

## Chair's Column

Dear members and friends of the UNT Math Department,



Su Gao

It is time to celebrate!

You can find 101 reasons to celebrate from this newsletter. Thanks to the hard work of our Outreach Committee for putting this newsletter together. And more

importantly, thanks to all faculty, staff, students, alumni, and friends of the department who worked hard to make the wonderful things happen so they become reasons to celebrate.

Let's celebrate our students: the UNT team placed 40th in the 2013 Putnam Competition! This sets a new record in UNT's history of participation in this most prestigious college mathematics competition.

Let's celebrate our faculty: Dr. Richter's research in number theory has just been published in the Proceedings of the National Academy of Sciences of the USA! This multidisciplinary scientific journal only publishes the highest level research in any science.

I invite you to find out the other reasons by reading the rest of the newsletter.....

April is also time to celebrate mathematics itself. Mathematics is that shared passion that has brought us together. Every April is Mathematics Awareness Month. This year the theme of the MAM is: Mathematics, Magic, and Mystery. It comes from the title of a 1956 book by renowned math popularizer Martin Gardner (1914-2010), whose extensive writings introduced the public to hexaflexagons, polyominoes, John Conway's "Game of Life," Penrose tiles, the Mandelbrot set, and much more. This year marks the centennial of Gardner's birth.

When you are done with this newsletter, you can check out the MAM fun activities at mathaware.org. Every day of the month a fascinating new mathemagic topic is shown on a video. From today's video I learned the Ten Card Trick.

What is today's date?

Su Gao  
Professor and Chair

## Cracking the secret code behind Ramanujan's mock theta functions



Professor Olav Richter's discovery with Ozlem Imamoglu and Martin Raum of ETH Zurich unveils another piece of the mystery over Ramanujan's mock theta functions that have puzzled mathematicians for

over nine decades. The story of the mock theta functions "begins with a cryptic letter written by a dying genius, the clues of which inspired scores of mathematicians to embark on an adventure which resembles an Indiana Jones movie", writes Ken Ono (The last words of a genius, AMS Notices, December 2010). According to Richter, "Ramanujan's last letter to Hardy in 1920 introduced 17 examples of mock theta functions, which are q-series such as

$$f(q) = 1 + \sum_{n=1}^{\infty} \frac{q^{n^2}}{(1+q)^2(1+q^2)^2 \cdots (1+q^n)^2}."$$

However, Ramanujan's letter gave no hint of where these functions come from, and why they might be important or interesting. On the mock theta functions, Kathrin Bringmann said, "Imagine that a famous composer left, after his death, a symphony written in a secret code that only he himself could read." Following seminal work of the Dutch mathematician Sander Zwegers, Bringmann and Ono have

built and applied their theory to many topics in mathematics. Mock theta functions turned out to have surprising connections with different areas of mathematics and physics, said Richter. For example, mock theta functions impact the theory of Donaldson invariants of CP2 that are related to gauge theory, they are intimately linked to the Mathieu and umbral moonshine conjectures, and they play an important role in the study of quantum black holes and mock modular forms.

For his joint work with Ozlem Imamoglu and Martin Raum, Richter said, "Bringmann and Ono (Inventiones Mathematicae, 2006) proved the Andrews-Dragonette conjecture, which provides an explicit formula for the Fourier series coefficients of the mock theta function  $f(q)$ . That formula is quite complicated (an infinite series of Kloosterman sums and I-Bessel functions), and all terms that occur are transcendental. We employ spectral methods of automorphic forms to extend the concept of holomorphic projection. As an application, we establish simple finite recursions for Fourier series coefficients of Ramanujan's mock theta functions, where all occurring terms are rational. For example, such recursions immediately give

$$f(q) = 1 + q - 2q^2 + 3q^3 - 3q^4 + 3q^5 - 5q^6 + 7q^7 - 6q^8 \dots"$$

Richter's work just appeared in the Proceedings of National Academy of Sciences (USA).

## { Table of Contents

Chairs Column .....	1
Cracking the secret code behind Ramanujan's mock theta functions .....	1
Professor Quintanilla Nominated for US Professor of the Year .....	2
Math Faculty Will Be NSF Program Director .....	2
Dr. Konstantino Beros Joins Faculty .....	2
Dr. Aaron Hill Moving to the University of Louisville .....	2
Governor Awards Dr. Bill Mance Outstanding Mentor Award ..	2
Texas PDE Conference at UNT .....	3
RTG Research Conference Scheduled for June .....	3
New staff .....	3
Algebra Symposium Organized by Graduate Students .....	3
Recent Graduates .....	4
UAEM-UNT Research Seed Funding For Math Faculty and Grad Students .....	4
Update on Recent Alumni .....	5

Graduate Named CAS Honorary Ambassador .....	5
UNT Graduate Serves as Editor of The Monthly .....	5
Number Facts .....	5
Tamara Knox Wins UNT Outstanding Teaching Fellow Award .....	6
UNT Team Places in Putnam Competition .....	6
RTG Math Scholars Program .....	6
Problem of the Month Competition .....	6
Mathematical Modeling Contest .....	6
Math Club .....	6
Actuarial Science .....	6
Honors Day Awards .....	7
Integration Bee .....	7
Thanks! .....	7
Department Awards .....	7
You Can Help/Please Tell Us .....	8

# { Faculty News

## Professor Quintanilla Nominated for US Professor of the Year



Congratulations to Professor John Quintanilla, who has been selected as one of three UNT nominees for U.S. Professor of the Year. This nomination was recommended by the University Distinguished Teaching Professor Selection and Review Committee. The U.S. Professor of the Year awards program celebrates

outstanding instructors across the country. Sponsored by the Council for Advancement and Support of Education and the Carnegie Foundation for the Advancement of Teaching, it is the only national program to recognize excellence in undergraduate education. This nomination recognizes Professor Quintanilla for his long-standing commitment to undergraduate student success, including math majors, Texas Academy of Mathematics and Science students, and Teach North Texas students.

## Math Faculty Will Be NSF Program Director



Professor Matt Douglass will be spending the next academic year at the National Science Foundation serving as a program director in the Division of Mathematical Sciences. NSF program directors oversee the foundation's "gold standard" merit review process and may help define new funding opportunities. This is a great opportunity for both Professor Douglass and for the university. We wish Dr. Douglass the best in the next year!



Dr. Konstantino Beros

## Dr. Konstantino Beros Joins Faculty

The department welcomes Dr. Konstantinos (Kostas) Beros who is a new RTG Postdoctoral Fellow. He earned his PhD in 2013 from the University of Wisconsin at Madison under the direction of Arnold W. Miller and Joseph S. Miller. His research interests are in descriptive set theory and Polish groups. He is currently co-organizing the RTG Logic and Dynamics Seminar. Kostas has a brother who is also a logician as well as photographer!



Dr. Aaron Hill

## Dr. Aaron Hill Moving to the University of Louisville

Congratulations to Dr. Aaron Hill, an RTG Postdoctoral Fellow, for being offered a tenure track assistant professor position from the University of Louisville, Kentucky.

Since Fall 2011, Dr. Hill has been a very active member of the Research Training Group. With his positive attitude and ability to organize, he has been an excellent colleague. Dr. Hill was one of the main organizers of the RTG International Conference on Logic and Dynamics, held in June 2012.

Also, Dr. Hill is a brilliant and extraordinary math instructor. His proposal for a research SQuaRE (Structured Quartet Research Ensembles) has been approved from the prestigious American Institute of Mathematics! Dr. Hill will be leading the group research in a week long workshop in Palo Alto, California, this October. AIM will provide both the research facilities and the financial support. His topic is "Classifying rank-one measure preserving transformations". Congratulations and good luck!



Dr. Bill Mance

## Governor Awards Dr. Bill Mance Outstanding Mentor Award

Congratulations to Dr. Bill Mance, an RTG Postdoctoral Fellow, for being awarded an Outstanding Mentor citation from Governor Rick Perry for his mentoring of Texas Academy of Math and Science student Dylan Airey.

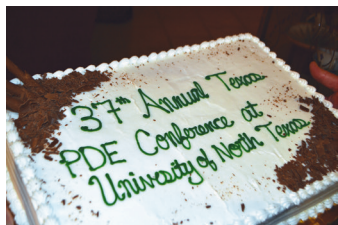
Dylan won the first place in the mathematical sciences division of the 2013 Exxon Mobil Texas Science and Engineering Fair. In this very competitive event, Dylan's research project on normal numbers was recognized as the best math project in all of Texas, and he also won the 1<sup>st</sup> place Mu Alpha Theta Award.

Dylan's mentor Dr. Mance received a letter from Governor Rick Perry, who congratulated him for being an outstanding mentor to a winner from the ExxonMobil Texas Science and Engineering Fair and announced that Dr. Mance had received a full scholarship to attend a professional development workshop at this year's Governor's Science and Technology Champions Academy. Dylan has enrolled at UT Austin to major in math from fall 2013, and Dylan and Dr. Mance continue to collaborate on mathematics research.



# { Department News

## Texas PDE Conference at UNT



Organized by Dr. Joe Iaia and Dr. Kanadpriya Basu (UT El Paso), the 37<sup>th</sup> Annual Texas Partial Differential Equations Conference was successfully held at UNT on March 1-2, 2014. There were approximately 45 participants from 16 universities and colleges. Following tradition there were no principal speakers and all talks were limited to 20 minutes. There were 35 talks with parallel sessions on Saturday March 1 and a single session on Sunday morning. The conference webpage featuring the program and a variety of general information can be accessed on <http://math.unt.edu/research/conferences/texas-pde-conference-2014>.

## RTG Research Conference Scheduled for June

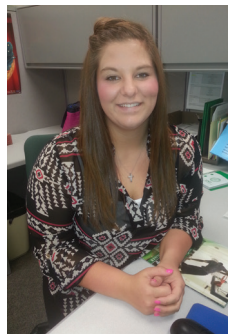
The RTG Research Conference "Logic, Dynamics, and Their Interactions II" will be held at UNT on June 2-6, 2014. For a list of speakers and other information, please visit the conference webpage at <http://math.unt.edu/rtgconference2014>. UNT faculty and students are encouraged to participate. The registration for UNT participants is free. There will also be an excursion followed by a banquet on Wednesday, June 4, 2014.

## Algebra Symposium Organized by Graduate Students



With 25 registered participants spanning 3 universities and 2 states, the Algebra Symposium held at the University of North Texas on November 9, 2013, was quite successful. The nine talks given by graduate students from the University of Oklahoma, the University of Texas at Arlington, and the University of North Texas covered algebra topics including representation theory, semifields, character theory, and non-associative algebraic systems. The symposium builds on previous graduate student workshops in algebra held with Texas A&M and Baylor University. The symposium was organized by UNT graduate students Drew Tillis and Christine Uhl.

## New staff



The department welcomes new staff members Ms. Chris Campbell, Ms. Carol Fichera and Ms. Michelle McCauley.

Chris is the RTG Assistant Coordinator and Travel Coordinator. She came from the UNT Human Resources Department and has a lot of administrative experience with employee recruitment and employee records. In the math department Chris assists faculty and graduate students with grant development, grant management, travel, conference organization, and other research activities.

Carol is the Math Lab Manager. She came from the UNT Undergraduate Admissions Office and she has a lot of administrative experience with student records. In the math department Carol is serving as the manager for Math Lab and the Math Quest Center. She works with all graders and tutors.

Michelle joined the department on March 17, 2014 as our new Math Lab Supervisor.

## Recent Graduates



From the Spring 2013 until Spring 2014, the department awarded 10 Master's and 7 PhDs. The following is the list of graduate students who successfully defended their theses or dissertations.

NAME	ADVISOR	DEGREE
Christine Uhl	Dr. Anne Shepler	MS
James Martin	Dr. Joseph Kung	MS
Jared Holshouser	Dr. Steve Jackson	MS
Philip Puente	Dr. Anne Shepler	MS
Subrat Pathak	Dr. Jay Liu	MA
Jose-Luis Paukner-Moron	Dr. Jay Liu	MS
Miah JnCharles	Dr. Rajeev Azad	MS
Tamara Knox	Dr. Anne Shepler	MS
Yaya Traore	Dr. Kai-Sheng Song	MS
Thomas Gilton	Dr. John Krueger	MS
Laxmi Paudel	Dr. Joe Iaia	Ph D
Rebecca Shi	Dr. Su Gao	Ph D
Daniel Walker	Dr. Steve Jackson	Ph D
Michael Cohen	Dr. Robert Kallman and Dr. Su Gao	Ph D
Rabin Dahal	Dr. Charles Conley	Ph D
Yu Weng	Dr. Kai-Sheng Song	Ph D
Sam McWhorter	Dr. Robert Kallman	Ph D

Of the ten master degree graduates, we welcome back Christine Uhl, James Martin, Jared Holshouser, Philip Puente and Tamara Knox who are continuing on and making good progress toward their PhD degrees in Mathematics here at UNT. We also send our best wishes to Thomas Gilton who was accepted into a prestigious PhD program at UCLA!

Michael Cohen, who graduated in May, is now a Visiting Assistant Professor at North Dakota State University. Rebecca Shi has moved to Atlanta. Laxmi Paudel, Daniel Walker, Rabin Dahal and Yu Weng stayed at UNT where they are teaching this year.

## UAEM-UNT Research Seed Funding For Math Faculty and Grad Students

Dr. Kai-Sheng Song and graduate students Eduardo Espinola and Jose Islas received a Joint UAEM-UNT Research Seed Funding Award of \$5,000 from the Office of the Vice President for Research and Economic Development. They traveled to Toluca, Mexico in the summer 2013 to collaborate with researchers at UAEM on "simulation of credit rating to municipalities of State of

Mexico by multivariate analysis and neural network models." Jose and Eduardo are essential to the project not just because of their Spanish, but because of their active participation in the mathematics and statistics that is required. They also helped Dr. Song become more familiar with the local culture.





# { Alumni News

## Update on Recent Alumni

Dr. Jeannette Larsen, who graduated in 2012, is a Visiting Assistant Professor at the University of Texas at Tyler. Dr. Weam Jasim, who graduated in 2011, is an Assistant Professor at Texas A&M International University. Dr. Jasim was one of the organizers of the recent Spring 2014 Texas Section of the MAA meeting in Laredo. Dr. Tushar Das, who graduated in 2012, is an Assistant Professor at the University of Wisconsin, La Crosse.

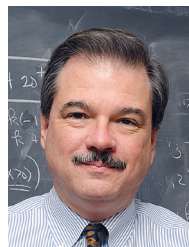
## Graduate Named CAS Honorary Ambassador

Dr. Somporn Sutinuntopas was named as the UNT Honorary Ambassador for the College of Arts and Sciences. In this roll, Dr. Sutinuntopas works with the college to make connections between UNT and Thailand.

Dr. Sutinuntopas earned her PhD degree in 1988 in the area of combinatorial designs. She describes her time at UNT as “one of the best experiences in her academic career: she could teach math as well as practice her English.” Upon completion of her degree, she returned to Thailand where she continues to teach at Ramkhamhaeng University in Bangkok. She is a professor and she has served as Department Chair and Vice Dean of Academic Affairs. Dr. Sutinuntopas organized two national mathematics conferences and for the last ten years she tutored high school students who were training for the International Mathematics Olympiad. She was the administrative and scientific mathematician coordinator of the Mathematical Research School for Young Mathematicians which was held in Bangkok last year. Her research interests include combinatorics, coding theory, and combinatorial design theory.



## UNT Graduate Serves as Editor of The Monthly



Dr. Scott Chapman is the 30th Editor of the American Mathematical Monthly. His term runs from 2012 through 2016. Dr. Chapman's accomplishments to date include implementation of a web based submission system and the first in 20 years of a special issue of the Monthly as well as continuing the quality editorial work needed to maintain a very popular and visible journal. The Monthly is the most widely read mathematics journal in the world. Past Monthly editors include many noted mathematicians such as L. E. Dickson, Robert Carmichael, Paul Halmos, Herbert Wilf and John Ewing.

Dr. Chapman received his PhD in 1987 from Dr. Nick Vaughn in the area of Algebra. Upon receiving his PhD, Dr. Chapman took a position at Trinity University in San Antonio where he taught until 2008. During his years at Trinity, he received three prestigious international fellowships from the Fulbright Commission (to Austria), the Consiglio Nazionale delle Ricerche (the Italian National Science Foundation), and the Deutscher Akademischer Austausch Dienst (German Academic Exchange Service). In 2008, Dr. Chapman accepted a prestigious offer from Sam Houston State University for the position of Professor and Scholar in Residence. Dr. Chapman has authored or co-authored over 90 publications and co-edited two books.

While at Trinity, Dr. Chapman was the principal investigator and program director of the Trinity Mathematics Departments NSF funded Undergraduate Research Experience in Mathematics Program. At Sam Houston State, Dr. Chapman is continuing his mentoring of undergraduate students by serving as director of a new NSF sponsored REU program. Many of the students in Dr. Chapman's REU program co-authored papers based on their work in the program and went on to become very productive mathematicians.

Dr. Chapman loves to spend his personal time with his wife Lenora and his two children Jonathan and Cameron.

# { Number Facts

Here are some numbers that give a snapshot of the department, as of Fall 2013:

- 6 number of PhDs graduate in 2013
- 8 number of part-time faculty members
- 36 number of full-time faculty members (including postdoctoral fellows)
- 58 number of bachelor's degrees awarded in 2013 (up from 43 in 2012)
- 57 number supported graduate students (up from 56 in 2012)
- 62 number of graduate students
- 227 number of math class sections offered in fall 2013
- 400 number of math majors (approximate)
- 8400 total enrollment in all math classes in fall 2013 (approximate)

# { Student News

## Tamara Knox Wins UNT Outstanding Teaching Fellow Award



Congratulations to Tamara Knox for being selected as a recipient of the 2014 Outstanding Teaching Fellow Award!

Tamara was recognized as an award recipient at the Honors Day Ceremony on Friday, April 4, at the Murchison Performing Arts Center.

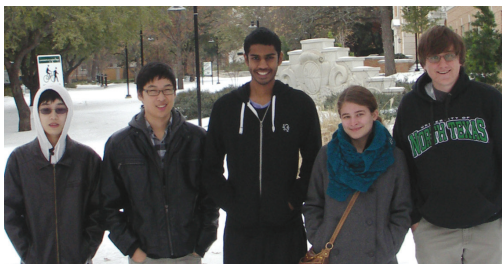
Ms. Tamara (Tam) Knox has been a TA or TF in the Mathematics Department since Fall 2011.

She distinguished herself as an outstanding instructor of record for a variety of service courses including Math 1100 (College Algebra), Math 1580 (Survey of Math) and Math 1680 (Elementary Probability and Statistics).

The majority of students in these courses dislike math and struggle with it, and it is challenging to teach them well, even for experienced instructors. But Tam's amazing talent reaches these students, to motivate them to do their best work, and all the while making learning fun, even in a large-lecture format at 8:00 am! Her students admire her engaging and passionate teaching style, her self-deprecating humor and her endless patience to ensure that everyone understands the material before moving on to the next topic.

This is the second straight year a Mathematics graduate student has won the Outstanding TF award. (Ms. Christine Uhl was one of last year's winners.)

## UNT Team Places in Putnam Competition



UNT placed 40<sup>th</sup> out of 557 North American participating Institutions in the Seventy Fourth Annual William Lowell Putnam Competition. Five

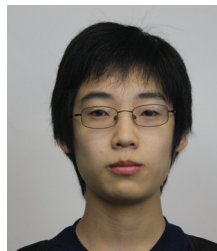
UNT students braved the December 7 wintery weather and 12 very challenging problems to participate. The competition was an individual competition which required each student to take a six hour exam consisting of 12 problems. Three of the students were designated as the UNT team and the team standing was determined by the results of the individual team members. Congratulations go to team members Kevin Lin, Robert Tung and Mark Fincher as well as Ashley Miller and Pranav Devalla who also took the exam.

## RTG Math Scholars Program

Every summer undergraduate students are invited to apply to do research with mathematics faculty members for a period of five weeks or more. In Summer 2013, 12 students were selected to participate and received a stipend. Some participants presented the outcome of their research in the informal mathematics research problem session, a department seminar. The program will take place again in Summer 2014.

## Problem of the Month Competition

The Problem of the Month competition proposes to the UNT math undergraduate students one math problem every month, during the regular school semesters. Certificates of excellence and cash prizes are awarded to the winners. Among the recent participants Kevin Lin and Chia Ting Han distinguished themselves for the quality of their solutions. For more information of the Problem of the Month see "[www.math.unt.edu/problem-of-the-month](http://www.math.unt.edu/problem-of-the-month)".



## Mathematical Modeling Contest

Coached by Professor Jay Liu, the UNT MCM (The Mathematical Contest in Modeling) team, consisting of TAMS students Shawn Hu, Preetam Palchuru, and Sayon Sengupta, successfully participated in the Mathematical Contest in Modeling last spring. This was our 2nd participation in the last 10 years.

This year UNT has two MCM teams, consists of four TAMS students: Team 1 - Shawn Hu and Preetam Palchuru, and Team 2 - Neil Danait and Anita Rao. Good luck, UNT MCM teams!

## Math Club

The UNT Math Club, comprising mostly undergraduate math majors but also some math graduate students, meets weekly on Friday at 1pm to discuss mathematics informally, plan social events like the upcoming picnic on



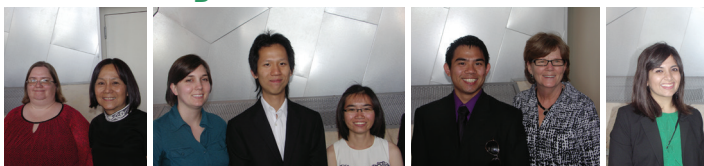
April 25, and play games. Steven Grigsby was recently elected Math Club President. There are plans to include formal math talks among future activities. For more information on the Math Club see "[www.math.unt.edu/news/seminars/math-club](http://www.math.unt.edu/news/seminars/math-club)".

## Actuarial Science

We were delighted that David Ellis, a 2011 graduate and now an actuarial analyst at AON, came back to UNT on March 21 to give a presentation on how to prepare for a job in actuarial science. His presentation was filled with great tips on course work, exam study, and interview tips. Please contact Dr. Huguette Tran for a copy of David's Power Point slides.

Congratulations to Dominic Nguyen for passing the Probability and Statistics Actuarial exam and landing an internship with AON this summer. Also, congratulations go to Alex Pax for passing both the Probability and Statistics and the Financial Mathematics Actuarial Exams on the first try.

## Honors Day Awards



On April 4, 2014 mathematics majors were awarded the following honors at the annual UNT Honors Day Award Ceremony:

*Outstanding Graduate Student In Mathematics:* Jared Holshouser

*Outstanding Undergraduate Students in Mathematics:* Chia Ting Han and Duong Nguyen

*Outstanding Student in Actuarial Science:* Dominic Nguyen

*Outstanding Math Lab Tutor:* Chelsea Drescher

During the ceremony, Carol Fichera and Dr. Huguette Tran were honored as a staff member and a faculty who made a difference in a student life.

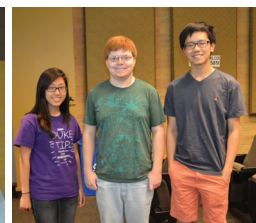
## Integration Bee

The Integration Bee began in the late 1980's and was the brainchild of former faculty member and now Deputy Division Manager at NSF, Hank Warchall. Since then some of the organizers, in addition to Warchall, have been Alex Clark, William Cherry, and Joseph Iaia.

The bee works similar to a spelling bee - students are given an indefinite integral to evaluate within one or two minutes. A student is

eliminated from the bee if he or she misses two problems. Traditionally there have been prizes for the top three students – in the past the prize may have been a calculator or a gift card and currently the prizes can be used to reduce the winner's tuition. The bee would not be complete without the awesome Integration Bee cake and jokes of the MC.

The integration bee took place this year on April 11. The winners were Mohammad Behnia - a TAMS junior-, first place (\$75 prize); Chia Ting Han - a UNT senior -, second place (\$50 prize) – and Chris Shen - a TAMS junior - third place (\$25 prize) .



## Thanks!

The faculty, students and staff wish to thank all those who have contributed monetarily to the mathematics department. The department currently has seven active scholarship funds and an eighth which is getting close. Furthermore, the Departmental Fund allows the chair to supplement scholarships and provide services to our students and faculty that state funds do not cover. With your help, the mathematics department continues to grow and improve.

# Department Awards

## 2014 Departmental Awards and Scholarships

### Faculty Awards:

Faculty Research Award:

Faculty Teaching Award

Faculty Service Award:

Dr. Anne Shepler

Dr. Steve Jackson and Ms. Krista Hines

Dr. Olav Richter and Ms. Mary Ann Teel

### Graduate Awards:

Outstanding Graduate Student in Mathematics:

Academic Excellence Award:

Teaching Excellence Award:

Jared Holshouser

Jeff Chang

Tamara Knox and Drew Tillis

### Graduate Scholarships:

John Ed Allen Scholarship:

John Neuberger Scholarship:

Caleb Ziegler

To be determined

### Undergraduate Scholarships:

David F. Dawson Scholarship:

E.H. Hanson Scholarship:

Mildred Masters McCarty Scholarship:

Roger L. Perry Scholarship:

Outstanding Undergraduate Students in Mathematics:

Outstanding Student in Actuarial Science:

Outstanding Math Lab Tutor:

Marissa Arevalo

Phuong Tran

Jared Hilliard

Shama Surani

Chia Ting Han and Duong Nguyen

Dominic Nguyen

Chelsea Drescher



# { You Can Help!

## I want to support the UNT Department of Mathematics.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Country \_\_\_\_\_

E-mail \_\_\_\_\_ Phone (\_\_\_\_\_) \_\_\_\_\_

Enclosed is my check for \$\_\_\_\_\_.  
Please make check payable to the University of North Texas.

Please charge \$\_\_\_\_\_ to my:

Visa    MasterCard    Discover    American Express

Card Number

Exp. Date

Signature



Please mail contribution to:

University of North Texas  
Department of Mathematics  
1155 Union Circle #311430  
Denton, TX 76203-5017

## I would like my gift to support the following areas in the amounts specified:

\$\_\_\_\_\_ Mathematics Department Fund: An expendable fund that enables the chair to support department priorities such as faculty recruitment, outreach activities, research visitors, student events and conferences.

\$\_\_\_\_\_ John Ed Allen Scholarship                      \$\_\_\_\_\_ The Dan Mauldin Endowment for Student Excellence

\$\_\_\_\_\_ David F. Dawson Scholarship

\$\_\_\_\_\_ Mildred Masters McCarty Scholarship

\$\_\_\_\_\_ E. H. Hanson Scholarship

\$\_\_\_\_\_ John W. Neuberger Scholarship

\$\_\_\_\_\_ Joseph P. S. Kung Scholarship

\$\_\_\_\_\_ Roger L. Perry Scholarship

### I would like to make this donation anonymously.

In addition to these funds which support a variety of department programs, we benefit from campus-wide funds that support undergraduate scholarships and graduate student fellowships. We invite friends of the department to contribute to an existing fund or to contact the chair to discuss creating a new fund for a specific purpose. Thank you for supporting the activities of the UNT Department of Mathematics.

## Please Tell Us!

Your classmates and the UNT Department of Mathematics would love to know what important things are going on in your life, and we welcome your submissions for the Class Notes section of Math News, as well as for our Website. Email your updates to [mathchair@unt.edu](mailto:mathchair@unt.edu). We look forward to hearing from you!

Name \_\_\_\_\_ E-mail Address \_\_\_\_\_

Degrees from UNT and Other Universities/Years \_\_\_\_\_

Current Firm/Institution \_\_\_\_\_

Position/Research Area \_\_\_\_\_

Other Information about Yourself (family, hobbies, and past positions): \_\_\_\_\_

**Thank you to our donors!**