

RISKY BUSINESS

—News and notes on the Actuarial Studies Program—

Department of Mathematics

Spring 2005

The University of Texas at Austin

From the Director



It's time to think of the future.

Health allowing, I'll keep teaching through the summer of 2010, when I'll retire from UT-Austin. This provides an opportunity for new blood in the program, new ideas, and increased energy.

I hope that it will also bring a research component to the actuarial program while continuing the traditional strong emphasis on teaching at the undergraduate and Master's level. In light of the strong research group here in modern financial mathematics, I'd like to see the future include research at the interface of actuarial science and financial mathematics.

So one possible type of successor as Director is an academic actuary active in research. An alternative type is an industry actuary to lead the program and provide connections to the profession; possible problems with this alternative include inexperience teaching and unfamiliarity with the most recent preliminary exam content.

Actuarial programs elsewhere have found it very difficult to identify and attract strong candidates of either type. I hope that we might start a search next year, even if we end up hiring my successor before my retirement.

The future also needs to bring us additional actuarial faculty. Leslie Vaaler continues to do a great job with all the sections of the interest-theory course and plans to continue this for many years. But I'm swamped with students in the other

See **Director** on page 3

Look on pages 2-4

Actuarial-practice seminar: 2

Career placement: 2

VEE credit: 3

Exam-prep seminar: 3

Student club news: 4

Students win CAS, UT awards

Gillette & Liu receive CAS Trust Scholarships

Carl Gillette and Grace Liu won two of the three CAS Trust Scholarships for 2004-5; this is the first time that two students from one school have won.

The \$1,500 per year scholarships are intended to further students' interest in the



property and casualty actuarial profession and encourage pursuit of the CAS designations. U.S. and Canadian citizens and permanent residents are eligible.

Carl, from Houston, will graduate in May with degrees in Finance, Business Honors, and Mathematics (Actuarial Science Option); he has a 4.0 GPA. He has accepted



See **CAS Scholarships** on page 4

Counts named top TA in College by Texas Exes

Nathan Counts, a student in the actuarial Master's degree program, was awarded the Texas Exes Teaching Award for 2004-5 for a Teaching Assistant in the College of Natural Sciences. The \$500 prize was awarded at a February ceremony. A prior actuarial Master's student, J. Harley Bailey, previously won this award.

Since 1982, the Texas Exes have awarded one prize annually to one faculty member and to one Teaching Assistant in each UT-Austin school or college. Students nominate the candidates, and a school or college committee selects the two winners.

Nathan, from Austin and previously an undergraduate at Pepperdine, is graduating in May with his Master's degree; he has ac-



cepted a position with Chicago Consulting Actuaries in Irving.

He told the Texas Exes: "I love working with calculus students at semester's start who want to drop out and go to pre-calculus and doubt their abilities but who stick with it and work hard, and by the end of the semester are some of my best students and have confidence in their ability to do math. The joys of teaching are measured by your students and that is what makes teaching rewarding."

Career placement procedures change

Actuarial on-campus interviewing and position posting is now being handled by Natural Sciences Career Services (NSCS). NSCS provides skilled professional assistance to students and employers alike.

There are several advantages for recruiters and students to this approach. Job openings can be posted on-line, a large number of interviewing rooms will be available, and résumé searches can be conducted from one centrally located site. The NSCS interviewing rooms (Will C. Hogg, 2.308) are centrally located on campus near the Main Building (also known as the Tower); see the online maps at www.utexas.edu/maps/.

All actuarial students, regardless of their formal major, are assisted by Senior Career Advisor Laura Mondino, who has worked in Career Services for several years. Christina Martinez, Recruiting Coordinator, handles interview scheduling and can arrange a room reservation for an information session.

For detailed information on how the system will operate, contact NSCS: 512/471-6700, nsemploy@uts.cc.utexas.edu, or see the website at careers.ns.utexas.edu. The process is roughly as follows:

Employers may post job or internship openings with required qualifications at any time during the year. Position announcements can be mailed, faxed, or emailed to NSCS, or employers may post the position through eRecruiting on their own. To obtain access to eRecruiting, please contact the NSCS recruiting coordinator at nsemploy@uts.cc.utexas.edu with your contact name, title, email address, mailing address, phone & fax number, and company web address.

Qualified students then indicate their desire to apply for the posted opening, and employers are provided applicants' résumés so they can select those to be invited to interviews. Invited applicants can then sign up on line for an interview, and the employer is provided a final schedule.

Alum group assists current students

If you are an alumnus of the UT Actuarial Program, and have not joined the UT Actuarial Alumni Association (UTAAA), please do so now! There is no fee to join – simply provide your contact information so it can be added to the UTAAA Membership Directory that is distributed to all 120+ members, as well as to current UT actuarial students. In addition, 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 (972-701-2542, lillian.cho@towersperrin.com).

Each September the UTAAA holds a Mock Interview event for students of the Actuarial Program that are preparing for actuarial job interviews. Thanks to the following UTAAA members who volunteered their time in Austin last fall: Ho Au-Yeung, Hewitt, Lillian Cho, Towers Perrin, Andy Dare, Towers Perrin, Clark Good, Watson Wyatt, Olivia He, Mellon, Shawn Howell, Benefit Partners, Greg Kantor, Watson Wyatt, Theresa Lee, AFA FMS-ARD, Shawn Loftus, USAA, Jim Murphy, Texas Windstorm Insurance Association, Brian Sprawka, Towers Perrin.

In addition, the UTAAA would like to extend special thanks to Manet Schuman (Mellon) who sponsored lunch at Kerbey Lane for all the students and alumni who participated in the Mock Interviews. This provided a great opportunity for students to interact with the alumni in a casual setting.

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

Lillian Cho, Chairperson

Actuarial-practice class addresses current issues; volunteers needed

UT-Austin's new spring class Seminar on Actuarial Practice introduced about 25 students to aspects of the real world of actuarial work during four class sessions. Presenters are needed for next spring.

The January meeting was presented by Karen Nowiejski (Nova Pension Valuations), Gloria Lesmeister (Watson Wyatt Worldwide), and Chris Norman (USAA Insurance). They provided information on the actuarial Code of Conduct and discussed ethical issues for actuaries.

February's meeting featured Serhat Guven (EMB America) describing elementary rate-making in the P&C world.

Linda Konarik (Benefit Partners) in March provided insights on the skills needed in actuarial consulting beyond the technical skills.

The April meeting saw George Sanger (Hewitt Associates) discuss the controversy over cash-balance pension plans as replacements for traditional defined-benefit plans.

If you would like to present a seminar session some future year, let Jim Daniel know about your topic. Remember that students are only required to have had the interest-theory class and the class that introduces probability models for survival and for claim severity.

Actuarial program in brief, 2004-2005

178 undergraduate majors seeking the B.S. in Mathematics (Actuarial Science Option), which is 27% of all undergraduate Mathematics majors; 8 graduate students in the actuarial M.A. program; about two dozen other students majoring in something else but taking most of the actuarial classes.

Classes for VEE credit (Verification by Educational Experience) for economics, finance, and applied statistical methods; classes covering the content of exams P, FM, M, and C.

Enrollments of about 175 in classes for exams FM or M in the fall semester; about 190 in classes for exams FM or M or C in the spring semester.

About half the students are female; about 20% are international.

On the Web (you might need www first).

Enter the Website: utactuary.info

M.A. program: utactuary.info/MA.html

Risky Business: utactuary.info/riskybusiness.html

Alum scholarship drive continues

For over 90 years the University of Texas at Austin's Actuarial Science Program has been the only advanced actuarial program in Texas, and its reputation for excellence has made it a favorite recruiting location for actuarial employers.

The good news is that the program's tremendous success has resulted in astounding increases in the last five years, both in the number of enrolled students and number of students passing exams. With growth comes challenge, though. This growth has threatened our tradition of providing scholarships to students as they pass exams, because there are simply not enough scholarship dollars.

If you're an alum reading this, you are no doubt proud of the success of this program and want to ensure that future students have the same motivation, encouragement, and rewards as were available in the past.

A small group of dedicated alumni has banded together to create the UT Austin – Actuarial Alumni Scholarship fund drive. Entering its fourth year, this annual fund drive kicks off in the fall. Last year, we awarded 2 excellent students scholarships totaling \$1,200. This year, we will award 3 students scholarships totaling \$1,800. We hope to offer a number of scholarships, and eventually have the scholarship permanently funded through an endowment of at least \$25,000 targeted for 2008. With an annual fundraising goal of \$6,000 we can offer scholarships each year while also setting aside funds to build the endowment.

This alumni scholarship endowment is our way of repaying a program that has given so many of us tremendous professional success. If you have any questions, contact any of the dedicated alumni who've made this fund drive possible: Lilian Cho, Jim Davis, Theresa Lee, Valerie Lopez-Zinzer, Karen Nowiejski, Kale Sears, Kevin Zagortz.

Valerie Lopez-Zinzer

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

Seven new Associates recognized: SoA leads CAS four to three

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: Ho Leung Au-Yeung, Hewitt Associates (Irving), Jo Beth (Arthur) Stephenson, Texas Department of Insurance (Austin), Elizabeth (Devaul) Tucker (San Francisco), Adrienne Wagner, Hewitt Associates (The Woodlands).

ACAS: Rebecca Armon, ACCC (Houston), Jim Murphy, Texas Windstorm Insurance Association (Austin), Lorie (Vordenbaumen) Pate (Austin)

Congratulations!

Director continues ...

actuarial classes. Changki Kim, our terminal three-year Instructor, has helped with this load last year and this but will depart this spring or next—and we've had no applicants to succeed him in this position, in part because other actuarial programs are advertising permanent positions.

With the support of the Mathematics Department, I've proposed that the administration create two new tenure-track assistant professorships in Mathematics dedicated to the actuarial program. If these are allocated, it will allow us over time to hire additional actuarial teachers who will also contribute to our research component (and possibly develop into my successor's successor as Director). But with the Legislature likely again to reduce the percentage of The University budget that it funds, it's not at all clear that new positions will be forthcoming.

So, as usual, the future is hazy. But we're doing everything we can to ensure the future of the actuarial program for decades to come.

Jim Daniel, Director.

Students organize exam-prep seminars for Exams P/1, FM/2

The UT-Austin student Actuarial Science Club is now organizing professionally taught exam-prep seminars twice yearly for both Exam P/1 and Exam FM/2. Detailed information and registration forms can be found at the Club's website www.utactuary.info/seminar.html (you'll need to click on the Seminar link in the banner at the top of that page).

Although both seminars are offered primarily as a service to UT-Austin actuarial students, they are open to everyone. Net proceeds largely go to the actuarial program's scholarship fund.

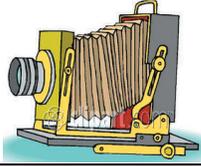
Both seminars are taught by Dr. Ana Neira, whose previous Club-organized Course 1 seminars were both popular and successful. Ana received her Ph.D. in pure mathematics at UT-Austin while also taking actuarial classes and passing actuarial exams. She works as an actuarial analyst for Mercer HR Consulting in San Francisco and nearly has her Associateship.

Classes approved for VEE credit

UT-Austin classes have been approved to meet all the new VEE requirements of the SoA and CAS.

Starting with the January 2005 change in the exam systems, candidates must show that they have learned certain material by meeting the Verification by Educational Experience (VEE) requirements in those subjects. The subjects include Economics (micro- and macro-), Corporate Finance, and Applied Statistical Methods (regression and time series).

One way to meet the requirement is to obtain at least a B- grade in a class that has been approved by the SoA and CAS for this purpose. Approved classes at UT-Austin are: for Economics, ECO304K & 304L or 304L and 420K; for Corporate Finance, FIN357; for Applied Statistical Methods, M349R (taught in spring 2005 as M375) or MSC371H or M349T=389T (spring 2003 only). Candidates with a grade of at least B- in such these classes can easily obtain VEE credit.



Focus on students

Financial-aid Honor Roll

Outstanding students receiving merit-based financial aid from the actuarial program during academic year summer 2004 through spring 2005 included:
AEGON-USA Actuarial Mathematics Scholarships: Waswate Ayana, John Gu; James Morris Dial Scholarships in Actuarial Studies: Nick Thornley; William W. Hand Memorial Actuarial Scholarship (American Society of Pension Actuaries): Allan Mak; Hewitt Associates Actuarial Scholarship: Jason Tracton; Jordan Scholarships funded by the Actuaries Club of the Southwest: Hsing-Pei Chen, Rebecca Merrill, Travis Weber; Jordan Scholarships funded by the Southwest Actuarial Forum: Jiayin Pan; Jordan Scholarships funded by the Actuarial Student Club: Waswate Ayana, Kelly Eakin, Grace Liu, Allan Mak, Carrie McGraw, Usman Tariq, Da Xu; Mercer HR Consulting Actuarial Scholarships: Ashar Azhar, Chris Hadik, Jeff Liu; Milliman USA Standard of Excellence Actuarial Scholarship: Grace Liu; C. Mitchell Actuarial Scholarship: Andrew Siu; John S. Rudd Jr. Endowed Actuarial Scholarship: Travis Weber; Rudd and Wisdom Actuarial Studies Scholarship: Carl Gillette; D. W. Simpson & Co. Scholarship: Grace Liu; State Farm Companies Actuarial Scholarships: Ankit Agarwal, Kaushal Balanadu, Yazan Dahu, Shamit Gupta, Scott Homann, Travis Weber; Towers Perrin Actuarial Scholarships: Cameron Carpenter, Lilly Luk, Riddhi Patel, Usman Tariq; USAA Actuarial Scholarships: Jeff Liu, Jason Tracton; UT Actuarial Alumni Actuarial Scholarships: Waswate Ayana, Kelly Eakin, Allan Mak; Watson Wyatt Worldwide Actuarial Scholarships: Nathan Counts, Bo Shi, Usman Tariq; Eugene Wisdom Memorial Scholarship in Actuarial Studies: Ashley Smith; Actuarial Studies Excellence-Awards (Fireman's Fund and USF&G merit-based loan program to assist the Texas Department of Insurance):

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

Actuarial Student Club

President: Travis Weber

Vice President: Waswate Ayana

Treasurer: Arthur Sigel

The Actuarial Science Club (ASC) student organization has seen another strong year marked by rapid growth. With the Natural Sciences Career Services handling most of the Fall 2004 recruiting season rush, the club had more energy to focus on its over 80 members. During this time, students remained busy with career expos, company presentations, and other company-sponsored events.

One major change for the club was the addition of online sign-up capability for T-shirt reservations and club membership. Although dues and payments are still received in person, the online forms and databases created by Treasurer Arthur Sigel keep the club records organized and accessible.

This year's club T-shirts remained nearly unchanged from last year's by popular demand. The shirts spell out "Actuarial Science Club 2004-2005" using some actuarial symbols on the front, and sport the slogan "Actuaries do it with models ...continuously and discretely" on the back.

The semiannual joint course 1 prep seminar has greatly grown in size and success. In fall, graduate student Gagan Nanda taught the weekend-long seminar started by Dr. Ana Neira (Mercer, San Francisco) in her absence. Thanks to them, the club was able to donate \$3000 to the actuarial scholarship fund.

As the spring semester continues, ASC will continue hosting professional speakers from the actuarial consulting and insurance industries. There will also be many new opportunities available to members.

In keeping with ASC's goal to support its students taking actuarial exams, Vice President Waswate Ayana is leading a project to proctor and subsidize the cost of mock exams for courses P, FM, M, and C. These exams will use BPP materials and offer the students an opportunity to experience the exam setting at a fraction of the cost. The mock exams will be graded and returned with personalized analyses that will help the students gauge their performance. And see the information on our exam-prep seminars on page 3.

In addition, President Travis Weber will be organizing an ice cream social for club members in late spring to celebrate the end of the semester and give members a networking opportunity. Also, the newly formed ASC intramural softball team led by team captain Nathan Counts starts practice soon and plans to be the best.

Overall, the club will continue to work hard to keep up with the remarkable growth of the UT actuarial science program. To learn more about ASC's events and programs, visit the club website at <http://studentorgs.utexas.edu/actuary/>.

Travis Weber, President

Melissa Herrera, Jennifer McLaughlin, Huachen Sun, Renee Thompson; Texas Department of Insurance Internship (Fireman's Fund and USF&G program to assist the Texas Department of Insurance): Waswate Ayana, Ashar Azhar, Yazan Dahu, Fayola Farquhar, Rebecca Merrill, Jiayin Pan, Murad Sadruddin, Renee Thompson, Elizabeth Wiley, Da Xu.

CAS Scholarships continues ...

a position with Mercer HR Consulting in Houston. Carl is also checking examples and exercises in the interest-theory textbook that Jim Daniel and Leslie Vaaler are writing.

Grace, from Austin, will also graduate in May with degrees in Finance, Business Honors, and Mathematics (Actuarial Science Option); she has a 4.0 GPA. After graduation, she will work for Tillinghast/Towers Perrin in New York City.