

# The Math Log

Newsletter of the University of North Dakota  
Mathematics Department

## New Statistician Joins Mathematics Department

**Dr. Adewale Lukman** joined the UND Mathematics Department as a tenure-track faculty member in the fall of 2023. He was born in Ibadan, Nigeria, not far from Lagos, Nigeria, and is currently a citizen of Nigeria. He completed a Ph.D. degree in Statistics at Ladoke Akintola University of Technology, Ogbomoso, Nigeria, in 2018. Before coming to UND, he served as a Lecturer in the Department of Epidemiology and Biostatistics at the University of Medical Sciences in Ondo, Nigeria.

Dr. Lukman's research specialty area is statistics. He is the author (along with coauthors) of numerous published scholarly articles. Dr. Lukman writes, "My research interests revolve around applied Statistics and Data Science, specializing in supervised and unsupervised machine learning methodologies. I am particularly drawn to the application of these techniques in areas such as Biostatistics, Environmental Statistics, and other relevant domains. My aim is to contribute to advancements in these fields through the integration of robust statistical methods and cutting-edge data science techniques."

The UND Mathematics Department has recently established an M.S. degree program in Applied Statistics. Dr. Lukman will help with the teaching of the courses in this program. He is especially eager to teach Applied Statistical Methods and Regression Analysis I and II.

Dr. Lukman's native language is Yoruba, but he also speaks English, of course. He notes that at Ladoke Akintola University, where he received his Ph.D., the language of instruction is English. Dr. Lukman is married to Olajumoke Adewale, and the couple has a son Greatworth Adewale. In his spare time, Dr. Lukman enjoys watching soccer. He also engages in spiritual activities such as reading the Bible, praying, and listening to Christian messages.

We wish Dr. Lukman and his family the best of luck here at UND and in Grand Forks!

## Rue Dies

It is with sadness that we note the passing of UND Mathematics Department Professor Emeritus **Dr. James S. Rue**. Dr. Rue passed away on February 5, 2024. Dr. Rue first came to the UND Mathematics Department in 1954, when



Dr. Adewale Lukman

he began work as a graduate student. He later completed a master's degree here at UND and a Ph.D. at Iowa State University. He served as a faculty member in the UND Mathematics Department until his retirement in 1993. A more detailed article describing the life and work of Dr. Rue appears in the 2015-2016 issue of the *Math Log*. We will miss Dr. Rue.

## Zerr Assumes New Administrative Roles

UND Mathematics faculty member **Dr. Ryan Zerr** (pronounced ZEER) has assumed two new administrative roles. First, UND President **Andrew Armacost** has appointed Dr. Zerr to the position of Associate Vice President for Strategy and Implementation. Dr. Zerr's main duty in this role is to coordinate activities relating to UND's strategic planning process. UND's current strategic plan is commonly known as "UND LEADS." Further information about LEADS is available on the Web at

<https://und.edu/about/strategic-plan>

As Associate Vice President, Dr. Zerr will report directly to President Armacost.

Dr. Zerr has also assumed the role of Mathematics Department Chair. He is replacing the previous department Chair, **Dr. Gerri Dunnigan**, who has completed her second three-year term as Chair. Mathematics Department bylaws state that a given person may not serve more than two consecutive terms as the department Chair, so Dr. Dunnigan has stepped down as Chair.

Dr. Zerr has extensive administrative experience here at UND. He has previously served as Director of UND's Essential Studies program<sup>1</sup> and as one of several Associate Deans of UND's College of Arts and Sciences. In his Associate Dean's role, he specialized in curriculum issues. Dr. Zerr has recently served as Chair of UND's Theatre Arts Department, and a few years ago, he served a one-year term as Chair of the UND Senate.<sup>2</sup>

As Dr. Zerr has carried out his previous administration activities over the past several years, he has also taught a few classes in the Mathematics Department and advised a few graduate students. He has regularly attended our Mathematics Department meetings. In addition, he has continued to conduct research and scholarly activity, and he has carried out other "service" duties for the University above and beyond the ones we described above.

Each year, UND faculty members fill out and sign a "Position Description Form," or PDF. The PDF indicates the percentage of the faculty member's time that he or she will spend on teaching, research, service, and administration. Dr. Zerr's 2023-2024 PDF indicates that he will spend 50% of his time on his work as Mathematics Department Chair, 40% of his time on his work as Associate Vice President, and 10% of his time on research and service.

We would like to thank Dr. Zerr for his contributions to the University and to the Mathematics Department. We wish him success in both of his new roles!

### **Dunnigan Completes Service as Mathematics Department Chair**

**Dr. Gerri Dunnigan** has completed her second three-year term as Chair of the UND Mathematics Department. Mathematics Department bylaws state that a faculty member can serve as department Chair for at most two consecutive three-year terms, so Dr. Dunnigan stepped down as Chair shortly after the end of the Spring 2023 semester. Dr. Dunnigan led the Mathematics Department through the COVID-19 pandemic. During Dr. Dunnigan's service as Chair, the Mathematics Department established a new M.S. degree program in Applied Statistics. The department also expanded its offerings of online courses. In fact, one can now complete the entire M.S. degree in Applied Statistics in the online format. Toward the end of Dr. Dunnigan's service as Chair, the Mathematics Department



Dr. Ryan Zerr

successfully filled two open tenure-track positions. We thank Dr. Dunnigan for her service as our department Chair over the last six years!

### **New Teaching Professor Joins Department**

**Dr. Ming Huo** has joined the Mathematics Department as a Teaching Assistant Professor. Dr. Huo holds a Ph.D. degree in Mathematics from the University of Nevada, Las Vegas. Her research area is operator theory and complex analysis. She is also interested in applied mathematics.

Dr. Huo has studied and worked in different parts of the U.S., including Florida, Alabama, Nevada, Massachusetts, Connecticut, and New York, but she is originally from the city of Kaifeng, China. Dr. Huo writes, "According to Wikipedia, Kaifeng is one of the Eight Ancient Capitals of China, having been the capital eight times in history, and is best known for having been the Chinese capital during the Northern Song dynasty."

In her spare time, Dr. Huo enjoys reading, hiking, and cooking. One of her favorite books is "Walden; or Life in the Woods," by Henry David Thoreau. Dr. Huo writes, "When I was working in Massachusetts and New York, I actually visited Walden Pond State Reservation and hiked around the full circle of the Walden Pond in one Summer." According to Wikipedia, Walden Pond is a Pond in Concord, Massachusetts. Thoreau lived in a cabin on the shore of this pond for a short time, and this provided the inspiration for the above book. Dr. Huo also enjoys gardening.

1. Essential Studies is a program at UND (or a set of requirements for bachelor's degrees at UND) which requires students to take a broad set of courses. Undergraduate students must take a certain minimum number of credit hours of "Essential Studies courses" which they choose from certain sets eligible courses. The Director of the Essential Studies program performs certain tasks to ensure that the various Essential Studies courses continue to meet the requirements of the Essential Studies program. Further information on Essential Studies is available on the Web at <https://und.edu/academics/essential-studies>.
2. The UND Senate is a group consisting of dozens "senators." Each senator is a UND faculty member, staff member, administrator, or student. Most senators are elected, but some administrators, such as the Provost and the deans, are unelected "ex officio" senators because of the administrative positions they hold. The Senate holds monthly meetings throughout the fall and spring semesters, at which it makes decisions and recommendations concerning UND business. For more information on the UND Senate, see <https://und.edu/academics/university-senate>.

“Next spring,” she writes, “I plan to rent a garden plot in Grand Forks and grow vegetables and flowers, taking advantage of the very fertile black soil in North Dakota.” She also plans to learn cross-country skiing and snowshoeing and to “cheer for our hockey team.”

We hope that things go well for Dr. Huo here at UND!

### Visitor Presents Lecture

**Dr. Julia Walk** presented the talk “Mathematical Explorations of *Spot It!*” here at the UND Mathematics Department on October 19, 2023. Dr. Walk is an Associate Professor at Concordia College in Moorhead, Minnesota. Her talk was part of the **Edward O. Nelson** Memorial Lecture Series.

### Founders Day Awards

Each year, UND holds a special event known as “UND Founders Day.” According to the Web site for Founders Day,<sup>3</sup> the purpose of Founders Day is to celebrate the history of UND and to honor people associated with UND. The event “marks the anniversary of the signing of the Dakota Territory legislation, establishing the University of North Dakota in Grand Forks.” Founders Day is usually held on the UND campus in February and consists of a dinner and a special program. One part of the program is a presentation of awards to various UND faculty and departments. Two UND Mathematics Department faculty members received awards at the 2024 Founders Day event.

Mathematics faculty member **Dr. Radha Panini** received the McDermott Faculty Award for Excellence in Undergraduate Teaching. Mathematics Faculty Member **Dr. Ryan Zerr**, along with several other UND faculty members, received the UND Award for Interdisciplinary Collaboration in Research and Creative Activity.

### Several GTAs Graduate

**Brittany Scheer** completed her M.S. degree in Mathematics here at UND in May of 2023. **Dr. Gerri Dunnigan** advised Brittany as she prepared her M.S. independent study report. The title of her independent study was “Convolutional Neural Networks for Image Processing with Applications.” In the immediate future, Brittany plans to continue working at the Altru Cancer Center, but she hopes to begin work on a Ph.D. soon and then teach.

**Jonathan Boateng** received his M.S. degree in Mathematics in May of 2023. He completed an M.S. independent study report entitled “Regression Splines” under the guidance of **Dr. Jeremiah Bartz**. He will be joining Basin Electric Cooperative in Bismarck, North Dakota, as a Market Analyst.

**Irin Rahman** completed an independent study report entitled “A comparative study of word-based LSTM

model and the GPT model in natural language processing for text generation using Python,” under the guidance of her adviser, **Dr. Gerri Dunnigan**. She received her M.S. degree in Mathematics in May of 2023. She plans to continue her graduate studies.

**Manou Anga Mbombo** received his M.S. degree in Mathematics in May of 2023. He wrote an independent study report entitled “Applications of Group Theory to Molecular Biology” under the guidance of his adviser, **Dr. Anthony Bevelacqua**. During the 2023-2024 academic year, Manou will be working as a mathematics instructor at Seattle Pacific University.

**Rachel Blomquist** received her M.S. degree in May of 2023. Her academic adviser was **Dr. Michael Minnotte**, and the title of her independent study report was “Quantile Regression.” Rachel is now a mathematics instructor at Colby Community College in Colby, Kansas.

**Jacob Denault** completed his M.S. degree in Mathematics in May of 2023. To fulfill the requirements for this degree, he wrote a thesis entitled “A Generalized Approach to Partitioning Weighted Points in a Plane.” **Drs. Ryan Zerr, Bruce Dearden, and Doojin Hong** served on the “Faculty Advisory Committee” for Jacob’s thesis. The members of this committee reviewed and approved Jacob’s thesis. Jacob is now a Ph.D. student and Teaching Assistant at North Dakota State University (NDSU). Jacob enjoys teaching, but he is not sure what career path he will follow after graduation from NDSU.

### New GTAs Join Department

**Sumaiya Alansar** is from Bangladesh. She completed a bachelor’s degree in Mathematical Sciences at Umm Al-Qura University, in Mecca, Saudi Arabia. She minored in applied mathematics.

**Tunde Alesinloye** is from Oyo State, Nigeria. He earned his undergraduate degree at the University of Ilorin, in Nigeria, where he majored in Mathematics and minored in Statistics and Computer Science. Tunde is interested in artificial intelligence and machine learning.

**Daniel Kwakye** was born in Kumasi, Ghana, but he has lived in Accra, Ghana, for almost all of his life. He completed his Bachelor of Education degree in Mathematics at the University of Cape Coast, in Ghana, with a minor in Economics. In his spare time, he enjoys listening to music, watching soccer games, and playing volleyball.

**Oscar Edem Mawutor** is a student in our graduate program in applied statistics. Oscar is from Accra, Ghana. He completed an undergraduate degree in actuarial science at the University for Development Studies in Ghana. He is interested in data analytics and data science. In his spare time, he enjoys watching soccer

3. The Web site for Founders Day is located at <https://campus.und.edu/founders-day> .

and playing video games. Oscar is a fan Manchester United, a soccer team based near Manchester, England. Oscar also enjoys watching action movies, especially military movies.

**Ganesh Thondilege** is from Colombo, Sri Lanka. She completed her undergraduate degree in Mathematics at the University of Sri Jayewardenepura, in Sri Lanka. She also completed minors in Statistics and Chemistry. Her research interests include numerical methods, applications of graph theory, optimization, differential equations, and numerical techniques for machine learning and image processing.

**Tobias Amewuga Tamakloe** is from the city of Accra in Ghana. He completed an undergraduate degree in Mathematics with a minor in Economics at the University of Cape Coast, in Ghana. In his spare time, Tobias enjoys playing volleyball and traveling.

### Where They Are and What They Are Up To

**Missy (Johnson) Schell** (B.S. 2006) lives in Bismarck, North Dakota, with her husband and three children. She serves as a Load Forecast Analyst for Basin Electric Power Cooperative. Specifically, she runs statistical and econometric models to forecast future energy use and power requirements for Basin Electric's members. Missy writes, "My colleague is a math graduate from NDSU and we frequently (and playfully) debate who received a superior math education."

**Stephen Bique** (B.A. 1983, M.S. 1985) lives in Alexandria, Virginia, and works for the Federal Financing Bank (FFB) as a computer scientist. In his work at FFB, Stephen provides advanced application engineering, software development, and analysis in financial mathematics. The FFB operates under the direction of the U.S. Department of the Treasury. In 2022, Stephen married Kyle Kerr at King of Glory Lutheran Church, in Dallas, Texas.

**Tom Weston** (M.S. 1962) is retired and lives in Lacey, Washington. He worked for the Boeing Company for thirty years, where he did scientific work. Tom says that he received a good education in mathematics and physics at UND. He remembers sharing an office with **Howard Larson** while he was attending graduate school here at UND.

### Faculty Footnotes

**Jeremiah Bartz** has published the article "Good things come in threes: a ternary tree for triangular triples" in the *Mathematics Magazine*.

**Jeremiah Bartz, Bruce Dearden, Joel Iams, and Jerry Metzger** have published the paper "Ratio balancing numbers." This article appears in the book *Combinatorics, graph theory and computing*.

**Doojin Hong** has published the article "Spectra of higher spin operators on the sphere" in the *Kyungpook Mathematical Journal*.

A. Rod Gover, **Lawrence J. Peterson**, and Callum Sleigh have published the article "A conformally invariant Yang-Mills type energy and equation on 6-manifolds" in the journal *Communications in Contemporary Mathematics*.

**Dr. Bryce Christopherson** presented a scholarly talk entitled "Some Algebraic Techniques for Ramsey Theory" at the Fall 2023 meeting of the North Central Section of the Mathematical Association of America (MAA) in Duluth, Minnesota.

**Dr. Adewale F. Lukman** presented the talk "Robust Kibria-Lukman Strategy for the Negative Binomial Regression with Applications" at the Fall 2023 MAA meeting in Duluth, Minnesota.

**Dr. Jeremiah Bartz** gave the talk "Math Meets the City" at the Fall 2023 MAA meeting in Duluth.

**Dr. Ryan Zerr** and his collaborators have been awarded a grant of \$25,000 from the Teagle Foundation and the National Endowment for the Humanities. The title of the grant is "Cornerstone Program at UND."

### Student Solves Problem

The journal *Math Horizons* has acknowledged current UND undergraduate Mathematics student Tyler Van for his solution to a problem posed in the journal.

### Scholarships

The Mathematics Department has offered scholarships to several students for the 2023-2024 academic year. The students were as follows:

**Noah Cowley, Madisen Ellingson-Stumphf, and Olivia Rike-Norman** (Jay O. & Marie Bjerkaas Math Scholarship)

**Samuel Kjell and Thomas Iken** (Ronald C. and Ann C. Bzoch Memorial Scholarship)

**Bella Ficklin and Audrey Rubish** (Deann & Lee Christianson Scholarship)

**Malissa Reinhardt and Rebecca Miles** (David Uherka Mathematics Scholarship)

**Christian Gordon** (Paige Plagge Memorial Math Scholarship)

**Matthew Johnson** (Joseph A. Guzek Mathematics Scholarship)

**Bella Ficklin and Jacob Stanley** (Diana L. Wells Memorial Mathematics Scholarship)

**Christian Gordon** (Judy Ann Utton Memorial Scholarship)

**Caden Dahl** (James Rue Mathematics Scholarship)

UND's College of Arts and Sciences normally awards the John & Lyle Buchwitz Scholarship to one Mathematics graduate student and one Physics graduate student each year. No eligible Mathematics students applied for the scholarship for the 2023-2024 academic year, but the Mathematics department will publicize the scholarship more extensively this spring. We expect several eligible students to apply for the 2024-2025 John & Lyle Buchwitz scholarship.

We would like to thank the many generous donors who have made all of the above scholarships possible.

### Department Hosts Mathematics Track Meet

Each year, the UND Mathematics Department hosts the Mathematics Track Meet. The Mathematics Track Meet is a competitive event for selected students from grades seven through twelve from the Grand Forks area. The 2022-2023 Math Track Meet took place on February 20, 2023 (Presidents' Day), and the 2023-2024 Track Meet was held on December 19, 2023. A total of 108 students participated in the 2022-2023 Track Meet, and 190 students participated in the 2023-2024 Track Meet. Many faculty and graduate students from the UND Mathematics Department helped with both events. **Drs. Ryan Zerr, Radha Panini, and Tim Prescott** served on the organizing committee for the 2022-2023 event, and **Drs. Panini, Prescott, and Eun-Jung Youn** served on the committee for the 2023-2024 event.

### New Secretary Begins Service

**Julie Solheim** has begun service as the new Administrative Secretary in the Mathematics Department. Julie had previously completed a bachelor's degree in General Studies here at UND. She minored in Communications, Sociology, and Women and Gender Studies. She also holds a certificate in Professional and Executive Communication. Julie has worked at UND since 2001. Before coming to the Mathematics Department, she worked at UND's Division of Research and Economic Development. She has also worked at UND's University Counseling Center and at UND's Upward Bound program. When Julie is not at work, she spends time with her two toy poodles, Bella and Cora. She is an avid fan of the Minnesota Vikings and has been following the team since her childhood. Julie replaces our previous Administrative Secretary, **Kirsten Gudgeon**. Kirsten has moved overseas to be with her husband. We wish our new and former secretaries the best of luck in the months and years to come!

### Mathematics Graduate Discusses Chiropractic Work

**Daniel (Dan) Perlov** serves as a chiropractor in Winnipeg, Manitoba (Canada). Dan completed his M.S. degree in Mathematics here at UND in August of 2006. The *Math Log* editor recently visited with Dan. We discussed his background and his chiropractic work.

Dan was born and raised in Winnipeg. Before coming to UND, he completed his bachelor's degree in Mathematics at the University of Winnipeg. The main focus of his mathematical studies at the time was complex variables. He began his graduate studies here at UND in the fall of 2004. Mathematics faculty members **Michael Gregory** and **Ryan Zerr** jointly advised Dan as he prepared his M.S. independent study report. Dr. Gregory retired at about the time of Dan's graduation from UND, but Dr. Zerr is still with our department. Dan was Dr. Gregory's last graduate student and Dr. Zerr's first graduate student.

During his studies at UND, Dan made "great friends and long-term relationships." He met current Mathematics faculty member **Dr. Jeremiah Bartz** while both were graduate students here in the UND Mathematics Department. The two have kept in touch ever since, and from time to time they visit each other in person. Dan also recalls some of his work with Mathematics faculty members **Anthony Bevelacqua** and **Jerry Metzger**. He studied algebra with Dr. Bevelacqua and continued fractions with Dr. Metzger.

A few years after completing his M.S. degree, Dan began work toward a Doctor of Chiropractic degree at Northwestern Health Sciences University in Bloomington, Minnesota. He completed his degree in April of 2013. Dan says that his graduate degree in Mathematics helped him gain admission to the chiropractic degree program at Northwestern. His mathematical background was also helpful in classes such as biochemistry and anatomy. His mathematical training has also helped him with some of the business and financial aspects of his chiropractic work.

A chiropractor is a doctor of "chiropractic." Chiropractic is a form of medical practice in which doctors treat back pain and other types of pain primarily by manipulating vertebrae and other joints in the body. Chiropractors treat patients in cities and towns throughout most of the U.S. and Canada. In Dan's chiropractic work, he sees a variety of patients. The severity of his patients' problems and the overall wellness of his patients vary significantly from one patient to another. For each of his patients, Dan performs an assessment and diagnosis and then develops a treatment plan for the patient. Most of the treatment occurs in the chiropractor's office or clinic. Many patients visit the chiropractor's office several times. Dan will soon open a new chiropractic multidisciplinary clinic with an emphasis on the diagnosis and treatment of complex cases.

Another chiropractor, as well as several other health care modalities, will work along with Dan at the new clinic. The clinic will be located on the northeast end of Winnipeg.

Dan and his wife Heather have two children: Oliver, age 8, and Eden, age 4. In his spare time, Dan plays pool, and he often plays games with his children. Dan also enjoys mentoring other aspiring chiropractors as they begin their chiropractic studies and their service as chiropractors.

We would like to thank Dan for telling us about his past studies and his current work. We wish him the best of luck in his work at the new clinic!

## The Pseudo-Sum,

by Larry Peterson

This issue of the *Math Log* would not be complete if I did not mention a very special person who recently visited the UND campus.



**Mr. Greg Brockman** visited UND on September 26, 2023. Mr. Brockman is the current president and one of several co-founders of OpenAI, a company that develops artificial intelligence products used by millions of people around the world.<sup>4</sup>

When Mr. Brockman came to UND, he, along with UND President **Andrew Armacost**, appeared before an audience of over 500 people in the ballroom of the new Memorial Union building here on the UND campus.<sup>5</sup> President Armacost interviewed Mr. Brockman for approximately fifty minutes. The two discussed Mr. Brockman’s background, but much of the interview centered on artificial intelligence and the future of artificial intelligence. A complete video recording of President Armacost’s conversation with Mr. Brockman is available on the Web at

[www.youtube.com/watch?v=LSWy7nLDKRo](http://www.youtube.com/watch?v=LSWy7nLDKRo)

I think that you will find the video very interesting.

One of my reasons for mentioning the visit by Greg Brockman here in the *Math Log* is simply the importance of OpenAI and Brockman’s work for the company. To learn more about Mr. Brockman’s work, you should watch the above video, but to give you a sense of the importance of Mr. Brockman and his visit to UND, I would like to quote from the announcement for Mr. Brockman’s visit at the Memorial Union. The announcement stated that “walk-through metal detectors will be used at entrances for this event.” It also said, “No backpacks, purses or bags of any kind will be allowed in the Memorial Union large ballroom for this

event.” Finally, the announcement said that “doors will close for this event at 12:55 p.m. Re-entry will not be allowed.”

Greg Brockman’s visit to UND is especially interesting for another important reason: Mr. Brockman has some specific ties to the UND Mathematics Department! He has done mathematical research with UND Mathematics Department faculty members! According to the Fall 2008 issue of the *Math Log*, Mr. Brockman and UND Mathematics Department faculty member **Dr. Ryan Zerr** published the article “Asymptotic behavior of certain Ducci sequences” in the *Fibonacci Quarterly*. Also, I remember seeing Greg Brockman at the UND Mathematics Track Meet<sup>6</sup> here on the UND campus several years ago. We briefly discussed one of the problems that had appeared on one of the exams at the Math Track Meet.

I hope you get a chance to watch the video recording of Mr. Brockman’s discussion with President Armacost! I also hope that things are going well for you. Please keep us informed concerning your activities. Our paper mail and email addresses appear on the next page.

## Mathematics Department Faculty and Staff for 2023-2024

Reem Albashaireh .....	Teaching Assistant Professor
Jeremiah D. Bartz .....	Associate Professor
Anthony J. Bevelacqua .....	Professor
Evelyn Boss .....	Academic Advisor
Gwennie A. Byron .....	Teaching Associate Professor
Bryce Christopherson .....	Assistant Professor
Darian Colgrove .....	Math Active Learning Lab Lab Manager
Bruce G. Dearden .....	Professor
Mary E. Dietz .....	Teaching Associate Professor
Gerri M. Dunnigan .....	Associate Professor
Doojin Hong .....	Associate Professor
Ming Huo .....	Teaching Assistant Professor
Joel E. Iiams .....	Professor
Michele A. Iiams .....	Professor
Aloysia Larson .....	Teaching Assistant Professor
Adewale Lukman .....	Assistant Professor
Richard P. Millsbaugh .....	Professor
Michael C. Minnotte .....	Professor and Associate Chair
Radha Panini .....	Teaching Associate Professor
Lawrence J. Peterson .....	Associate Professor
Lacey Pietron .....	Administrative Clerk
Timothy M. Prescott .....	Associate Professor
Thomas L. Richards .....	Associate Professor
Jessica Short .....	Teaching Associate Professor
Alexandar Sidles .....	Teaching Assistant Professor
Julie Solheim .....	Administrative Secretary
Eun-Jung Youn .....	Teaching Associate Professor
Ryan J. Zerr .....	Professor and Chair

4. See the articles on Greg Brockman and OpenAI in the online encyclopedia Wikipedia, at [en.wikipedia.org](http://en.wikipedia.org).

5. See [blogs.und.edu/und-today/2023/09/video-a-conversation-with-greg-brockman-co-creator-of-chatgpt](http://blogs.und.edu/und-today/2023/09/video-a-conversation-with-greg-brockman-co-creator-of-chatgpt).

6. Information on the Mathematics Track Meet appears on page 5 of this issue of the *Math Log*.

The following persons are responsible for monetary gifts to the UND Alumni Association specifically designated for the improvement of the Department of Mathematics. We thank you for your generosity!

John Clynych	Dr. Julie N. Getty	William & Anne Grams	Carol Hokana & Nick Bonifanti
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Rodney B. McKinney	Patricia J. Lund	James & Nadjah Larson	Col. (RET) Greg & Jey Stolt
Dr. Gail S. Nelson	Dr. James & Janet Loos	Dr. Doug & Susan McLeod	Drs. Richard & Sandra Paur
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**Deann and Lee Christianson Scholarship**

Drs. Deann & Lee Christianson

**Brent Christensen Mathematics Scholarship**

Brent M. Christensen

**Judy Ann Utton Memorial Scholarship Endowment**

Bruce & Lori Anderson

**Paul Bruce Waterside Enterprises Scholarship**

Paul V. Bruce

**David Uherka Mathematics Scholarship**

Dr. Timothy J. Pennings

**Patrick Durkin Memorial Scholarship**

Seth & Katie Greicar  
Christopher Smith

**Joseph A. Guzek Mathematics Scholarship**

Joseph & Joyann Guzek

If you would like to make a monetary contribution to UND, to the UND Mathematics Department, or to one of our scholarships, please make your check payable to the "UND Foundation." Thank you!

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## **The 2023-2024 UND *Math Log* newsletter is here!**

In this issue:

- Two Mathematics faculty members receive Founders Day awards.
- Zerr assumes new administrative roles.
- New statistician joins Mathematics Department.
- Mathematics graduate discusses chiropractic work.
- OpenAI executive discusses artificial intelligence. See the Pseudo-Sum.