

# Middle Tennessee State University

## Actuarial Science Program Newsletter (Fall 2015)

Presented by the Actuarial Mathematics Student Association (AMSA)

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### Faculty

Dr. Don Hong, ACAD  
Dr. Abdul Khaliq  
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### Editors

Stephen Henderson  
Jason Lockett  
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Actuarial Science Polo

### Letter From Program Coordinator

Dear Students and Alumni, Faculty and Friends,

It has been really an exciting year for MTSU actuarial science program in 2015. The undergraduate program has been approved by the State TBR and THEC as a stand-alone major. The graduate program of MS for professional science (MSPS) in actuarial science has now entered its fifth year. Actuarial faculty member Dr. Qiang Wu has been promoted to Associate Professor with Tenure. He also achieved ASA designation from the Society of Actuaries recently. Students and faculty members have presented research work at the Actuarial Research Conference (ARC) consecutively since 2013. MSPS graduate student, Kim Page's presentation at 2015 ARC held at the University of Toronto won an honorable mention and cash award. More and more students passed the actuarial professional exams. With stronger support from local companies, students in the program not only receive internship opportunities, but also receive job offers before graduation in addition to those who choose pursuing for advanced degrees. Under exchange agreements, the program has attracted a dozen international students, with more to join in upcoming years.

Our program has attracted excellent Out-of-State and also abroad applicants. Recent applicants in MSPS include graduates from UCLA, Dartmouth, UT-Knoxville, U Alabama, UIUC, Stevens Institute of Technology in addition to TBR schools. We also noticed our actuarial science students having ACT scores of 34 or are national merit finalists.

Our alumni continue to report good news on achieving associate or fellow designations from the actuarial societies. We are sincerely grateful for the continuing support from industrial partners. The program advisory board, alumni and friends, partners and supports, university administrators, students and faculty members all have made a great contributions to the program. The MTSU actuarial science program cannot continue to thrive without your support. I am looking forward to hearing more good news from alumni and students. Wishing you all a wonderful holiday season.

**Don Hong**, Ph.D. ACAD

Professor and Coordinator of MTSU Actuarial Science Program, Email: [dhong@mtsu.edu](mailto:dhong@mtsu.edu)

### Program Facts

- The MTSU Actuarial Science program was established in 1987.
- MTSU has the only program in Tennessee that offers actuarial science coursework for both undergraduate and graduate programs.
- It is one of 31 schools in the United States and the only school in Tennessee with a Master level degree program in actuarial science listed on the Society of Actuaries (SOA) website.
- The MTSU Actuarial Science Program currently has about 50 students in the undergraduate program and about 30 students in the graduate program.
- The MTSU Actuarial Science Program has students participating from all over the United States from states including AL, AZ, CA, IL, IN, KY, LA, ME, MO, MS, NC, NE, NY, NV, OH, OK, PA, SC, TN, TX, VA, WI, WV as well as other countries including Cameron, China, Ghana, India, Kenya, South Korea, and Saudi Arabia.
- 14 alumni have achieved ASA or ACAS designations; while 7 alumni went on to obtain FSA or FCAS designations.

## Program Facts

- Students in this program have been able to pass many actuarial exams. Since 2006, 63 students have passed Exam-P/1 from the Society of Actuaries (SOA) or the Casualty Actuarial Society (CAS); 47 students have passed Exam-FM/2; 18 students have passed Exam-MFE/3F; 11 students have passed Exam-MLC/LC; 8 students have passed Exam-C/4.
- Many students have been able to complete internships and receive job offers before graduation.
- For the past 3 years, faculty and students participated in the Actuarial Research Conferences. Kim Page's presentation entitled "Predictive Analytics for Minor League Baseball Pitchers" won honorable mention and cash award from the conference held at Toronto University in August 2015.
- The following students, currently enrolled in the program, have passed more than three actuarial exams: **Adam French** (P, FM, MFE, LC, ST), **Brent Carpenetti** (P, FM, MFE, C), **Sulemana Dauda** (P, FM, MFE, MLC), **David Matthews** (P, FM, C), **Lianlian Zhou** (P, FM, MLC), **Joe Thomas** (P, FM, MFE, MLC, C), **Yousaf Khaliq**, **Yunzhu Yang**, and **Qin Zhou** (P, FM, MFE).
- **Rachael Padgett** (BS, 2013) and **Joshua Minshall** (BS, 2005) achieved ASA and ACAS designations from the SOA and ACAS in 2015, respectively. **Raymond Hanna** (BS, 2002) achieved FAS in 2014.
- Our graduate students have received their Bachelor Degrees from universities including U. Alabama, Auburn, Carson-Newman, Colby, Dartmouth, Dillard, U. Illinois, Lipscomb, Louisiana Tech, National University, Ohio State, South Carolina, SUNY-Albany, UCLA, Vanguard University, U Mississippi, UT-Martin, UT-Knoxville, U. South, U Wisconsin, and WVU in addition to TBR schools.
- Congratulations to December 2015 graduates: **Meecede Baker** and **Kristin Meisel** with a BS degree, **Adam French**, **Haoxuan Zhang**, **Shuzhe Xu**, and **Sirr Tiekeu** with an MS degree.

## Donations and Thanks

- **Donations** Your gift is welcome! The Actuarial Science Student Association wishes to thank all alumni, parents, students, faculty, staff and friends who support the program. Your gift will be used to support students' educational and research activities. Your donation to the program is tax deductible, and you can choose to have your name published or remain anonymous. You can now contribute online via MTSU foundation web site. Or you may send your check to: *MTSU Foundation, Office of Development, MTSU P.O. Box 109, Murfreesboro, TN 37132*. Please write "Gift to Actuarial Science (#92935)" in the memo line of your check or on the online gift form.
- **Thanks** to Mr. **Brent Carpenetti**, Dr. **Lu (Gary) Xiong**, and Mr. **David Matthews** who donated a portion from their 1<sup>st</sup> pay check from their newly received actuarial job to Actuarial Scholarship Fund at MTSU Foundation. Also, we appreciate **Mr. Qingbo Xue**, **the Nelsons**, **Ms. Anna Mu**, **Dr. Zoe Zhang**, **Dr. Kenneth Hollman**, **CASE grant**, **Nationwide Insurance**, **State Farm Insurance** and many others for their generous support to MTSU actuarial science program.

## International Connections

MTSU actuarial science program has established exchange programs with Ningbo University (NBU) and North China University of Technology (NCUT) in China. NBU's 2+2 program admits about 35 students each year and expects to send 20 students to MTSU annually after completing 2 years in NBU and continuing another 2 years study in actuarial science at MTSU. NCUT's 3+1+1 program is sending senior students to MTSU to complete their last year study in actuarial science and continue one more year graduate study for an MSPS degree. The picture below was taken when a delegation of Deans from NBU visited MTSU in October 2015.



Students and Faculty with Visitors from Ningbo University

## AMSA Meetings

- On October 16<sup>th</sup>, 2015, **Andrew Kirchner**, FSA, presented an information session to the MTSU students. Andrew spoke about the opportunities available to students through Cigna's Actuarial Executive Development Program. Andrew also spoke about internship opportunities available from Cigna in different parts of the United States and soon to be in Nashville.



Kevin Smith (3<sup>rd</sup> from Left)

- **Kevin Smith** (BS 1990), ASA, chief actuary of Caterpillar Insurance Services, and MTSU alumnus, delivered a presentation to AMSA students on October 28, 2015. He discussed the role of actuaries in a captive insurance company and provided students with valuable entry-level advice from a hiring manager's perspective.

- **Jeremiah Richardson** (BS, 2007) came to speak to the AMSA members on November 10, 2015. He achieved his ACAS designation in 2013 and currently works as a consulting actuary for Willis Group. The speaker talked about the process of achieving associate and fellow designations from the CAS. He also explained the advantages and disadvantages of working with a carrier insurance group and a consulting insurance group.

- On November 18<sup>th</sup>, 2015, **Rachael Padgett** (BS, 2013) visited MTSU and gave an informative talk to actuarial science students on how to be a successful actuary. Rachael is an MTSU Alumnus (BS 2013) and recently achieved her ASA designation in June 2015 and is currently an actuarial analyst at BPS&M, a Wells Fargo Company in Brentwood, TN. Rachael was presented with the MTSU Actuarial Science Outstanding Alumni Award.



Rachael Padgett in Middle

- **David Snell**, ASA, MAAA, came to speak to the AMSA members on December 1, 2015. He has been retired since 2007 as Vice President of Asia-Pacific Technology for RGA Reinsurance Company and is active with the SOA. He gave two separate talks relating them to actuarial science: Behavioral Economics and Genetic Algorithms.

## Actuarial Scholarships

- **Scholarship for the Excellence in Actuarial Science:** Established in 2005 to award students in the Actuarial Science program. Recipients of the scholarship are expected to have passed one or more professional exams from the Society of Actuaries or the Casualty Actuary Society in the past year, in addition to maintaining a GPA of 3.0 or above at MTSU. The scholarship is sponsored by State Farm Insurance, Casualty of Actuaries of the Southeast, Southeastern Actuarial Conference, as well as individuals who kindly support MTSU Actuarial Science program.
- **B.L. Hong's Memorial Scholarship for Excellence in Actuarial Science:** Established by Dr. Don Hong and family through Middle Tennessee State University Foundation in honor of his father Bai Lin Hong. The scholarship recipients are actuarial science students who have passed three or more professional exams from the actuarial societies.
- **The Actuarial Student Award** is given to undergraduate students in the Actuarial Science program in particular. Recipients of the award have passed one or more professional exams from the Society of Actuaries or the Casualty Actuary Society in the past year in addition to maintaining a GPA of 3.0 or above at MTSU. This fund was established in 1992 by Syed Hossain to support MTSU Actuarial Science program.

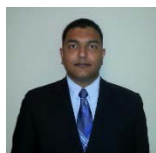
## Research and Services in the Actuarial Science Program

- **Dr. Don Hong**, Professor and the program coordinator is an academic correspondence member (ACAD) of the Casualty Actuarial Society (CAS). He serves for the CAS in the academic engagement committee, the academic research group and the university award group.
- **Dr. Qiang Wu**, Associate professor is an ASA--Associate of the Society of Actuaries. He has been voted into the Predictive Analytics and Futurism Section council of the Society of Actuaries in 2015.
- **Graduate students, Zoe Ye and Sarah Lin, Lu (Gary) Xiong, Brent Carpenetti and Kim Page** participated in the Actuarial Research Conferences and presented papers in 2013, 2014, and 2015, respectively. Kim Page's presentation entitled "Predictive Analytics for Minor League Baseball Pitchers" won honorable mention and cash award from the Society of Actuaries.
- **Drs. Don Hong, Ken Hollman, and Qiang Wu** completed a RATE REVIEW REPORT for Tennessee Department of Commerce and Insurance (TDCI) under a grant support of Health Insurance Rate Review Project, in September 2012.
- **Dr. Don Hong** received \$3000 actuarial science program grant support from the Casualty Actuaries of the Southeast in 2014. The grant money was used to reimburse students exam fees.
- **Dr. Qiang Wu**, ASA, received an Educational Institution Grant of \$5,000 from the Society of Actuaries in June 2015. The grant is used to support travel and research in actuarial science.
- **The AMSA Officers** held workshops for exam P/1 on Friday afternoons in October 2015. This allowed for members planning on taking the exam to work out practice problems and learn strategies on the day of the exam. Three of the regular attendees of the workshop went on to pass exam P/1. The workshops for exam FM/2 will start in January 2016.
- On November 4th, 2015, **Stephen Henderson** organized the AMSA members at KOM-162 for a Predictive Analytics Webinar presented by CAS Student Central. This webinar helped these members understand the basics of data science and predictive analytics as well as preparing to be a part-data-scientist.

## CASE Meeting

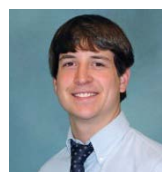
- **Joseph Thomas, Jason Luckett, and Yousaf Khaliq**, attended the Casualty Actuary of the Southeast (CASE) conference at Georgia State University on October 6. The conference included presentations on a variety of current actuarial and insurance topics, and served as a good networking opportunity for both the students and the university. Students are encouraged to attend future conferences, especially the CASE Spring 2016 meeting, which will take place in Nashville, TN.

## AY2015-16 AMSA Officers



Co-President

**David Mathews** is a Graduate Student, Actuarial Intern, and U.S. Navy Reservist. He passed exams P/1, FM/2, and C/4.



Vice President of Undergraduate Affairs

**Jason Luckett** is an undergraduate student graduating in May of 2016. He is currently completing an internship with SIGMA Actuarial Consulting Group Inc, and he has passed exam P/1.



Co-President

**Joseph Thomas** is a student in the MSPS Actuarial Sciences program. He received his Bachelor of Science in Mathematics from University of Tennessee at Martin, and has passed exams P/1, FM/2, MFE/3F, and MLC/3L, C/4.



Vice President of International Affairs

**Yuhao Qiao** is an undergraduate student in Actuarial Science program started from 2015 fall semester in MTSU. Prior to his studies at MTSU, he was a student at Ningbo University in China. He has passed exam P/1.



Vice President of Graduate Affairs

**Yousaf Khaliq** completed his undergraduate degree from the University of Illinois with a major in Economics and a minor in Applied Statistics and is now an MSPS student with passing exams P/1, FM/2, and MFE/3F.



Vice President of The Treasury

**Stephen Henderson** is a MSPS graduate student with a Bachelor of Arts in Mathematics and a Finance/Economics minor from Carson-Newman University. He has passed exams P/1 and FM/2.