

Loyola University Chicago Dept. of Mathematics and Statistics Alumni Newsletter, Summer 2023

Hello Math and Stats Alums! We've been thinking through ways to stay better connected, and this newsletter is one of the first tangible results. We hope you enjoy hearing about all the great things that have happened in our department over the last year or so. It has been a good one!

Congratulations 2023 grads!

This was an amazing class! Things looked rough early on with covid interrupting freshman year, then sophomore year, and so on. But they made it through, and thrived! They have done great things at Loyola, and we expect them to do great things going forward! Here is a picture of some of them after the ceremony. I wish I had everyone, maybe next year I'll be more systematic...



Awards and other great things:

Our faculty and students received numerous prestigious awards and recognitions this year. Here is a selection. And I apologize to anyone who was missed, I know there are other great things going on that I may not have heard about or may have forgotten to include.

1. Swarnali Banerjee, along with Catherine Putonti (Bioinformatics), recently received a grant from the National Institute of Health valued at over \$400, 000 to support her ongoing research into the cause and treatment of urinary tract infections, and to support students involved in that work. Congratulations Swarnali!



2. Alec Krueger was named a 2023 Sujack Master Teacher. This is a major recognition from the College of Arts and Sciences of Alec's outstanding teaching. Alec has also taken on the role of MATH118 coordinator and runs our teaching seminar. Congratulations Alec!



- Laurie Jordan was the runner up for the 2023 Kolvenbach Award for engaged teaching. This is a university wide award and was given largely for Laurie's recently created SLIM (service learning in math) class. This is focused on service through tutoring math and is our first math specific Engaged Learning class. Congratulations Laurie!



- In August 2022 we descended on the MAA mathfest in Philadelphia. Three Loyola students (Kate Bove, Kathryn Cantrell and Isabel Renteria) gave undergraduate research poster presentations, and Loyola Undergrad research by our former students Kaity Parsons and Emma Zajdela and won the Allendoerfer prize for expository writing.



- Kiet Anh Nguyen, a Dec 2022 graduate in Theoretical Physics and Applied Math, won the President's Medallion at Loyola University Chicago, an award which recognizes outstanding academic achievement, leadership, and service.



- Kate Bove, a graduating math major, won the Gannon Center for Women and Leadership's Undergraduate Leadership Award. This is Kate along with several students and faculty members as she received the award. Congratulations Kate!



- Math majors Zoha Hassan and Aidan Doyle received 2023-2024 "building community bridges" Awards from the college of Arts and Sciences. I don't have a picture of them winning, but here is a link to the award.

<https://www.luc.edu/cas/buildingbridgesawards/>

8. Greg Matthews and our former student (and colleague) Quang Nguyen were finalists at the “Big Data Bowl,” and were invited to present their work evaluating performance of pass-rushers at the NFL combine. Congratulations Greg and Quang!



9. Finally, here are our 2023 departmental award winners

Chair's Award: Alexander Wenner

Driscoll Award: Lindsay Miller

Gerst Award: Angelos Vasilopoulos

Mayer Award: Elizabeth Brunet

Reisel Award: Ciara Wingfield

Rust Award: Kirsten Fasiang

VandeValde Award: Kate Bove

Zajdel Award: Patrick Furman

The picture has these folks, and a few other amazing students as well.



Summer 2023 undergrad research

We have (I think) a record number of students doing undergrad research this summer! I'm probably missing some, but these include:

- Cecily Bartsch (Provost's fellowship, with Dr. Wan).
- Leigha DeRango (Undergrad summer research experience, with Dr. Whalen)
- Miguel Diaz (Undergrad summer research experience, with Dr. Wan)
- Kathryn Cantrell (NSF REU, Rochester Institute of Technology)
- Elizabeth Joseph (Undergrad summer research experience, with Dr. Wan)
- Alex Lewis (U. Chicago Physics REU)
- Anurathi Madasi (Ciera Research experience for Undergrads, Northwestern)
- Trinity Bauer (Loyola Carbon Fellowship, with Dr. O'Brien and Dr. Guy (Psychology))
- Davide Mazzucco (Undergrad Research Experience, with Dr. Brookes, Engineering)
- Walter McGavran (National weather center REU, U. Oklahoma)
- Pranati Mitta (NSF REU in computer and Data Science, Rice)
- Amanda Newton (Undergrad summer research experience, with Dr. Wan)
- Isabel Renteria (NSF REU, UCLA)
- Elisa Stagaman (Loyola Adventures in Urobiome Data Summer Research Program)
- Emma Schatz (NSF REU: Materials Research with Data Science, North Carolina St.)

We also have many students doing exciting internships, and our grads are off getting jobs and, in some cases, going to Ph.D. programs. Our students are really setting the world on fire this year!

Events and work in the community

- **Chicago Math teachers circle.** The Chicago math teachers' circle ran a full set of 4 sessions at Loyola during AY2022-2023, working with groups of teachers from CPS and beyond. It is always great to spend time with colleagues teaching our future students! The most recent session was an excellent presentation of Mobius bands and things by our own Carmen Rovi. See <https://matheirclesofchicago.org/cmtc/>

- **Data fest.** Data fest ran for the first time since covid this spring this past April. This is a weekend-long event bringing together students from Loyola and beyond to do some intensive data analyzing. This is led by Greg Matthews – thanks for getting this great event going again Greg! See <https://www.luc.edu/datascience/events/datafest/>
- **WIDS.** Our department has also been co-sponsoring Women in Data Science (WIDS) conferences for the last 2 years. Our department representative for this is Mena Whalen. See <https://widschicago.org/>

Clubs

- **Math club** Math club has been doing great things, as usual. I'm attaching photos from a graduation party, a "love is in the square" event, a knitting and math event, a pie-day event, a women in science and math event, a juggling and math event and a "symme-tri-dye" event, all (except one) within the last year. Thanks to all the wonderful students who organize this, and especially the outgoing president, Kate Bove! And also the incoming president, Isabel Renteria, who I'm sure will do a great job next year!



- **Data Science club.** There is also now a data science club! The founding president is Leigha DeRango. I'm sure we'll be hearing a lot from them next year!

New and newish programs

Depending on when you graduated, here are some new programs you may not know about.

- **Applied math.** We started this major about 6 years ago, and now have several graduated students. It is growing slowly, but it is growing. You'll see below we have recently hired several exciting faculty members in Applied math, and I expect it will grow more in the next few years.
- **Data Science.** Our data science program was launched about 3 years ago, as an interdisciplinary program with Computer Science. As of this year, we have a Major, a Minor, and most recently a Master's program. All are growing quickly. Thanks to Greg Matthews for leading this effort, and to Swarnali Banerjee who will lead the program starting next year!
- **Data Science consulting center.** As of summer 2023, we have launched a Data Science Consulting Center, led by Greg Matthews. Please contact him if you have data what needs stuff done to it! The center even has a website! <https://www.luc.edu/cdsc/>

Rataj Scholarships

Thanks to the generosity of our alum. Greg Rataj, we have been able to establish the Rataj Scholarship fund, and have been giving scholarships to two to three students a year over the past several years. See <https://www.luc.edu/math/scholarshipsopportunities/>

Comings and goings

We've had a lot of faculty members retire or otherwise leave our department over the last few years. To pick an arbitrary cutoff, I'm going to list those who have left in 2020 or later

- Nick Barron
- Marian Bocea
- Steve Doty
- Anne Hupert
- Bob Jensen
- Anthony Mastroberardino
- Joseph Mayne
- Mark Pashan
- Cristina Popovici
- Stuart Wick

We wish them all well in the next steps of their journeys. And, while it has been sad to say goodbye to so many people, on the flip side we've welcomed many great new faculty members. Here is the list, also since 2020.

- Widad Abdalla (Starting Fall 2023, Lecturer of Statistics)
- Eric Chang (Started Fall 2021, Lecturer of Mathematics)
- Izuchukwu Eze (Started Fall 2021, Lecturer of Mathematics)
- Rafael Gonzalez (Started Fall 2022, Assistant Professor of Mathematics)
- Giovanni Gravina (Starting Fall 2024, Assistant Professor of Applied Mathematics)
- Matthew Mills (Started Fall 2021, Lecturer of mathematics)
- Jose Pastrana (Starting Fall 2023, Lecturer of Mathematics)
- Nicolas Petit (Starting Fall 2023, Lecturer of Mathematics)
- Carmen Rovi (Started Fall 2021, Assistant Professor of Mathematics)
- Matthew Stuart (Started Fall 2022, Assistant Professor of Applied Statistics)
- Tuyen Tran (Started Fall 2020, Assistant Professor of Applied Mathematics)
- Xiang Wan (Started Fall 2022, Assistant Professor of Applied Mathematics)
- Mena Whalen (Started Fall 2021, Assistant Professor of Applied Statistics)
- Darius Wheeler (Started Fall 2021, Lecturer of Math/Applied Math)
- Miles Xi (Started Fall 2021, Assistant Professor of Applied Statistics and Bioinformatics)

If you do some math here, you will find that our department is growing. Relatedly, we are expecting record enrollments in our classes this coming fall. Our future is bright!

Till next time!

I think this is the first alumni newsletter we've sent, at least the first in a long time. Hopefully we'll do something similar next summer. And please keep in touch – we all love hearing from former students. I also think it would be nice to get more current students in touch with alums working in fields they are interested in, so maybe you'll hear more about that at some point, or maybe you have ideas. And if there are opportunities our students should know about, I am always happy to share, please send them along! And, if you enjoyed this and would like to receive more department news, you could sign up for our mailing list at: <https://forms.office.com/r/VdPJmfueeD>. This is only used once or twice a year, you won't get spammed much...

Go Ramblers!