Research Group at the UCLA Law School.

Kevin Nichols, Tess Nesbitt, Jason Monroe, and Brian Kriegler serve as statistical consultants to the Litt & Associates law firm.

Tess Nesbitt is working as a data analyst for Drs. Ko and Yamada with the UCLA Dental School.

### Celebrations

Congratulations are in order for the following wedding and engagements: Ariana Haig was married summer 2006. Chris Barr was married in April. Jamie Barron was married over Memorial Day weekend. Nathan Yau was married just a week earlier (Nathan will be moving to New York where his wife will be attending medical school). Brian Kriegler is engaged with Kathy Furst.

Nicole Chen gave birth to a baby boy in mid-June. The healthy boy, Samuel Yu, was born June 20 and weighed 8 lbs., 6 ozs. During the Spring quarter, graduate students recorded suggestions for baby names on the lounge whiteboard. Nicole’s daughter Shannon named him “Porky”.

Your fellow classmates wish you all the best for you and your families!

### Internships

Summer is known for being a time of fun in the sun and good times. During summer break, graduate students are typically continuing research, working, serving as readers and teaching assistants or studying for qualifying exams. Some students choose to pursue internships. This year, several of our students have chosen to spend the summer with industry:

- ♦ Nathan Yau – New York Times Graphics Department, New York City, NY.
- ♦ Hai Nguyen – Jet Propulsion Laboratory, Pasadena, CA.
- ♦ Ka Wong – Jet Propulsion Laboratory, Pasadena, CA.
- ♦ Sheela Nair – Google, New York.
- ♦ David Diez – Environmental Protection Agency, Arlington, VA.

### Special Thanks

During the 2006-07 school year, the following graduate students served as officers to SGSA:

- ♦ David Diez – President
- ♦ Dave Zes – Internal Vice President
- ♦ Brandi Shanata – External Vice President
- ♦ Chris Barr - Treasurer
- ♦ Ryan Rosario - Webmaster

Chris Barr served as the 2006-07 Teaching Assistant Coordinator (TAC). Brandi Shanata will serve as the 2007-08 Teaching Assistant Coordinator.

Brandi Shanata served as the 2006-07 Technology Teaching Assistant Coordinator (TTAC). Hai Nguyen has been awarded the position for the 2007-08 school year.

Kevin Nichols served as our “team captain” for all Statistics graduate student intramural sports teams. He organized teams and games and promoted events with his artwork.

### New SGSA Website in the Making

This summer the SGSA webmaster will be constructing a new SGSA website to replace the existing one. This new website will use the Plone system to allow for easy and collaborative editing. Some features of the site we hope to implement are automated cookie reminders before seminar, and a grad student only section for a contact list and polls. The webmaster will have this new site completed before the end of the summer.

### Department T-Shirts!

During spring quarter, graduate students designed a department T-shirt. Students submitted a large number of slogans for the shirt.

The winner was a slogan by Kevin Nichols: “LA’s Hottest Models”.

“LA’s Hottest Models”



Other slogans considered were:

- “Other Stats Departments are just Splinelless”
- “The Strongest Link in the Markov Chain”
- “We Make Random Sampling Simple”
- “Central Limit Theorem Central”.

Inquiries about the shirt can be addressed to [tshirt@stat.ucla.edu](mailto:tshirt@stat.ucla.edu).

## Staff News

### Introducing our New Student Affairs Office, Sandy Valdivieso

We are pleased to announce, albeit belatedly, the hiring of our new Student Affairs Officer, **Sandy Valdivieso**.

She comes to us having worked as the SAO of Public Health. Her interests in Psychology



and her experience in peer counseling led her to discover a passion for working with people, and in particular with students. She is an alumna of UCLA, having received her Masters in Counseling and Student Affairs from the GSE&IS.

We are very pleased to have Sandy in our department and hope the association lasts a long time.

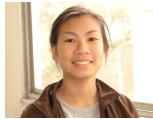
### New Hires

We are pleased to introduce into our staff Verghese Nallengara, Jennifer Lu, Isabelle Ea, Diep Tran, Yesenia Cisneros, and Joyce Tsoi.

After a decade of teaching mathematics, **Verghese Nallengara** is now pursuing a career in IT. He is a former Mechanical and Aerospace Engineering student at UCLA. He is working with us full-time and we feel fortunate to have him on board.



**Jennifer Lu**, a work-study, is a Cognitive Science major. She finds the field presents the right balance of computer programming requirements (fortunately for us, an area she's most definitely interested in) and the extremely interesting cross disciplinary subjects of biology, engineering, linguistics, mathematics, philosophy, and psychology.



**Isabelle Ea**, a work-study, is currently a Pre-business Economics major but a recent course entitled *Sex: From Biology to Gendered Society* might cause her to switch majors. Self-taught in computer technology, Isabelle often finds herself naturally helping others with their computer needs. Fortunately for us, she enjoys working with computers and aspires to learn web development and UNIX. We to accommodate her desire to learn in these areas.



**Diep Tran**, a work-study and first-year came to UCLA with the conviction of being an English major which currently she continues being. She is a Lord of the Rings aficionado. Diep's talents in the english language are coming in handy in her work in the Student Affairs Office where she writes emails, interacts with students, and helps to produce publications.



Sociology major, **Yesenia Cisneros**, works in the Student Affairs office. She enjoys the proximity of the work place to her classes and the variety of assignments she is given. Computer



literate since the age of 10, Yesenia will be putting her HTML and CSS skills into building from scratch a social networking web site for students this summer.

## Department News

### Introducing Baby Justin Xu

We are pleased to announce the birth of Justin Xu.



Justin Xu

The healthy 8 pound and 2 ounce boy was born September 9, 2006 to the proud parents Hongquan Xu and Qing Shen. We wish the Xu family best wishes.

### New Requirements for Statistics Major/Minor

The following changes to our program are effective this Fall 2007<sup>13</sup>

- **Changes To The Major**<sup>14</sup>
- The number of required courses will increase from 12 to 15.
- A required core in computational statistics will be added.
- Stats 130B will no longer be required
- Math 172A and B (Actuarial Mathematics) will be official electives
- A new course in experimental design will be added

- **Changes To The Minor**<sup>15</sup>
- Stats 10-15 will be a course required to enter the minor.

- There will be three pathways through the minor:
  1. Take any two of these three sequences: 100ABC, 101ABC, 102ABC and electives.
  2. Take any two courses from all three of the above sequences + electives.

<sup>13</sup> Changes are awaiting FEC approval

<sup>14</sup> These changes will only affect students who enter the major/minor on or after Fall 2007

<sup>15</sup> These changes will only affect students who enter the major/minor on or after Fall 2007



3. Take Stats 110A, any two courses from any two of the above sequences and electives.
- Students with less mathematical backgrounds are advised to choose the 3rd option.
  - Below are new or re-numbered courses (effective Fall 2007)
    - Stats 101A  
Intro to Experimental Design and Sampling (new course)
    - Stats 101B  
Intro to Data Analysis and Regression (formerly 120A)
    - Stats 101C  
Regression and Data Mining (formerly 120B)
    - Stats 102A  
Intro to computational stats with R (formerly 135)
    - Stats 102B
    - Matrix Computation and Topimization for Stats (formerly 175)
    - Stats 102C  
Intro to Markov Chain Monte Carlo Methods (new course)
- Changes are awaiting FEC approval  
Note: these changes will only affect students who enter the major/minor on or after Fall 2007.

For more information contact Sandy Valdivieso at [sandy@stat.ucla.edu](mailto:sandy@stat.ucla.edu) or 310-206-3742.

## Alumni News

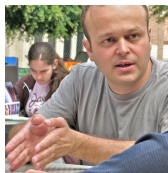
### Alejandro Veen: A Watson Research Center Staff Member

Upon completion of his Ph.D., Alejandro Veen started working immediately with Yasuo Amemiya's [Statistics research group](#)<sup>16</sup> at the [Watson Research Center](#)<sup>17</sup>. His title is Research Staff Member and he spends 50% of his time on his own projects and 50% on projects beneficial to the company.

Alejandro and IBM found each other at a local [JSM job fair](#)<sup>18</sup>. Having learned valuable lessons from his experience in the process, Alejandro gives the following advice to fellow graduate students:

1. Submit a well prepared, up-to-date and complete CV. Once submitted with JSM's online system a CV is difficult to update.

2. In Alejandro's case, presenting a diverse set of research interests (i.e. complementary to statistics research) helped. IBM's eye was caught by Alejandro's bachelor's degree in Economics as much as by his doctorate degree in Statistics. IBM's Statistics group happened be looking for this combination of interests which led them toward pursuing the acquaintance further.



Alejandro Veen

3. Submit your CV early. The industry participants view CV's well in advance of the fair's occurrence and set up interviews with attractive candidates weeks in advance of the event.

Alejandro has been working with [Rick Paik Schoenberg](#), applying [point process analysis to California Earthquake data](#)<sup>19</sup>. Point processes can be applied to economics data as well. Alejandro expects to continue working with Rick and applying the point process techniques to the economics research that IBM is interested.

The [Watson Research Center](#) is located in Yorktown, N.Y., just 60 minutes from Manhattan, where Alejandro lives. Needless to say, Alejandro is excited about his new job and home. He enjoys

being closer to family in Europe and living in a vibrant cultural center.

## Statistical Seedlings Teaching

### A Conference to Enrich UCR Undergraduate Experience: Statistics Education for Undergraduate Students



The theme for this year's conference to *Enrich UCR Undergraduate Experience* was "Statistics Education for Undergraduate Students".

The speakers included: Mahtash Esfandiari, Christopher Barr, and Adam Sugano. The conference date, location and schedule was:

Date: Saturday, June 2, 2007

Location: University of California at Riverside, Room B650, Statistics-Computer Building

#### Schedule

- Inauguration: 9:30 AM  
Andrew J. Grosovsky, Vice Provost for Undergraduate Education and Professor of Cell Biology, University of California, Riverside
- 2006-2007 Student Award Presentations: 9:40 AM  
Robert J. Beaver Outstanding Statistical Consulting Award and Recognition  
Morris J. Garber Award for Outstanding Ph.D. Students
- Outstanding Teaching Assistant Award
- Invited Presentation I: 10:00 AM — 10:45 AM  
Mahtash Esfandiari, Christopher David Barr, and Adam Philip Sugano, Department of Statistics, University of

<sup>16</sup> <http://www.research.ibm.com/stat/index.htm>

<sup>17</sup> <http://www.watson.ibm.com/>

<sup>18</sup> <http://www.amstat.org/careers/>

<sup>19</sup> <http://theses.stat.ucla.edu/abstract.php?dissertation=37>

California, Los Angeles

"Using Technology to Enhance Teaching, Learning, and Assessment in Introductory Statistics"

- Discussion: 10:45 AM — 10:55 AM
- Invited Presentation II: 11:00 AM — 11:45 AM

Linda Penas, Department of Statistics, University of California, Riverside

"Using Technology and Other Resources to Enrich Teaching of Large Introductory Statistics Courses at UCR"

- Discussion: 11:45 AM - 11:50 AM
- Invited Presentation III: 12:00 Noon — 12:45 PM

Robert Newcomb, Department of Statistics, University of California, Irvine

"Challenges and Rewards: Lessons from Teaching Statistics to Undergraduates"

Discussion: 12:45 PM — 12:50 PM

- Invited Presentation IV: 1:00 PM — 1:45 PM
- Yasar Yesilcay, Department of Statistics, University of Florida, Gainesville  
"An ideal curriculum for BS in Statistics: Is it feasible?"
- Discussion: 1:45 PM — 1:50 PM

### SOCR Presents at USCOTS 2007

Juana Sanchez, Nicolas Christou and Ivo Dinov organized a session at the 2007 USCOTS, OSU, May 17-19, 2007.

The presenters introduced the [Statistics Online Computational Resource](#)<sup>20</sup>, described the pedagogical utilization of the SOCR tools, conducted interactive activities and demonstrated their in-class use of these resources.

The [US Congress on Teaching Statistics](#)<sup>21</sup> (USCOTS) is the largest statistics education event in the United States.

For more information on the presentation, please see

[http://wiki.stat.ucla.edu/socr/index.php/USCOTS\\_2007\\_Program\\_SOCR](http://wiki.stat.ucla.edu/socr/index.php/USCOTS_2007_Program_SOCR)

<sup>20</sup> <http://www.socr.ucla.edu>

<sup>21</sup> <http://www.causeweb.org/uscots/>

## Advancing Statistics

### Research

#### Grants

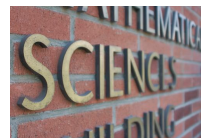
- Alan Yuille, Computational Theory of Motion Perception, National Science Foundation (NSF), 9/15/06-8/31/09
- Mahtash Esfandiari and Osman Galal, Muslim Women's Perceptions, Needs and Barriers to Breast Cancer and Screening, Susan G. Komen Breast Cancer Foundation, 5/1/05–10/31/07
- Mark Hansen, Computing in Statistics: Model Courses and Curricula, UC Berkeley/National Science Foundation, 8/1/06–7/31/09
- Yingnian Wu and Song-chun Zhu, From Information Scaling to Regimes of Statistical Models of Natural Image Patterns, National Science Foundation, 6/1/07–5/31/10

#### Preprints, Papers and Reviews

### Recent Papers

1. *YN Wu, SC Zhu, C Guo* (revised, 2007), From Information Scaling of Natural Images to Regimes of Statistical Models. Accepted by Quarterly of Applied Mathematics.
2. *Shen, Q and Xu, H.* (2007). Diagnostics for Linear Models With Functional Responses. *Technometrics*, 49, 26-33.
3. *Yang, X., Shen, Q., Xu, H. and Shoptaw, S.* (2007). Functional Regression Analysis using an F Test for Longitudinal Data with Large Numbers of Repeated Measures. *Statistics in Medicine*, 26, 1552-1566.
4. *Xu, H. and Wong, A.* (2007). Two-Level Nonregular Designs From Quaternary Linear Codes. *Statistica Sinica*.
5. *Zhou, Q and Wong, W.H.* (2007). Coupling Hidden Markov Models for the Discovery of Cis-regulatory Modules in Multiple Species. *Ann. Appl. Statist.*, Accepted.

6. *C.E. Guo, S.C. Zhu and Y.N. Wu* (2007). Primal Sketch: Integrating Texture and Structure. *Computer Vision and Image Understanding*, vol. 106, issue 1, 5-19, April, 2007
7. *S.C. Zhu and D. Mumford* (2007). Quest for a Stochastic Grammar of Images Foundations and Trends in Computer Graphics and Vision, 2007 (To appear)
8. *A. Barbu and S.C. Zhu* (2007). Cluster Sampling and Its Applications in Image Analysis. *Journal of Computational and Graphical Statistics*, 2007 (To appear)
9. *F. Han and S.C. Zhu* (2007). A Two-Level Generative Model for Cloth Representation and Shape-from-Shading. *IEEE Trans. on Pattern Analysis and Machine Intelligence*, vol.29, no.7, July 2007



10. Jussi Tohka, Evgeny Krestyannikov, Ivo D. Dinov, Allan MacKenzie Graham, David W. Shattuck, Ulla Ruotsalainen and Arthur W. Toga (2007). Genetic Algorithms for Finite Mixture Model Based Voxel Classification in Neuroimaging. *IEEE Transactions on Medical Imaging*, Vol.26, Iss.5, May 2007, 696-711.
11. Z. Tu, S. Zheng, A. Yuille, A. Reiss, R. Dutton, A. Lee, A. Galaburda, I. Dinov, P. Thompson, A. Toga (2007). Automated Extraction of the Cortical Sulci Based on a Supervised Learning Approach. *IEEE Tran. on Medical Imaging*, April 2007, 26(4), 541-552.
12. M. Hamilton, E. Graham, P. Rundel, M. Allen, W. Kaiser, M. Hansen, and D. Estrin (2007). New Approaches in Embedded Networked Sensing for Terrestrial Ecological Observatories, *Env Engineering Science*, Vol. 24, No. 2

13. S. Tileyioglu, M. Hansen, R. Nigbor (2007), Elevators as a Repeatable Excitation Source for Structural Health Monitoring in Buildings, 6th International Workshop on Structural Health Monitoring (under revision)
14. S. Reddy, G. Chen, B. Fulkerson, S.-J. Kim, U. Park, N. Yau, J. Cho, M. Hansen and J. Heidemann (2007), Sensor-Internet Share and Search: Enabling Collaboration of Citizen Scientists, (accepted at the Workshop for Data Sharing and Interoperability, IPSN '07)
15. Ayers, K., C. Sabatti and K. Lange (2007) "A Dictionary Model for Haplotyping, Genotype Calling, and Association Mapping" to appear in Genetic Epidemiology.
16. Freimer, N. and C. Sabatti (2007) "Human Genetics: Variants in Common Diseases." Nature 445: 828-30. (Invited contribution.)
17. Schoenberg, F.P. and Tranbarger, K.E. (2007). Description of Earthquake Aftershock Sequences Using Prototype Point Processes. To appear in Environmetrics.
18. Schoenberg, F.P., Chang, C., Keeley, J., Pompa, J., Woods, J., and Xu, H. (2007). A Critical Assessment of the Burning Index in Los Angeles County, California. To appear in International Journal of Wildland Fire.
19. Schoenberg, F.P., Pompa, J.L., and Chang, C. (2007). A Note on Non-parametric and Semi-parametric Modeling of Wildfire Hazard in Los Angeles County, California. To appear in

Environmental and Ecological Statistics, Vol. 16.

## Computing Matters Bits & Bytes

### CCLE Adopts Moodle

UCLA's Common Collaboration and Learning Environment project has chosen Moodle as the technology to serve the universities instructional and collaboration application.

The [CCLE web site](#)<sup>22</sup> will serve to bring a standard internet presence to instructional and collaborative projects at the university. Much still has to be worked out regarding policies and multi-departmental management of this shared resource. Departments and divisions are welcome to opt to use the shared Moodle installation or to run their own Moodle installations which can still participate in the federated network of Moodle services.

We're pleased to see this development since it aligns well with [our own commitment to Moodle](#)<sup>23</sup>.

### University RSS Feeds

We've been [pushing RSS on the campus](#)<sup>24</sup> for a couple of years. Now wider adoption of RSS is beginning to take place.

The university has started providing a [collection of RSS links](#)<sup>25</sup> and we are proud to say that our department's feed is among the first departmental feeds listed.

The library is also now providing an [RSS feed of recent acquisitions](#)<sup>26</sup>.

### Update on Podcasts at UCLA

UCLA and Apple are working together to present a protected and public podcast presence at [Apple's iTunes U](#)<sup>27</sup>.

Piloting is expected to begin in fall 2007 with the introduction of the public facing site first.

While copyright issues over proprietary lecture materials hold up the private facing iTunes site, at least a public facing iTunes site provides an excellent marketing opportunity for departments looking for new networks to reach out to prospective audiences.

Apple officially announced the iTunes U portal site in May and it currently contains the course materials of 16 universities including: Arizona State, Duke, MIT, Stanford, UC Berkeley, Texas A&M, just to name a few.

### New Web Applications Coming Online

Ruby on Rails development has replaced our PHP development for database driven web applications. Some of first applications written include: [Journal of Statistical Computing](#)<sup>28</sup>, [Conference Registration](#)<sup>29</sup>.

Other applications slated to be rewritten in Rails include [Directory](#) and [Seminars](#).

<sup>22</sup> <http://ccle.ucla.edu/>

<sup>23</sup> <http://moodle.stat.ucla.edu>

<sup>24</sup> [http://www.stat.ucla.edu/~josec/presentations/CWP\\_RSS.pdf](http://www.stat.ucla.edu/~josec/presentations/CWP_RSS.pdf)

<sup>25</sup> <http://www.ucla.edu/rss/>

<sup>26</sup> <http://www2.library.ucla.edu/libraries/6453.cfm>

<sup>27</sup> <http://www.apple.com/education/itunesu/>

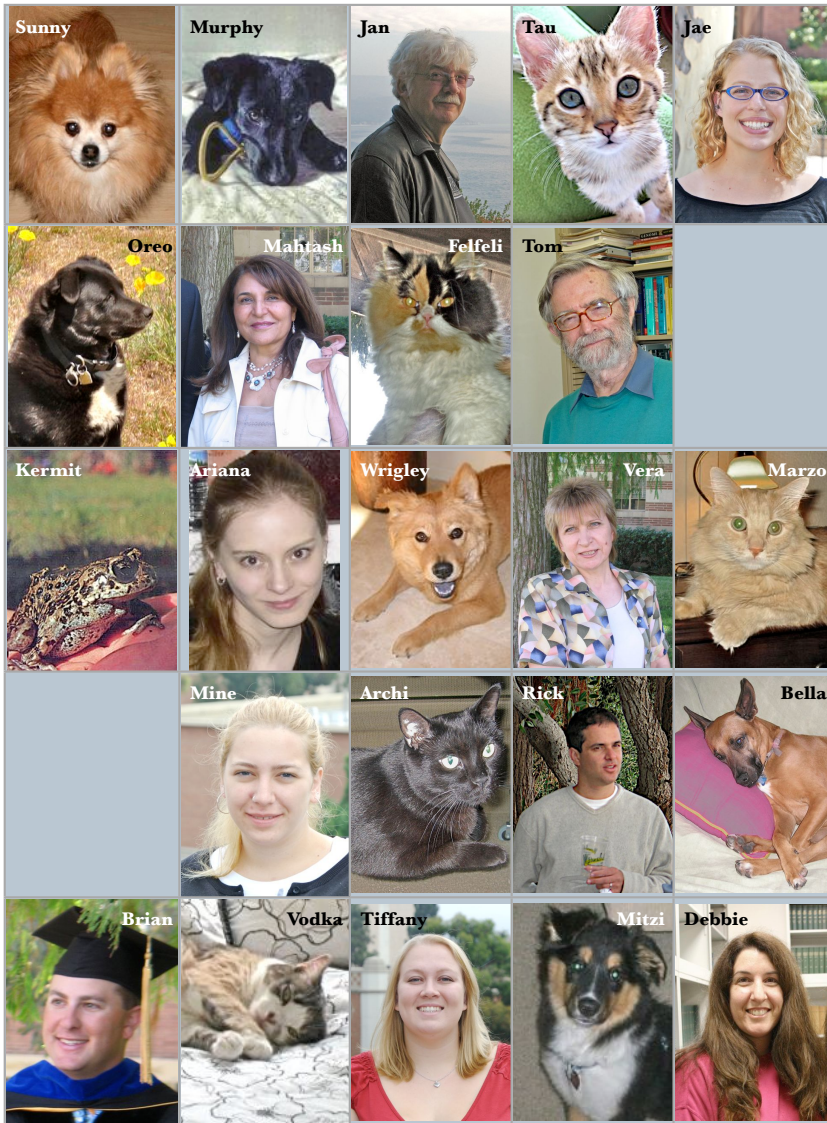
<sup>28</sup> <http://jss-dev.stat.ucla.edu>, soon to be renamed <http://www.jstatsoft.org>

<sup>29</sup> <http://register.stat.ucla.edu>

# Just for Fun

## Match the Pet with their Human

Do people really look like their pets? Test this hypothesis by seeing if you can match the department members with their pets.



Answers: Sunny/Murphy/Jae; Tau/Tiffany; Oreo/Jan; Felfeli/Mahtash; Kermit/Tom; Wrigley/Brian; Marzo/Vera; Archi/Vera; Bella/Rick; Vodka/Mine; Mitzi/Ariana

Support Statistics Teaching and Research

## Giving

The UCLA Department of Statistics is growing rapidly, and our sources of public funding are not keeping up with our increasing demands. Funding from donors like you will help us maintain state-of-the-art computing facilities for our undergraduate majors and our graduate students. You can also help provide financial assistance for our grad students to support their research and teaching. Donate and advance Statistics' mission of promoting the use of data in the understanding of our environment, our social relationships, and our physical and virtual selves.

### How to Give

#### Give Online

You can make donations easily and [securely online](#)<sup>30</sup>. Donate to one of four areas: *Undergraduate Teaching*, *Graduate Student Support*, *Computing Support*, or *Discretionary*.

#### Give by Mail

Donate by mail. Send checks or money orders (made payable to **UC Regents**) to:

UCLA Department of Statistics  
8125 Math Sciences Bldg.  
Los Angeles, CA 90095-1554

Please mark check with one of the fund areas described above to which you wish to contribute.

#### More Information

For more information please see our [web page for online giving](#)<sup>31</sup> or contact Jennifer Ono, Fund Manager, at 310-825-8430 or e-mail at [giving@stat.ucla.edu](mailto:giving@stat.ucla.edu).

---

<sup>30</sup> <http://giving.ucla.edu/statistics>

<sup>31</sup> <http://giving.stat.ucla.edu>



Events at UCLA and Statistics

## Calendar

<b>April 2</b>	<b>Spring Instruction Begins</b>
<b>May 28</b>	<b>Memorial Day Holiday</b>
<b>June 8</b>	<b>Instruction Ends</b>
<b>June 11-15</b>	<b>Finals Week</b>
<b>June 15</b>	<b>Quarter Ends</b>
<b>June 16</b>	<b>Statistics Commencement</b>
<b>June 25</b>	<b>Summer Session A Begins</b>
<b>July 4</b>	<b>Independence Day</b>
<b>August 6</b>	<b>Session C Begins</b>
<b>September 3</b>	<b>Labor Day Holiday</b>
<b>September 17-19</b>	<b>Statistics Qualifying Examinations</b>
<b>September 24</b>	<b>Fall Quarter Begins</b>
<b>September 27</b>	<b>Fall Instruction Begins</b>
<b>November 12</b>	<b>Veteran's Day</b>
<b>November 22-23</b>	<b>Thanksgiving Holiday</b>
<b>December 7</b>	<b>Instruction Ends</b>
<b>December 10-14</b>	<b>Final Exams</b>
<b>December 12</b>	<b>PhD Applications Deadline</b>
<b>December 14</b>	<b>Quarter Ends</b>
<b>December 24-25</b>	<b>Christmas Holiday</b>
<b>December 31-January 1</b>	<b>New Year's Holiday</b>

## CREDITS

Statistical Moments is published bi-annually by the Department of Statistics at UCLA. Send comments, questions and submissions to [newsletter@stat.ucla.edu](mailto:newsletter@stat.ucla.edu). Back issues are available at <http://moments.stat.ucla.edu>.

### NEWSLETTER STAFF

**Rick Paik Schoenberg**  
Editor-in-Chief

**Jose Hales-Garcia**  
Production Director

**Sandy Valdivieso**  
Contributing Editor

**Ryan Rosario**  
Contributing Editor

### Contributors

Sandy Valdivieso, Ryan Rosario, Ivo Dinov, Juana Sanchez, Verghese Nallengara

### Subscription

To receive notifications about the newsletter join the newsletter's mailing list at: <http://lists.stat.ucla.edu/mailman/listinfo/moments>

**Statistical Moments**  
**8125 Math Sciences Bldg.**  
**Los Angeles, CA**  
**90095-1554**