

---

# RISKY BUSINESS

—News and notes on the Actuarial Studies Program—

---

Department of Mathematics

Spring 2007

The University of Texas at Austin

---

From  
the  
Director



The actuarial program continues to thrive. Sure, there are some areas to improve—especially scholarships, as indicated in Leslie Vaaler's article on this page. But on the whole, all is well.

Over 200 students participate in the actuarial program, of whom nearly 200 are seeking the degree B.S. in Mathematics (Actuarial Science Option). And that's 30% of all Math majors, by far the single largest group among the various types of majors. Between 20% and 25% of the students are international students.

Exam results remain strong. We have students graduating with credit for all the preliminary exams, or slightly less.

Job (and summer internship) placement continues successfully. Twenty-nine students found entry-level jobs in the 2005-6 academic year; with the job market still tight, six with an exam passed failed to land a job, although two of those have since then. I'm pleased to note that about 330 students have begun actuarial careers since the program moved back to Math in 1989; that compares with about 160 prior to 1989. We're seeing a steady increase in recruiting by companies outside Texas; almost one-third of last year's hires were outside the state, and so far this year the fraction seems closer to one half.

So we're in good shape. Employers and alums support the program, there are lots of bright and hard-working students, and I have great colleagues. What a tough job I have!

Jim Daniel, Director

## What's on pages 2-4

Volunteers, speakers needed: 2  
More program changes: 2  
Leslie Vaaler promoted: 3  
AIG/AG China program: 3  
Focus on students: 4

## Employers contribute laptops for MA students

Five actuarial employers have provided six new Windows laptop computers for use by the six students now in the actuarial MA program. This provides our students experience with the type of computer system they are likely to use on the job, as opposed to the Linux systems generally available in the Mathematics Department.

The donors were: CCA Strategies, Irving; Hewitt Associates, The Woodlands; Rudd & Wisdom, Austin; Towers Perrin, Houston (two computers); and Watson Wyatt Worldwide, Dallas.

Because of a temporary reduction in the number of teaching assistantships available for graduate students in Mathematics, only two students were admitted to the actuarial MA program for fall 2006 rather than the usual four, reducing the total in the two-year program from the usual eight to six. We expect the total to return to eight for fall 2008 and will be seeking donors of two more computers so that each of the eight students will have one to use while in the program.

These laptops replaced desktop systems contributed six and seven years ago by Buck Consultants, Hewitt Associates, PricewaterhouseCoopers, Rudd & Wisdom, Towers Perrin (two systems), and Watson Wyatt Worldwide (two systems); those older systems were turned over to the Mathematics Department for use by other students.

---

## Scholarships update: new problems, new approaches

Note: As Buck Consultants Assistant Director of Actuarial Studies, Leslie Vaaler has taken on responsibility for the actuarial program's scholarship program. This is her report on the problems it is facing.

For many years, we were able to offer scholarship support to all active actuarial students who had passed an exam, but things are now much more competitive. It is difficult now for a student with just one exam to receive a scholarship.

Before I took over the scholarship administration, I would have accurately predicted that students like to get scholarships. However, I would have underestimated the extent that these scholarships matter to soon-to-be professionals who will have excellent earning potential. In addition to money now (and we all know about the time-value of money), the scholarships provide a significant morale boost. Studying for exams is hard work, and the scholarships encourage students on this road.

I have carefully considered the records of our strongest students and compared them to the records of applicants in recent terms. We not only have more students, we also have significantly more students who have good grades in actuarial (and non-actuarial) courses and who have passed multiple SoA/CAS exams. Many of these students also have impressive computing skills and extra-curricular involvements, not to mention internship experience.

Among the possible ways to deal with the nice problem of having more deserving students would be to offer smaller scholarships. However, over the years the Actuarial Studies Advisory Council has encouraged us to keep the scholarships above \$1,000 so that they have a significant impact on the recipients. We've also been urged to reward students

See Scholarships on page 3

## Alum Association seeks volunteers to help students with interviewing

The UT Actuarial Alumni Association (UTAAA) seeks members and volunteers for its annual Mock Interview event for actuarial program students who are preparing for actuarial job interviews.

Last September, the UTAAA volunteers conducting the mock interviews were Allan Mak (Towers Perrin, Houston); Gagan Nanda (Watson Wyatt, Dallas); Jasmin Shum (Buck Consultants, Houston); Lillian Cho (Towers Perrin, Dallas); Lindsey Mormon (Watson Wyatt, Dallas); Travis Weber (Watson Wyatt, Dallas); Tu Ta (USAA, San Antonio); Wei Yu (Texas Mutual, Austin); and Winnie Hung (Watson Wyatt, Dallas).

A flyer containing details about the Mock Interviews will be sent to members at the end of the summer. If you are interested in assisting students during our Mock Interview event, please make sure you have joined the UTAAA and your information in the Membership Directory is current.

If you are an alum of the UT Actuarial Program and have not joined the UTAAA, please do so now! There is no fee to join – simply provide your contact information so it can be added to the Membership Directory that is distributed to the UTAAA's 120+ members and to current UT actuarial students. If you are already a member and have changed employers, please update your contact information. New and updated contact information should be provided to the UTAAA Chairperson:

Lillian Cho  
Towers Perrin  
12377 Merit Drive, Suite 1200  
Dallas, TX 75251  
Phone: 972-701-2542  
E-mail: lillian.cho@towersperrin.com

Yanin Ounkomol  
Houston, TX  
Graduating May 2007, joining Watson Wyatt in DC. Passed P/1, FM/2, M/3, C/4. Likes ballroom dancing, Longhorn Band, camping, crafting.

## Seminar on Issues in Actuarial Practice introduces students to actuarial issues; interested in a being speaker?

The actuarial program seeks volunteer speakers for its Seminar on Actuarial Practice. Presenters discuss practical actuarial issues in a manner that students with no actuarial experience can understand.

The lectures occur on Mondays at 5 pm each spring semester and should last 60 to 90 minutes. Presentations that include active participation by the students are especially effective. About 30 students usually attend.

Previous presentations have included such topics as: actuarial ethics; actuarial consulting skills; P & C ratemaking; Social Security; controversies over pension plans; mergers and acquisitions; actuaries

in life insurance; and actuaries in P & C insurance.

Students participating must have had interest theory, the class covering survival models and life-insurance benefits (but not premiums or reserves), and the class covering severity and frequency and aggregate models (but not credibility or advanced estimation procedures).

While we have a small pool of both regular and occasional presenters, we'd like more so as not to exhaust these generous contributors to our students' more practical education. Please contact Jim Daniel (daniel@math.utexas.edu) to volunteer with a topic.

## Exam system and program changes updated

The final details of the restructured—for May 2007—actuarial exam systems appeared after the 2006 issue of Risky Business went to press, so what was said there about UT-Austin's actuarial program and the exams after P/1 and FM/2 needs to be updated.

The SoA tests the traditional material on life contingencies in Exam MLC; this is also a portion of CAS Exam 3. UT-Austin covers this material in the two-semester sequence M339U-V that starts each fall.

Stochastic models for financial derivatives are new to the syllabi and are tested in SoA Exam MFE and as part of CAS Exam 3; we cover that in a new course M339W

offered each fall. The remainder of CAS Exam 3 treats the content of the standard undergraduate statistics course.

The two-semester sequence M339J-349P, starting each spring, covers the content of Exam C/4. This includes severity models, frequency models, model estimation (including credibility), and simulation.

## New Associates recognized

Starting with the 1994 issue, Risky Business has attempted to recognize all new Associates that have come through the UT program since its move to Mathematics. No attempt is made to recognize other important status changes, however: Fellowship, membership in the Academy, marriage, parenthood, Lotto winnings, and the like. We don't have a team of reporters, remember!

The following list shows the new Associates in the SoA or the CAS. Any omissions are regretted, and corrections will be appreciated.

### ASA:

Julie Ferguson, Mercer HR Consulting (Seattle)  
Mei Jia, Geisinger Health Plan (Danville, PA)  
James Jones, Deloitte Consulting (New York)  
Katie (Messerschmitt) Kehoe, Standard Insurance (Portland)  
Allan Mak, Towers Perrin (Houston)—graduated May 2006!  
Sherry Yeh, CCA Strategies (Chicago)

### ACAS:

Will Arthur, AIG (Chicago)  
Nicole Elliott, Texas Department of Insurance (Austin)  
Mark Jones, Union Standard (Irving)

Congratulations!

## AIG/American General creates new program of China Fellows

AIG/American General in Houston has established the AIG/AG China Fellow program in UT-Austin's actuarial MA program to address one problem for AIG/AG and another for the actuarial program.

AIG/AG needs students from China, educated in actuarial science, and experienced in the US and especially in US business practices, who will eventually work in AIG's offices in China. They were finding it difficult to identify such individuals.

For its part, the UT-Austin actuarial MA program had been reluctant to admit well-qualified applicants from China because experience showed them to have extreme difficulty in locating entry-level actuarial jobs in the US.

Starting for fall 2007, one student from China—approved by both the actuarial program and AIG/AG—will be admitted each year to the actuarial MA program and designated an AIG/AG China Fellow. The Fellow must have strong English skills so as to serve as a Teaching Assistant in Mathematics.

AIG/AG will provide the Fellow additional funds and intends to offer the Fellow a summer internship at the end of the first year of graduate school. Provided that the internship goes well, the Fellow's funding will be continued for a second year and AIG/AG will hope to hire the Fellow for the American General office in Houston upon completion of the two-year actuarial MA program. After a few years' experience in Houston, the Fellow is hoped to return to China to continue working for AIG.

If successful, this program should help bring strong students to the actuarial program and strong employees to AIG in China.

Khiem Ngo  
Austin, TX

Graduating December 2007 in Finance. Passed P/1, FM/2, M/3. Likes playing sports—golf, basketball, etc.

Brian Gaudet  
Houston, TX

Graduating December 2007. Passed P/1, FM/2. Likes running, playing piano.

## Leslie Vaaler promoted

We're delighted to announce that Dr. Leslie Vaaler, the Buck Consultants Assistant Director of Actuarial Studies and a Lecturer in Mathematics, has been promoted by the University to the rank of Senior Lecturer effective in fall 2007.

This promotion is available only to excellent teachers who contribute strongly to the University in ways beyond teaching. Dr. Vaaler's service as Assistant Director played a key role in her promotion, as did her scholarly work in writing (with slight participation from Jim Daniel) the new textbook Mathematical interest theory, now being (or about to be) used in distinguished actuarial programs at such places as Connecticut, Michigan, and Waterloo.

In recognition of her promotion, her title will be modified in fall 2007 to Buck Consultants Associate Director of Actuarial Studies.

## Actuarial Studies Advisory Council appreciated for its support and advice

Every couple of years we like to recognize the volunteer members of our Actuarial Studies Advisory Council (ASAC), which advises us on the actuarial program and meets in Austin each fall.

Our appreciation for all their help and advice goes out to: Lillian Cho, Towers Perrin; Phil Dial, Rudd & Wisdom; Chris Goodman, Milliman USA; Serhat Guven, EMB America; Tim Heslin, AIG American General; Brian Kasper, AEGON; Lianne Latham, American National; Valerie

Lopez-Zinzer, Watson Wyatt Worldwide; Karen Nowiejski, Nova Pension Valuations; Vi Phu, Towers Perrin; Roger Ray; George Sanger, Hewitt Associates; Tammy Shelton, Buck Consultants; Tom Struppeck, CIFG; Alan Taper, Mercer HR Consulting; Catherine Taylor (ASAC Chair), USAA P&C; Glenn Tobleman, Lewis & Ellis; Greg Young, PricewaterhouseCoopers; and Kevin Zagortz, Watson Wyatt Worldwide.

### How to reach us:

Jim Daniel can be reached at

512/471-7168: UT office  
512/471-9038: UT FAX  
512/343-8788: home office  
512/343-8788: home FAX  
daniel@math.utexas.edu

Find us on the Web at

[www.utactuary.info](http://www.utactuary.info)

### Scholarships continue

who have extra exams passed. So, unless we raise more money for scholarships, there will be deserving students who don't get scholarships.

This October, when I described the scholarship situation, ASAC members urged that we continue to grant significant scholarships. However, there was also a consensus that we should consider reimbursing exam fees for successful candidates even if we lack funds for a large scholarship. Of course, as we offer reimbursement awards, we decrease the number of larger awards we can offer; therefore, this program was instituted on a modest basis.

I have also encountered another scholarship problem: we have students with need-based non-actuarial financial aid who ironically have limited ability to benefit from our scholarships; if we give such a student a scholarship, the folks at Student Financial Services (who must abide by all sorts of government regulations) are often required to take away another grant of a similar amount.

Having learned of this possibility, I worked to understand the extent to which students with need-based financial aid could be compensated for additional documented exam and exam preparation expenses. I am happy to say that Student Financial Services has been very helpful in working with us, enabling us to award small scholarships to cover these additional expenses. The relationships I have established this year should help us to maximize the effective student benefit from actuarial scholarships.

Leslie Vaaler





# Focus on students

## Financial aid honor roll

Outstanding students receiving merit-based financial aid from the actuarial program during the academic year from summer 2006 through spring 2007 included: AEGON-USA Actuarial Mathematics Scholarships: Cameron Carpenter, Brian Gaudet, Sheryl Kadakia, Jonathan McWillie, Daniel Rosenberg; James Morris Dial Scholarships in Actuarial Studies: McKenzie Eakin, Yong Hui Ler; Hewitt Associates Actuarial Scholarship: Yong Hui Ler, Riddhi Patel; Jordan Scholarships funded by the Southwest Actuarial Forum: Darice Chang; Jordan Scholarships funded by CIGNA: Riddhi Patel, Rong Rong, YuHsiang Wu, Jun Xia; Jordan Scholarships funded by the Troncoso Consulting Group: Jeff Chuang, Michal Kujovic, Saleh Lalani, Abbas Mujtaba; Jordan Scholarships funded by the UT Actuarial Alumni Association: Murtaza Rawat, Yu Hsiang Wu; Jordan Scholarships funded by the students' Actuarial Science Club: Darice Chang, Jeff Chuang, Brian Gaudet, Sheryl Kadakia, Moses Kim, Katherine Limanjaya, Michael McPhail, Anne Morris; Mercer HR Consulting Actuarial Scholarships: Roland Kapalaski, Michael McPhail, Lauren Perry; Milliman USA Standard of Excellence Actuarial Scholarship: Yanin Ounkomol; C. Mitchell Actuarial Scholarship: Jeff Chuang; John S. Rudd Jr. Endowed Actuarial Scholarship: Hao Chen, Yanin Ounkomol, Jun Xia; Rudd and Wisdom Actuarial Studies Scholarship: Weilin Li, Lilly Luk, Jonathan McWillie; D. W. Simpson & Co. Scholarship: Lauren Perry; State Farm Companies Actuarial Scholarships: Komail Khoja, Uzman Tariq, Jun Xia; Towers Perrin Actuarial Scholarships: Lauren Perry, Jiayin Zheng; USAA P&C Actuarial Scholarships: McKenzie Eakin, Sheryl Kadakia; USAA Life Actuarial Scholarships: Khiem Ngo; Watson Wyatt Worldwide Actuarial Scholarships: Moses Kim, Katherine Limanjaya, Riddhi Patel, Amie Sun; Eugene Wisdom Memorial Scholarship in Actuarial Studies: Yong Hui Ler, Michael McPhail; Actuarial Studies Excellence-Awards (Fireman's Fund and USF&G merit-based loan program to assist the Texas Department of Insurance): Yong Hui Ler, Xinan Li, Katherine Limanjaya, Rong Rong; Texas Department of Insurance Internship/Scholarship (Fireman's Fund and USF&G program to assist the Texas Department of Insurance): Hector Benavidez, Brian Gaudet, Komail Khoja, Yong Hui Ler, Weilin Li, Guillermo Martinez, Abbas Mujtaba, Amie Sun.

Michael McPhail  
Sugar Land, TX

Graduating December 2007. Passed P/1, FM/2, M/3. Likes spending time with his wife, hiking, watching Seinfeld every day.

Michal Kujovic  
Bratislava, Slovakia

Actuarial MA student graduating May 2008. Passed P/1, FM/2. Likes chess, soccer, movies.

## Placement operation

As announced in the 2005 issue of Risky Business, job and internship placement operations are now located in the Natural Sciences Career Services (NSCS) of Ace. For detailed information on how the eRecruiting system operates, contact NSCS: 512/471-6700, nsemploy@uts.cc.utexas.edu, or see the website at careers.ns.utexas.edu.

Expenses of Risky Business are paid with gift funds from friends of the program.

## Actuarial Science Club experiences boom year

President: Yanin Ounkomol  
Vice President: Sheryl Kadakia  
Treasurer: Khiem Ngo

The Actuarial Science Club (ASC) has had a tremendously successful year with 90 members. We kicked off the year with an ice cream social, introducing the new officers and the club's purpose. New events we added this year include study groups, a panel discussion about internships, and a community service project.

Sheryl Kadakia has done a great job with Seminars and Mock Exams for both the fall and spring semesters. The exam preparation seminars for Exams P and FM were once again taught by Dr. Ana Neira, from Mercer in Los Angeles. Thanks to these seminars, UT students can fully prepare for exams at a discounted price and the club can donate \$1000 to the actuarial scholarship fund.

The ASC has had several speakers from various industries talk about the actuarial profession. At the end of the fall semester, the club had the honor of having Professor John Shepherd from Macquarie University in Sydney, Australia, speak about the Actuarial Control Cycle, the central concept for the Fundamentals of Actuarial Practice following the preliminary examinations.

In addition to having speakers, the club has expanded its social aspect by playing intramural softball and by working a service project this spring. The club hopes to end the 3 year losing streak in softball by practicing before the games. New this year, the club participated in Project 2007, UT's largest single day service event. The ASC was in charge of cleaning up an impoverished neighborhood and pulling weeds at Barrington Elementary.

Keeping the tradition alive, the ASC will be holding its annual ice cream social on April 14<sup>th</sup>, 2007, for actuarial students and UT alums. The ice cream social is meant to bring together alums from the actuarial program and speakers from the semester with students, providing great social and

Continued in the column to the left