

RISKY BUSINESS

—News and notes on the Actuarial Studies Program—

Department of Mathematics

Spring 2009

The University of Texas at Austin

From
the
Director



Time sure flies when you're having fun!

I can hardly believe that this is the 20th year since the actuarial program returned to its original home in the Mathematics Department and I became its Director. Over that time over 385 students from our actuarial program have found entry-level actuarial jobs, and lots of others have completed the program and gone on to work in other areas or to attend graduate school in a wide range of fields—operations research, computer visualization, financial engineering, computer sciences, religious studies, and so on.

While 2009-2010 will be my last at UT-Austin, as this issue's lead article explains the actuarial program will continue without a hitch under the able guidance of my successor, Mark Maxwell.

But I'm not gone yet, so I'm pleased to be able to assemble this year's *Risky Business* to inform you about what's been going on. You'll see that the program is going strong and in fact apparently still growing.

One change this year is that besides admitting our usual four students for the actuarial Master's program and providing them with Mathematics teaching assistantships, we offered admission

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Dr. Mark Maxwell, ASA, to succeed Daniel in 2010

Dr. Mark Maxwell, ASA, has accepted our offer to succeed Jim Daniel as Director of Actuarial Studies when Daniel retires in August 2010. He'll join the Mathematics Department faculty this coming summer as Clinical Professor and Paul V. Montgomery Fellow and teach in the actuarial program so as to overlap with Daniel for a year.

Maxwell's hiring brings to a close a process that began nearly four years ago when Daniel identified his intended retirement date. A Mathematics Department committee of distinguished faculty was appointed to think about the future of the actuarial program. Having consulted widely in the actuarial academic community, it recommended the appointment of an actuarial educator to lead the program and of a research-oriented credentialed actuary to add a research component to the program. It eventually unanimously recommended Maxwell as its first choice

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Originally from Boise, Idaho, Maxwell—as he prefers to be called—received a PhD in Mathematics from Oregon State. He became interested in actuarial education while teaching at Maryville University in St. Louis.

Robert Morris University (RMU), outside Pittsburgh, hired him in 2000



to develop an actuarial program while he was taking actuarial exams, and he began directing RMU's actuarial program in 2003—the same year in which he became an Associate of the SoA. With his RMU colleague Len Asimow, he has completed a textbook for a first course on probability and statistics with examples relevant to risk, insurance, and actuarial applications. Maxwell

spent last spring at UT-Austin as a visiting faculty member, teaching a section of our Interest Theory class and getting to know many of our students.

The UT-Austin students' Actuarial Science Club has arranged for Maxwell to teach exam-prep intensive review seminars for the joint actuarial exams P/1 on probability and FM/2 on financial mathematics (mainly interest theory). He volunteered his time to teach these as a fund-raiser for the Club last spring, last fall, and again this spring.

Maxwell is currently completing an unexpired term on the governing Council of the Education and Research Section of the Society of Actuaries. For pleasure, he enjoys outdoor activities and playing sports, and is an avid sports fan—especially of baseball and his beloved Cubs.

You can e-mail Maxwell as maxwell@math.utexas.edu.

State of the actuarial program, 2008-2009

This article describes several aspects of the actuarial program to give you an overall view of its health.

Student body. There are about 170 students seeking the B.S. in Mathematics (Actuarial Science Option), about as last year. Ten students are in our Master's program. It appears that about 35 students are actively engaged in the actuarial program but not seeking either of the above degrees; these primarily come from Business or Economics, but some are also in Engineering or Computer Sciences.

Roughly 45% of actuarial students are female; less than 20% are international students.

Enrollment trends. This fall's enrollment in our Interest Theory classes

totaled 79, up almost 13% from the 70 in fall 2007. Enrollment in the fall post-Interest-Theory classes was 172, up almost 24% over the 2007 number (and nearly double the 2006 number).

Interest Theory and Introductory Financial Math for Actuaries this spring have a total of 112 students, up nearly 22% from last spring's 92. The classes covering some of the material for Exams MLC/3L and C/4 have 124 this spring, about the same as the 121 in 2008. Our class that meets the VEE requirement in applied statistics has 55 students, up from last spring's 47.

Students and exams. The program continues to stress the importance of the actuarial exams, as do employers. Among the 103 students who provided

data early last fall before the fall exams, seven had passed three exams, 15 had passed two, and 23 had passed one. Of the 115 providing data this winter, four have passed three exams, 12 have passed two, and 16 have passed one.

Job placement. Of the 26 students that had passed at least one exam and were eligible to work permanently in the US, three who sought actuarial jobs failed to find one during the 2007-2008 academic year. One of the three international students who had passed an exam found a position. Two of the 18 students without an exam found a job.

This December another nine students accepted actuarial jobs. About 45 students are seeking jobs this coming May/August or December.

Successor continues

for Director from among five excellent candidates, and the Department's governing body unanimously supported the recommendation.

"Maxwell will do a great job for UT-Austin's actuarial program and bring new vigor and new ideas", said Daniel. Maxwell hopes to attract a research-oriented actuary who would interact with some strong research group here, such as that in financial mathematics. He plans to expand our recruiting of highschool students; he was quite successful in this for his current home institution, where he developed an outstanding undergraduate actuarial program.

Said Maxwell: "It is my dream opportunity to move to Austin, work with excellent students, and help build on the accomplishments of the program. I promise to be aggressive in helping students maximize their potential. I hope to inculcate students with a sense of family and ownership in the program, so that graduates remain involved as they advance in the profession."

Find us on the Web at
www.utactuary.info

Student club continues 1

However, this year the club took further steps to help network students studying for exams through Facebook groups. Members could use the groups to form study groups and post questions for other students taking the same exam.

ASC tried to ease the burden of studying for actuarial classes by initiating "study parties." The club reserved a room and brought snacks, and students showed up with their friends to study for actuarial homework assignments and tests. This provided members with the opportunity to find study groups or to study individually surrounded by students to whom they could ask questions.

ASC continued encouraging social events to help students network. The officers feel that class success, exam success, and club success follows students befriending and getting to know their fellow ASC members. Social events included Bowling, a Halloween Party, Dave and Busters Night, a Rock-band Party, and attending Plucker's Trivia Night. Also, the club participated in Intramural soccer, football, and basketball (we even made it to the playoffs!).

Overall, ASC's activities this year

Student club continues 2

have vastly expanded. Broad changes include consistently having meetings/social events every week (instead of last year's biweekly meetings) and increasing communication through weekly updates, a more extensive website (<http://www.ma.utexas.edu/dev/asc/>), and seeking member feedback through email surveys. We maintained the growth that the previous officers accumulated through pushing social events, and we initiated more programs to help the students reach professional, exam, and classroom success.

Meagan Hughes, President

Director continues

without financial support to the three applicants that were the backups to the first four. To our surprise, all three accepted; they even received teaching assistantships for the fall because Mathematics needed their services. We intend to continue this practice, although it's hard to predict how many might accept without support. Our Master's students seem popular with employers, so studying here is an investment for the future despite the cost.

Jim Daniel, Director

New Associates

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: Courtney Bach, JPMorgan Retirement (Irving, TX); Darice Chang, Towers Perrin (Dallas); Jeff Chuang, New York Life (New York); Rebecca Cruickshank, USAA Life (San Antonio); Brian Horton, Aon Consulting (Baltimore); Aly Moosa, SCOR (Plano); Khiem Ngo, Rudd & Wisdom (Austin); Yanin Ounkomol, Watson Wyatt (Arlington, VA); Travis Weber, Watson Wyatt (Dallas); Terence Yiu, KPMG (Hong Kong).

CERA: Brody Lipperman, AEGON (Bedford, TX).

ACAS: Elizabeth Buhro, Texas Department of Insurance (Austin); Miriam Fisk, Towers Perrin (Hartford); Jinghua Kuang, Texas Department of Insurance (Austin).

Congratulations!

Bridget Barrow

Katy

Graduates May 2010 in Finance.
Passed P/1. Volunteer with blind.

Rogelio Sanchez

Fort Worth

Graduates May 2010. Passed P/1.
Loves UT sports teams.

How to reach us:

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Actuarial Studies Advisory Council guides program

The Actuarial Studies Advisory Council (ASAC) is a committee of actuaries—and occasionally a non-actuary—that advises us on the actuarial program. Two of its current members, Vi Phu and Tammy Shelton, also have been elected to terms on the Advisory Council for the College of Natural Sciences in which the Mathematics Department resides.

While the ASAC provides advice throughout the year as appropriate, it meets each fall in Austin to review detailed reports on the program and its finances and to discuss current issues. Many ASAC members stay after the meeting for a reception with current students.

Current Chair of the ASAC is Catherine Taylor, FCAS, of USAA. The other members are Lillian Cho, ASA, Towers Perrin; Phil Dial, FSA, Rudd & Wisdom; Christian Goodman, ASA, Milliman; Serhat Guven, FCAS, EMB America; Tim Heslin, FSA, AIG/American General; Brian Kasper, FSA, AEGON Direct Marketing; Liane Latham, FSA, American National; Shawn Loftus, FSA, USAA; Gagan Nanda, Watson Wyatt; Sumi Parekh, Mercer; Vi Phu, ASA, Towers Perrin; Roger Ray, ASA, Leggette Actuaries; George Sanger, FSA, Hewitt Associates; Tammy Shelton, FSA, Buck Consultants; Karen Smith, FSA, Nova Pension Valuations; Tom Struppeck, ASA, FCAS, Longhorn Analytics; Alan Taper, FSA, Hewitt Associates; Glenn Tobleman, FSA, FCAS, Lewis & Ellis; Greg Young, ASA, PricewaterhouseCoopers; and Valerie Zinzer, FSA, Nova Pension Valuations.

Thanks!

John Farley

Nassau, Bahamas

M.A. student, graduates May 2010.
Passed P/1, FM/2, MFE/3F. Plays tennis, table tennis, racquet ball.

Actuarial alums host mock interviews each fall—join in!

The UT Actuarial Alumni Association (UTAAA) continues to conduct Mock Interviews at the beginning of each fall semester for students of the actuarial program. Many thanks to the following alumni volunteers who conducted interviews and offered job search and resume advice to 21 students at the September 2008 Mock Interviews:

Allan Mak, Towers Perrin (Houston); Charles Hui, Transamerica Life (Dallas); Christy Trang, Watson Wyatt (Dallas); Eddie Bradford, Texas Mutual (Austin); Lillian Cho, Towers Perrin (Dallas); Michal Kujovic, Watson Wyatt (Houston); Riddhi Patel, Mercer (Dallas); Sumi Parekh, Mercer (Dallas); Valerie Lopez, Nova Pension Valuation (Austin); William Strange, Buck Consultants (Dallas).

In addition, thanks to Towers Perrin for sponsoring lunch for the actuarial students and alumni volunteers at the end of the Mock Interview event. If you or your employer are interested in sponsoring lunch at this year's event, please contact the UTAAA Chairperson.

To volunteer for our Mock Interview event, 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 members at the end of the summer.

If you are an alumnus 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 its 120+ members as well as to current UT actuarial students. 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



Focus on students

Two students honored for excellence

Since the publication of last spring's *Risky Business*, two actuarial students received awards for academic excellence.

Among the awards were Bob Williams Awards from the Mathematics Department. The Williams endowment was created by UT-Austin alum and Emeritus Professor Bob Williams to provide funds to support excellence in undergraduate mathematics. Each of the half dozen specialty areas for mathematics majors can recommend candidates for recognition each semester.

In spring 2008 a Williams award was made to Ms. Pui Man Ho, who graduated with a 4.0 GPA and received the B.S. in Mathematics (Actuarial Science Option). Originally from Hong Kong, she attended Foothill College in California before coming to UT-Austin. She passed Exams P/1, FM/2, and MFE/3F before graduating and starting work with Mercer in San Francisco. Pui Man also received a book award for academic excellence from our College of Natural Sciences at its Honors Day.

Originally from Singapore, Ms. Zhi Xuan Fang received a Williams award last December, graduating with a 3.96 GPA and the B.S. in Mathematics (Actuarial Science Option). She passed Exams P/1, FM/2, and MLC/3L before graduating. Having become interested in finance and financial mathematics while at UT-Austin, she plans to start graduate school next fall at either Carnegie Mellon (in computational finance) or Columbia (in financial engineering).

Students' Actuarial Science Club expands activities, provides resources for students

This year, the Actuarial Science Club (ASC) focused on providing resources for students pursuing internships/full time jobs, preparing for actuarial exams, studying for actuarial classes, and wishing to develop a social actuarial student network. The officers continued last year's popular programs while developing several new programs to pursue even more member participation.

The club took extraordinary steps this past recruiting season to help students pursue internships and full time jobs. We sponsored resume and interviewing workshops with the Natural Science Career Center, providing students with actuarial specific advice. We also hosted internship panels and "get to know your seniors" events to encourage students to utilize upper classmen with work and exam success. Also, the club continued to sponsor professional speakers whose topics ranged from "what it takes to be an actuary", "the secrets of an insurance job", and "starting an actuarial career in a downturn economy." ASC meetings helped students both learn more about the available actuarial paths and improve their skills to pursue a path.

To help students prepare for exams, the club continued to offer discounted seminars taught by Dr. Maxwell, DVD seminar rentals, mock exams, and the "actuarial marketplace", which helps students network to buy/sell used manuals.

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

Financial aid Honor Roll

Outstanding students receiving merit-based financial aid from the actuarial program during the period from Summer 2008 through spring 2009 included:

AEGON-USA Actuarial Mathematics Scholarships: David Fernandez, Ray Guan, Chanhan Hsu, Lu Lu; James Morris Dial Scholarships in Actuarial Studies: Kayley Clemings, Lu Tian; Hewitt Associates Actuarial Scholarships: Minsub Kim, Spencer Ranney, Nicola Voldstad, Tatiana Yacho, Zhehui Mao; Jordan Scholarships funded by Actuarial Alumni: Travis Clark, Matthew Garfield, Kyungho Lee, Kenneth Torng, Na Ye; Jordan Scholarships funded by the Actuarial Student Club: Ronak Shah, Kenneth Torng; Jordan Scholarships funded by the Actuaries Club of the Southwest: Julie Minica, Wenwen Sun; Jordan Scholarships funded by the Southwest Actuarial Forum: Chanhan Hsu, Minsub Kim, Bryan Xin Qiao; Jordan Scholarships funded by USAA Life: Chanhan Hsu, Zhou Lu, Zhehui Mao; Jordan Scholarships funded by Mark and Ashley Guajardo: Scott Merkord, Brice Robinson; Jordan Scholarship: Tejesh Patel; JPMorgan Compensation and Benefit Strategies Actuarial Scholarships: Jesus Flores-Komiyama, Brice Robinson; Mercer Actuarial Scholarship: Sean Copeland; Milliman USA Standard of Excellence Actuarial Scholarship: Scott Merkord; C. Mitchell Actuarial Scholarship: David Fernandez; John S. Rudd Jr. Endowed Actuarial Scholarships: Hang Leung, Jennifer Thelen; Rudd and Wisdom Actuarial Studies Scholarships: Sean Copeland, Paul Freeman, Matthew Garfield, Adam Henry, Daphne Lum, Steven Smith, Kenneth Torng, Allen Van; D. W. Simpson & Co. Scholarship: Kyungho Lee; Towers Perrin Actuarial Scholarships: Meagan Hughes, Cyan Manuel, Ronak Shah; Troncoso Consulting Group Actuarial Scholarship: Bryan Xin Qiao; USAA P&C Actuarial Scholarship: Kenneth Torng; Watson Wyatt Worldwide Actuarial Scholarships: Stephanie Kiehnle, Tejesh Patel, Jonathan White; Eugene Wisdom Memorial Scholarships: Zhehui Mao, Lu Zhang; Actuarial Studies Excellence-Awards (Fireman's Fund and USF&G merit-based loan program): David Fernandez, Devan McDonald, Julie Minica, Tatiana Yacho; Texas Department of Insurance Internship (Fireman's Fund and USF&G program to assist the Texas Department of Insurance): Travis Clark, David Fernandez, Katie Laughlin, Kyungho Lee, Hang Leung, Melissa Mokry, Brice Robinson, Jonathan White.

Meagan Hughes The Woodlands

Graduates May 2010 in Math, Plan II, Business Honors, Finance. Passed P/1, FM/2. Actuarial Club President.

Placement operation

Job and internship placement operations are located in the Natural Sciences Career Services (NSCS) office. For detailed information on how the eRecruiting system operates, contact NSCS: 512/471-6700, careers@cns.utexas.edu, or see the website at cns.utexas.edu/career_services/.