

RISKY BUSINESS

—News and notes on the Actuarial Studies Program—

Department of Mathematics

Spring 1993

The University of Texas at Austin

From
the
Director



Scholarships, stupid!

Following Bill Clinton, I should write that in big letters all over my office to remind me of the program's biggest need. The costs of education continue to rise, while it seems unlikely that the State will allocate additional funds for higher education this biennium. In fact, general financial aid may well drop. Students get squeezed from both sides.

And actuarial students get squeezed even worse. We all know what it's like to juggle actuarial exams, full time jobs, and personal lives. Actuarial students have to juggle actuarial exams, their full time "jobs" as students, personal lives, and—increasingly often—part time employment. Recent students have been waitpersons, bank tellers, tutors, cashiers, phone solicitors, painters, construction workers, deliverers, sales clerks, cooks, buyers, factory workers, and occasionally even actuarial interns.

That's too many balls to juggle. Increasing the financial aid available for actuarial students can eliminate some of the financial pressure and let them focus on schoolwork and actuarial exams. Presently about 100 actuarial students compete for just six scholarships; by comparison, the 120 Geology students compete for 36, and Accounting and Finance have even more.

Hence, the scholarship drive announced in the lead article. Please help. Encourage your employer or business to establish a scholarship as described in that article. Contribute to our annual general fund-raising drive, some of which goes to financial aid. Several articles in this issue describe the existing financial aid and who gets it. Take a look and see the sort of people and programs that need your help.

The future leaders of the Texas actuarial community need your support to help them move from working behind the fast-food counter to sitting in front of their actuarial books. How about it?

Jim Daniel, Director

Scholarship drive set

Actuarial students need increased financial aid to fend off the Scylla and Charybdis of rising costs and falling financial aid. The Actuarial Studies program seeks new merit-based scholarships from actuarial employers and individuals to meet this severe need.

Student Club active

The Actuarial Student Club had another prosperous year with almost 50 members. Present officers are Susie Tankersley (President) and Jim Davis (Treasurer).

The club provides members actuarial information by sponsoring talks by actuaries and a reception for the Actuarial Studies Advisory Council. A February interview workshop aired interview tips from what questions to ask to what to wear. Club happy hours allow idea swapping—for instance, on potential employers and how to pass exams (especially the fewest correct answers required for passing).

The club ventured again into intramural basketball and softball. Maybe this year we'll win a softball game!

Susie Tankersley, President

Actuarial Studies Advisory Council

The ASAC meets each fall to advise Jim Daniel on the operation of the program, hear a detailed report on the use of gift monies, brainstorm on future activities, and assist with fund raising. Toby Tobleman rotated off the ASAC this fall after having chaired it since its creation; *thanks, Toby, for all your help!* Present ASAC members are: Phil Dial of Rudd & Wisdom, Austin; Myron Dye (ASAC Chair) of USAA, San Antonio; Brian Forman of Columbia Universal Life, Austin; Cecily Gallagher of Towers Perrin, San Antonio; Gary Gross of Towers Perrin, Austin; Fred Kilbourne, San Diego; Jim Livingston of Fidelity Union Life, Dallas; Norman Parrish of Hewitt, The Woodlands; Jim Pozzi of American National, Galveston; Mike Pressley of Towers Perrin, Dallas; Roger Ray of Wyatt, Dallas; Tammy Shelton of Buck, Dallas; Mark Trieb of Milliman & Robertson, Dallas; and Larry Wadle, Houston.

Education costs are rising, and the State faces a budget shortfall; general need-based financial aid may well decrease. And Mathematics Department funds that provide aid in the form of payment for grading homework have already fallen.

Money raised in our general annual fund-raising drive will be used to provide some financial aid in the form of wages (for grading actuarial papers) and possibly (if funds remain) small scholarships. But new scholarships must be permanently established to make any real progress.

Nearly 20 major employers were asked this winter to create scholarships. Milliman & Robertson responded by funding a \$2000 annual scholarship. (See other articles for information on this scholarship and the five previously existing. See *From the Director* for more information on the need.)

A second scholarship drive is now being launched. How can you establish a scholarship? All we need is your commitment or your company's to fund the award each spring. (Or you could permanently fund it through an endowment; about \$20,000 is needed to endow a \$1000 per year scholarship.) Selection criteria, award amounts, selection procedures, and the like are primarily up to the donor; recipients of most present scholarships are chosen by the actuarial program according to criteria described elsewhere in this issue. Contributions during the general annual fund-raising drive also find their way into financial aid if not required to continue other core activities.

To discuss creating an award, contact Jim Daniel at 512/471-7168.

Look on pages 2-4 for:

Scholarships:	2, 3
Jobs & salaries:	4
Fund raising:	4
Student snapshots:	2, 3, 4

Actuarial financial aid summary

How scholarship winners are selected

All UT-Austin financial aid especially for actuarial students—scholarships, internship/scholarships, and loans—is awarded on the basis of merit.

Applications for such aid are made twice yearly on the Actuarial Studies Standard Application for Financial Aid. Applicants must provide complete transcripts of their college work as well as information on their past academics, present academics, actuarial-program progress, career plans, college extra-curricular activities, and relevant work experience.

Some of these data are then summarized by assigning points for certain achievements—completing actuarial classes, passing Exams, academic performance, and the like. With these data and other intangibles as a basis, an effort is made to distribute the various awards among the most meritorious students in accordance with the selection criteria of each award but without just piling all the support on one or two students.

For some scholarships, the decision on the recipient is made within the actuarial program itself. For others, the selection is made by the donors from among a few candidates selected by the program.

Such a system leads to awards usually going to continuing actuarial students rather than to in-coming students. The program would benefit from having some scholarships especially to recruit new students; merit-based awards primarily for under-represented minority students would be especially impactful.

William W. Hand

The William W. Hand Memorial Scholarship of \$1250 per semester was this year divided among three people because of unusual circumstances. Funded by the American Society of Pension Actuaries, the scholarship honors the late Houston pension actuary William Hand. Our largest, it usually goes to the outstanding actuarial student.

Joe Chiu of Houston held the scholarship during the first semester; also a winner of a Society of Actuaries minority scholarship, Joe had held the Hand Scholarship the previous year as well. Having graduated in December with a Mathematics degree (with about 180 SOA exam credits also), Joe accepted a job with Milliman & Robertson in Houston.

With Chiu graduated, the Hand Scholarship was split for the spring semester by May-graduating seniors Kofi Boaitey of Hickory Creek (originally from Ghana but now a Permanent Resident) and E. Susan Tankersley of Eastland. Susie majors in Risk Management and Insurance, while Kofi majors in Mathematics. Both have 110 SOA Exam credits. Joe, Susie, and Kofi are the only seniors this year to have passed the SOA life contingencies Exam 150 (and thus have credit for CAS 4A) prior to graduation.

Southwest Actuaries

The actuarial program hopes to establish the Southwest Actuaries Scholarships, merit-based awards generally of at most a few hundred dollars that recognize the accomplishments and potential of students that just miss winning the larger individually-named scholarships.

Awards will be funded from gifts in response to the annual fund-raising drive, to the extent that the monies are not needed for the continuing support of such crucial core activities as the production and mailing of resumés, the production and mailing of informational and recruiting material, paying student academic assistants, updating computer hardware and software, and the like.

It had been hoped that sufficient funds would have been raised during last summer's fund-raising drive to allow the awards of about \$6000 in Southwest Actuaries Scholarships. However, the reduced level of giving—see the story on annual fund-raising—precluded such awards until we know the other expenditures for the year more accurately.

To deal with this timing problem, the fund-raising drive this year will be in spring. Besides encouraging corporate contributions and new corporate-named scholarships such as those described in this *Risky*

AEGON-USA

Michael Mayberry and Katherine Messerschmidt, both of Austin, were this year's winners of AEGON-USA Actuarial Mathematics Scholarships; funded by AEGON-USA through its office in the Dallas area, the merit-based awards provide two students \$500 per semester.

A Mathematics major, Mike will be graduating in May. As of January, he had 40 SOA Exam credits.

Katie will receive her MBA in May; this is her second year holding this scholarship. She has 85 SOA Exam credits.

Students in their last or next-to-last year in the actuarial program are eligible for AEGON-USA Scholarships; recipients must be majoring in Mathematics and have at least a 3.5 GPA in Mathematics classes.

Jim Davis Quitman, Texas

Senior Economics major graduating in May 1993.

Passed Exams 100, 110, 130, 140.
Interested in theology, sports, piano, conservative causes.

Rudd & Wisdom

The Rudd & Wisdom Actuarial Studies Scholarship was created in the fall of 1992; its first recipients were Kofi Boaitey and James Norris.

Normally, the Rudd & Wisdom Scholarship is a merit-based award of \$1000 per semester to one student for two semesters; students concentrating in actuarial studies under any major are eligible, although graduates of high schools in the Southwestern U.S. are preferred. In this first year of the award, the scholarship was split.

Both Kofi and James are Mathematics majors graduating in May. Kofi, originally from Ghana but now a Permanent Resident from Hickory Creek, has 110 SOA Exam credits. James, originally from San Antonio but now living in Austin, has 60 credits.

Business, we ask you to respond to the fund-raising drive with individual contributions to the general discretionary fund so that merit-based Southwest Actuaries Scholarships can be created.

Actuarial financial aid summary

USAA Insurance

Loan program

Intern/scholarships

The USAA Actuarial Scholarship this year has been held by E. Susan Tankersley of Eastland. Susie, a Risk Management and Insurance major graduating in May, accepted a January job offer in the property and casualty division of her benefactor, USAA Insurance of San Antonio.

The \$500 per semester merit-based USAA Scholarship is for a junior or senior Texas resident concentrating in actuarial studies under any major. A 3.0 GPA is required, both overall and in core actuarial classes; other selection criteria include demonstrated leadership and community or school involvement.

Besides holding the USAA Scholarship for two years, Susie has won the Texas Department of Insurance Internship and the William W. Hand Memorial Actuarial Scholarship; her SOA Exam credits total 110. This year Susie has served as President of the Actuarial Student Club.

Kofi Boaitey Hickory Creek, Texas

Permanent Resident,
originally from Ghana.
Senior Mathematics major
graduating in May 1993.
Passed Exams 100, 110, 140, 150.
Interested in soccer, reading, music.

New M & R award

Milliman & Robertson has established a new scholarship of \$1000 per semester for two semesters; the first award will be made for the 1993-94 academic year.

The merit-based Milliman & Robertson Standard of Excellence Actuarial Scholarship will go to a junior, senior, or graduate student concentrating in actuarial studies under any major; GPAs of 3.25 overall and 3.5 in Mathematics classes are required, and at least one SOA Exam must have been passed. Recipients must intend to remain in Texas and become an FSA, and must demonstrate communication skills, leadership, compatibility, creativity, ingenuity, and integrity.

The new scholarship was established through the efforts of Mark Trieb and Tim Lee of Milliman & Robertson's Dallas and Houston offices, respectively.

The merit-based Actuarial Studies Excellence-Award Loan Program provides forgivable loans to full-time and part-time actuarial students in either degree-seeking or continuing-education activities. The program is funded by \$500,000 contributions from each of Fireman's Fund Insurance and USF&G in an effort to aid the Texas Department of Insurance.

Loans can be made each semester for up to the typical full cost of attending UT. Such costs are determined by UT financial aid experts and vary with residency status; for a Texas resident, for example, the cost is now about \$3500 per regular semester.

Loan holders that later work full time for the Texas Department of Insurance have their debts forgiven proportional to how long they are employed there, with three years' employment cancelling the entire debt.

The program was created by court order for the purpose of aiding the Texas Department of Insurance, not of aiding UT students. It was hoped that the forgivability feature of the loans would lead to more graduates seeking to work for the TDI. So far that does not appear to be the case, since only a tiny fraction of Excellence Award winners has applied for TDI positions and none have been hired. At UT-Austin's initiative, discussions have taken place for several months over whether the remaining approximately \$900,000 in the loan fund could be used to allow the UT-Austin actuarial program to aid the TDI actuarial operations more effectively; so far no agreement has been reached among the relevant parties—the donors, the Attorney General's office, TDI, and UT.

Because other designated winners declined the awards in order to accept summer internships, the only Excellence Award recipient last summer was Katherine Messerschmidt. Katie will graduate with an MBA this May; a native Austinite, she has 85 SOA Exam credits.

Last fall's recipients were Omar Haq (Pakistan; Risk Management & Insurance major graduating in May; 50 SOA Exam credits as of January), James Norris (San Antonio; Mathematics major graduating in May; 60 Exam credits), Oscar Silva (Columbia; Mathematics major graduating in May; no Exam credits as of January), E.

Two students each semester and summer hold merit-based actuarial scholarships, serving as unpaid actuarial interns at the Texas Department of Insurance.

The program is funded by the income from the balance in the funds that operate the Actuarial Studies Loan Program described in this *Risky Business*; both programs were thus created from \$500,000 gifts from each of Fireman's Fund Insurance and USF&G.

Long-semester interns spend 15 hours per week for 12 weeks at the TDI in Austin; the scholarship for one semester is \$1620, plus \$180 for having passed SOA/CAS Exam 100, \$180 for SOA/CAS Exam 110, and \$90 for each other SOA or CAS Exam. Recipients this fall semester were Adam Eichstadt and E. Susan Tankersley. Adam, a Mathematics major graduating this May, is originally from Victoria but now lives in Austin; he has 60 SOA Exam credits. Susie, from Eastland, is a Risk Management & Insurance major graduating this May; she has 110 SOA Exam credits. Spring recipients are Lena Huang and Susie Tankersley. Originally from China but now living in Austin, Lena will complete the program this May; she had 55 SOA Exam credits as of January.

Summer interns spend 40 hours per week for 10 weeks at the TDI either in Austin or in Houston; the scholarship is \$3600 plus \$400 for having passed SOA/CAS Exam 100, \$400 for SOA/CAS Exam 110, and \$200 for each other SOA or CAS Exam. Last summer's recipients were Omar Haq and Michael Mayberry, with both working in Austin. Omar, from Pakistan, is a Risk Management & Insurance major graduating this May; he had 50 SOA Exam credits as of January. Mike, a Mathematics major graduating in May, is from Carrollton; he had 40 SOA Exam credits as of January.

Susan Tankersley (Eastland; Risk Management & Insurance major graduating in May; 110 Exam credits), and Katie Messerschmidt.

Present recipients are Kofi Boaitey (Hickory Creek via Ghana; Mathematics major graduating in May; 110 Exam credits), and the same five that received loans in the fall.

Fund raising needs boost

Last spring's *Risky Business* announced the June 1992 launch of a new annual fund-raising drive intended to raise at least the same amounts as had been available in external funds the preceding three years through the fulfillment of 1989 three-year pledges from the actuarial community. These gifts exclude those for specific named scholarships. Unfortunately, only about 60% of the \$22,000 raised each previous year was raised in the 1992 drive.

But there was another event that reduced the impact of that shortfall in contributions: the State started covering some costs that previously had been covered from the annual gifts. Thus there was actually a modest amount more available than in previous years to support such crucial core activities as the production and mailing of resumés, the production and mailing of informational and recruiting materials, paying student academic assistants, updating computer hardware and software, and the like—all activities for which State funds are not available. Had we raised the previous years' \$22,000, however, we would have been able to award a few thousand dollars in new Southwest Actuaries Scholarships (see the article on those scholarships). Thus the reduced fund-raising prevented our expanding student financial aid.

This year's drive starts this spring to allow time to plan for the fall semester. The State budget crunch means that State funds for some activities (student wages for grading homework papers, for instance) will be cut back, requiring us to pick up the slack with gift funds or cut back on the activities themselves—a blow to the excellence of

**Cynthia Woronow
Houston, TX**

Senior Mathematics major graduating in December 1993. Passed Exam 100. Interested in jewelry making, knitting, sewing, and needlepoint.

**Jay Olson
Houston, Texas**

Junior Risk Management & Insurance major graduating in December 1994. Passed Exams 100, 140. Interested in sports, travel.

Jobs found

The demand for actuarial students remained strong last year, although finding jobs took longer than usual. Although it's too early to be certain, the same seems true for this year's students.

Twenty-three students last year had passed at least two actuarial exams and completed UT's life contingencies class; 22 of these found entry level jobs, although some not until as late as September and October. In addition, two students with at most one exam were hired. Of the 24 jobs, 17 were in SOA-related areas and 7 in CAS-related; 12 graduates took jobs with insurance companies, nine with consulting companies, and three with the State.

As of only the November exams, 17 present students have passed at least two exams and will have completed the life contingencies classwork by May; a few more should join this group when the February exam results are in. It appears that the job market will be about like last year—strong demand, but spread out over several months.

the program. Thus the program needs increased gift support over 1992 levels simply in order to keep activities at the present level; and still greater increases are needed to expand financial aid by awarding Southwest Actuaries Scholarships.

Where can increased contributions be found? Throughout the actuarial community. The need is especially great for growth in contributions from within the insurance industry, where most of the losses over previous years occurred (partly because individual companies were contacted, rather than the TLIA, for support from the life insurance industry). Some of the largest employers of actuaries in Texas, many of whose employees are UT-Austin graduates (many recent), have never contributed financially to the program. And of the nearly 600 actuaries in Texas, fewer than 50 made individual contributions however modest in response to the June 1992 solicitation.

The 1993 fund-raising drive will soon be seeking corporate and individual contributions from the actuarial community. The actuarial students—the future leaders of that community—deserve the community's support.

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

Salary data

Texas-area starting salaries seem higher than those reported in nationwide data. Based on recent offers and about 3% inflation, the following figures estimate the starting salaries likely to be offered this year's qualified UT actuarial students—classified by SOA Exam credits (the correspondence for CAS Exams is straightforward), and ignoring the occasional anomalies both high and low. All students are assumed to have completed the classwork on interest theory and on life contingencies (the academic content for SOA Exam 150 and CAS Exam 4A) and to have had no actuarial work experience other than possibly internships; students that have actually passed SOA 150 or CAS 4A often get still higher salaries.

SOA credits	Salary/1000
≤ 30	24–28
40–60	28–31
70–90	31–34
100–120	34–36
130–160	36–37
≥ 170	37–39

**Susan Van Horn
San Antonio, Texas**

Junior Mathematics major graduating in May 1994. Passed Exam 100. Interested in avant garde cinema, local music, reading, cooking, sewing.

Thanks!

During the last 12 months nearly 100 individuals and businesses have contributed general-purpose funds, scholarships, time, or ideas to support the actuarial program's students and activities. In Jim Daniel's view and that of the Actuarial Studies Advisory Council, those contributions are used well. On behalf of the students—the real beneficiaries of your gifts—we thank you all.

**Lena Huang
Austin, TX**

Originally from China. Master's candidate in Statistics, departing in May 1993. Passed Exams 110, 140, 151. Interested in reading, tennis, cooking.