

A publication of the *Corporation for the National Math Sciences Alliance*

Upcoming

Events

**2020 Field of  
Dreams  
Conference**Minneapolis, MN  
Nov. 6-8, 2020

## Math Alliance Statement on Systemic and Structural Racism

The National Alliance for Doctoral Studies in the Mathematical Sciences (Math Alliance) offers on behalf of our mentors, students, and partner organizations, our deepest condolences to the families of all of the African-American women and men unjustly killed by law enforcement.

We too watch in disbelief and horror as these unjust murders are steadily streamed into our homes—in particular the murder of Mr. George Floyd whose life was brutally and callously ended by Officer Chauvin on May 25, 2020, as others who swore to protect and serve their community stood by and did nothing to stop his murder. These heinous acts are illustrative of the systemic and structural racism that exists within the United States and the world at large. We unequivocally stand up to say and to affirm that Black Lives Matter.

Anti-black animus and systemic racism pervades every aspect of our shared experiences and our mathematics community has not been exempt from this. In fact, it is precisely these experiences which led to the creation of The National Alliance for Doctoral Studies in the Mathematical Sciences (Math Alliance), whose original name – the *Alliance for the Production of African American Ph.D.s in the Mathematical Sciences* — reflects our animating concern that African Americans were significantly underrepresented at all levels in the mathematical sciences.

The [goals](#) of the Math Alliance are founded on the premise that we must address issues of systemic racism in mathematics to improve the recruitment, retention, graduate school completion, and professional career progression of underrepresented minorities in the mathematical sciences, in particular Black scholars.

In light of the continued oppression and systemic racism of black and brown people, the work of the Math Alliance must expand. We are now redoubling our commitment to proactive and responsible leadership in addressing the needs of black and brown students in the mathematical sciences.

To this end, we are forming an Advocacy and Policy Committee whose charge is:

- to bring to light established best practices within the mathematics community which support the recruitment, retention, graduate school completion, and professional career progression of underrepresented minorities in the mathematical sciences, and
- to investigate and document structural impediments which have led to unacceptably slow progress in these areas.

This committee's work will amplify the Math Alliance's efforts to build, support, and sustain an inclusive mathematical community.

The Math Alliance will continue to fight systemic and structural racism through mentoring, advocacy, and through our reaffirmed commitment to providing equal opportunities and equal access to Alliance programs.

Now more than ever, the Math Alliance reiterates its commitment to social justice, equity and inclusion for all, including Black, Latinx, Native American, and Pacific Islanders within the mathematical sciences.

## Thoughts from the Director...



**David Goldberg**  
Executive Director  
of the  
Math Alliance

We are still in the midst of COVID-19, of course, and so much is changing on that front every day. So many of our mentors are involved in the science, particularly related to data and models. We mention a couple we know about elsewhere in this newsletter, but I would love for us to hear more about all the Math Alliance mentors working on understanding this outbreak and helping in progress towards a solution. We are also seeing that it is not enough just to have good model, as you need leadership to design and implement a plan.

I will remind you that **F-GAP is still continuing as planned**, and we are still taking [nominations](#). I am writing this following the second of three days of our [IMA Workshop for F-GAP students](#), and it has been wonderful. IMA has done a terrific job of moving our concept to a virtual setting, and I, for one, am learning a lot!

I usually enjoy sitting down to write these notes, and sharing news of our community, its successes and challenges, and how I view these in the context of current events. This time it has been hard, certainly the hardest since I started these columns. First, there was never any question that the statement of the Math Alliance's Executive Council in response to the murder of George Floyd must appear as the first item in this publication, where my notes usually appear. Mr. Floyd's murder, and those of so many more, often committed by those sworn to protect them, left me, and many of my colleagues, at such a low point. I did not know how to write about it in a way that was constructive. I am so proud of our Council, for making such a strong statement, and for issuing call to action, which we have to now turn into a reality.

We've written about endemic racism in our country several times in the last year ([February/March](#), [January](#), [October](#), [August](#), (by Phil Kutzko), and [July](#)). On at least a couple of occasions we have mentioned the NY Times's *1619 Project*" as an attempt to help us better understand our own history and responsibilities, and these last months show just how far we still have to go. That's why we have to intensify our commitment to the work we do here in the Math Alliance. In the wake of an event like the killing of Mr. Floyd, it is hard to know what to say that hasn't been said before. It does seem there may be more people recognizing that we are not just battling racism, which is a manifestation of hate, but white supremacy, which is the systemic notion that "not white" is equivalent to "less than white." Larry Wilmore distilled this so well in his [Black on the Air](#) podcast. To paraphrase Mr. Wilmore, for a person to put their knee on another's neck for 8:46, ignoring the pleas for breath life, and even for their mama, that police must view George Floyd as less than himself (and this applies to the other police officers complicit in the murder). I want to be optimistic, and we do see some steps being taken in the right direction. I should mention one in our profession, that University of Texas, Austin, has just announced they will remove the name of [R.L. Moore](#) from their [math department building](#), something which many have called out for years. As I said, I want to be optimistic, and I am trying hard. Let's hope this momentum continues, and never stops.

## Happenings Throughout our Community



### Math Alliance Mentor Tatiana Toro wins Blackwell-Tapia Prize.

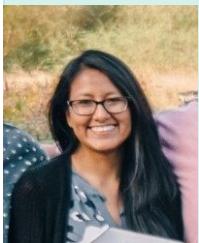
Professor Toro becomes the fifth Math Alliance Mentor to win this prestigious biennial award (Rodrigo Bañuelos (2004), Trachette Jackson (2010), Ricardo Cortez (2012), Jacqueline Hughes-Oliver (2014) are the others). **Congratulations from all of us!!**

*Photo from  
[Univ. of Washington](#)*



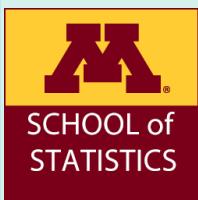
Math Alliance Mentor Abba Gumel [interviewed on NPR](#) and in the NY Times regarding effectiveness of masks in preventing COVID-19.

*Photo from  
[Arizona State Univ.](#)*



Math Alliance Scholar, Paola Lopez, who is earning a Ph.D. in Bioengineering, is featured on the [Kumar Lab website](#).

*Photo from  
[Kumar Lab website](#)*



U. Minnesota Statistics is a new DPG, and the Department, Alliance and Field of Dreams are [featured in the University's College of Liberal Arts publication](#)

*Photo from  
[Twitter](#)*



AMS Inclusion/Exclusion [Blog](#)

## Some Covid-19 Resources

- [AMS Resources & Updates related to COVID-19](#)
- [Free AMS Mathematical Modeling Books and Journals available during COVID-19 pandemic](#)

### From ASA Blogs

- [SAS COVID-19 Free Books](#)
- [How can I help during coronavirus crisis](#)
- [COVID-19 Kaggle Competition Announced](#)

## Now Accepting 2020-21 F-GAP Nominations!

The Facilitated Graduate Applications Process (F-GAP) is an Alliance program that provides undergraduate Juniors and Master's students with the advice and assistance needed to begin the application process as they apply to graduate programs.



F-GAP will help students choose departments that are most appropriate to their goals and aspirations. The Alliance Community will work with the student as they prepare their applications to graduate programs and will assist in tracking the progress of their applications through the admissions process. The Alliance Community will assist in maximizing the chances that Alliance Scholars will be admitted, with support, to a department or program where they will thrive. We will pair each eligible student with one of our Doctoral Alliance Mentors who will work with the students local mentor to create a mentoring team that will aid in the application process.

If you know of a student who will be applying to graduate programs for Fall 2021 please submit student nominations here: <https://mathalliance.org/2020-fgap-nomination-form/>. As part of this submission, you will be asked to check a box stating that you have read the document, [“Selecting students for the F-GAP program: FAQs.”](#)



# Things to note in the AMS Notices

## JUNE/JULY

A WORD FROM...Alexander Hoover and Alexander Wiedemann Board Members of Spectra, the Association for LGBT Mathematicians

Letter to the editor on Postbaccalaureate programs and diversity, authors include Math Alliance Mentors Bernard Lidicky and Michael Young

Early Career section features Jobs in Academia, including What to Expect at a Large Public Research University by Math Alliance Mentors David Jensen and Chris Manon

Report of the Executive Director, Math Alliance Mentor, Catherine Roberts

Mathematics People...

AWM Prizes awarded to Math Alliance Mentors Raegan Higgins, Omayra Ortega, and to **Math Alliance Scholar and Mentor** Denise Rangel Tracy

Math Alliance Mentors Jonathan Chaika, Artem Chernikov, Michael Harris, Michael Lacey, and Bianca Viray named Simons Fellows

**Math Alliance Scholars Mayleen Cortez, Trini Nguyen, Jorge Silva Guzman, awarded NSF Graduate Research Fellowships!!**

## AUGUST

Featured articles:

CAT(0) Geometry, Robots, and Society, by Math Alliance Mentor Federico Ardila-Mantilla

On the Kinematic Formula in the Lives of the Saints, by Math Alliance Mentor Danny Calegari

Early Career includes piece on A View of Mathematics from Behind the Veil, by Math Alliance Mentor Robin Wilson.  
In Mathematics People

Math Alliance Mentors Andre Neves and Tatiana Toro named Fellow of AAAS

# Items of interest in AMSTATNEWS

## MAY

[President's Corner --#LeadWithStatistics: A Data Ethics Call to Action](#)

[ASA Members Show Leadership During COVID-19 Crisis](#), includes features on Math Alliance Mentors Xihong Lin (Harvard T.H. Chan School of Public Health, Biostatistics) and Elizabeth Halloran (University of Biostatistics)

[JSM Is Now Virtual](#)

[Statistics and Data Science Education Section Invites Mentoring Program Applicants](#)

## JUNE

[National Center for Education Statistics Faces Program Cuts](#)

[A Conversation to Celebrate Pride Month](#)

[Statisticians Create COVID-19 Dashboard to Predict Infection](#)

[StatFest Program Focuses on Engagement, Opportunity](#). StatFest's organizational chair is [Adrian Coles](#), of Eli Lilly, the Math Alliance's Associate Director for Industrial Relations

[Statistics Calculator a Resource for Students](#)

[Highlights of the April 2020 Board of Directors Meeting](#)

[Dennis Lin Takes Reins as Purdue Statistics Department Head](#)

[Social Statistics Section Plans Privacy Discussions](#), with Alliance Mentor Aleksandra Slavkovic (Penn State University) as one panelist.

[NSF Shares Spring 2020 Student Training Resources](#)

## JULY

[JSM moves to virtual format](#)

[Katherine Ensor elected President of ASA, Alliance Mentors Jeffrey Dawson, Tyler McCormick, Stephen Campbell, Ali Shojaie, Sesa Slavković, and 2019 IMA Workshop plenary speaker, Rebecca Nugent elected to ASA leadership positions](#)

Math Alliance Mentor Ofer Harel featured in [Sections and Interest Groups: A Career Development Perspective](#)

Wendy Martinez, [President's Corner](#)

Feature on Math Alliance Partner: [Dennis Lin Takes Reins as Purdue Statistics Department Head](#)

[Statistical Consulting Section Responds to COVID-19](#)

[ASA Members Stop the Presses with New Book About Disease Outbreaks](#)

## SISG Scholarships Available

The Summer Institute in Statistical Genetics (SISG) has received NSF funding for scholarships for US graduate students. The goal of SISG is to strengthen the statistical and genetic proficiency and career preparation of scholars from all backgrounds, especially those from groups historically underrepresented in STEM such as racial and ethnic minority groups, low income, first generation college students, veterans, and differently abled and 2SLGBTQ groups. For 2021 the scholarships will provide registration, travel, housing and meal costs. With the need to be online only in 2020, scholarships will be for registration.

Scholarship applications and details of the 18 modules in SISG are at [www.biostat.washington.edu/suminst/sisg](http://www.biostat.washington.edu/suminst/sisg). Applicants can choose from basic statistics and genetics courses; population, quantitative and forensic genetics; GWAS and network analysis; Bayesian and compositional data analysis, and several others. Each module will have pre-recorded lecture and interactive Zoom sessions, along with downloadable data and software.

Please send enquiries to [sisg@uw.edu](mailto:sisg@uw.edu).

## MSRI Upcoming Programs

MSRI invites applications for Research Professors, Research Members and Postdoctoral Fellows in the following programs: **Universality and Integrability in Random Matrix Theory and Interacting Particle Systems** (August 16 - December 17, 2021), **The Analysis and Geometry of Random Spaces** (January 18 - May 27, 2022) and **Complex Dynamics: from special families to natural generalizations in one and several variables** (January 18 - May 27, 2022). Research Professorships are intended for senior researchers who will be making key contributions to a program, including the mentoring of postdoctoral fellows, and who will be in residence for three or more months. Research Memberships are intended for researchers who will be making contributions to a program and who will be in residence for one or more months. Postdoctoral Fellowships are intended for recent PhDs.

MSRI has been supported from its origins by the National Science Foundation, now joined by the National Security Agency, over 100 Academic Sponsor departments, by a range of private foundations, and by generous and farsighted individuals.

# Faculty opening at RIT/NTID – Visiting Assistant Professor

**Requisition Number:** 5182BR

**Organization:** Department of Science and Mathematics

**College/Division:** National Technical Institute for the Deaf

**Faculty Rank:** Visiting Assistant Professor

**Posting Tenure Status:** Non-Tenure-Track Visiting Professor

**Anticipated Start Date:** August 2020

View the complete job description online: <https://sjobs.brassring.com/TGnewUI/Search/home/HomeWithPreLoad?partnerid=25483&siteid=5291&PageType=JobDetails&jobid=1529813>

## DETAILED JOB DESCRIPTION:

The Department of Science and Mathematics at the National Technical Institute for the Deaf, one of the colleges of Rochester Institute of Technology, invites applications for a visiting assistant professor position in mathematics and physics. The successful candidate will:

Provide direct instruction and serve as a faculty tutor for deaf and hard-of-hearing students in a range of mathematics and physics courses.

Develop and undertake a successful research agenda that leads to presentation and peer-reviewed publication. Involvement of deaf and hard-of-hearing students in research activities will be strongly encouraged.

Undertake a communication development agenda that demonstrates ongoing growth in the use of American Sign Language and other forms of communication.

Provide service to the department and college as assigned.

## ABOUT THE UNIVERSITY:

Founded in 1829, Rochester Institute of Technology is a diverse and collaborative community of engaged, socially conscious, and intellectually curious minds. Through creativity and innovation, and an intentional blending of technology, the arts and design, we provide exceptional individuals with a wide range of academic opportunities, including a leading research program and an internationally recognized education for deaf and hard-of-hearing students. Beyond our main campus in Rochester, New York, RIT has international campuses in China, Croatia, Dubai, and Kosovo. And with more than 19,000 students and more than 125,000 graduates from all 50 states and over 100 nations, RIT is driving progress in industries and communities around the world. Find out more at [www.rit.edu](http://www.rit.edu).

## REQUIRED MINIMUM QUALIFICATIONS:

PhD in an engineering discipline

Prior teaching and/or tutoring experience in physics and/or mathematics

Demonstrated ability to perform research and to develop publications for peer review

Ability to communicate in American Sign Language

Demonstrated commitment to diversity and to the advancement of deaf and hard-of-hearing persons through scholarship, teaching, tutoring, and/or service

## HOW TO APPLY:

Please apply online at <http://careers.rit.edu/faculty> Keyword Search: 5182BR. In order to be considered for this position, please submit your online application, cover letter addressing the listed qualifications; curriculum vitae; and upload the following attachments:

Research Statement

Contribution to diversity statement

A statement of teaching philosophy

Review of applications will begin immediately.



## MATH ALLIANCE PARTNER INSTITUTION

### Penn State University– Dean of College of Science Announcement

The Pennsylvania State University ([Penn State](#)), the Commonwealth of Pennsylvania's land-grant institution and its largest university, invites applications and nominations for the position of Verne M. Willaman Dean of the Eberly College of Science. This is an extraordinary opportunity to lead a highly esteemed college at Penn State, a premier university committed to making positive impacts worldwide through stellar teaching, research, and service.

Penn State embraces its land-grant mission to serve the public good and create a better future for its students, the Commonwealth, and the world. The University, which enrolls approximately 96,000 students on [24 campuses in Pennsylvania](#) and online via its [World Campus](#), functions as one University, geographically distributed. With a \$6.8 billion annual operating budget, it has more than 17,000 full-time faculty and staff and offers more than 160 baccalaureate degree programs.

Research and innovation are at the core of Penn State's mission. The University's research expenditures totaled \$968 million in 2018-2019, a record high for the third consecutive year. Moreover, according to the National Science Foundation rankings of 2018 research expenditures, the breadth of Penn State's research surpasses that of any other university in the country, ranking in the top 10 in 18 research fields.

The [Eberly College of Science](#) strives to build a better future for its students and society by creating and sharing knowledge and discoveries through impactful research and delivering innovative undergraduate and graduate education and assessment. Through a strong outreach program, the College plays an important role in enhancing public understanding of science, and its nearly \$128 million in research expenditures make up 13% of the University's total.

The College provides instruction and research opportunities in life, mathematical, physical, and interdisciplinary sciences in its seven departments: Astronomy and Astrophysics, Biochemistry & Molecular Biology, Biology, Chemistry, Mathematics, Physics, and Statistics. All these academic departments have impressive National Research Council ratings, placing them among the best nationwide.

Further demonstrating its deep commitment to collaborative, interdisciplinary opportunities and the education of future scientists, the College is home to 16 centers, offices, and institutes that attract top students and foster robust fundamental and applied research.

The Eberly College of Science enrolled 3,496 undergraduate and 712 graduate students in Fall 2019. The College's 616 faculty in Fall 2019 comprised 239 full, associate, and assistant professors, and 377 instructors, lecturers, and teaching/research faculty. The faculty includes four National Medal of Science recipients, 16 members of the National Academy of Sciences, and 14 members of the American Academy of Arts and Sciences. The College also hosts 14 of the University's 25 Evan Pugh Professors, the highest honor bestowed on Penn State faculty. The College's 287 staff members in Fall 2019 included executives, academic administrators, and staff at all levels.

Inquiries about and nominations and applications for this position are invited. Interested applicants should forward an electronic version (Microsoft Word or Adobe PDF files preferred) of their curriculum vitae and a letter of interest to:

Jett Pihakis and Joi Hayes-Scott  
Russell Reynolds Associates  
[PennState.ECOS@russellreynolds.com](mailto:PennState.ECOS@russellreynolds.com)  
(202) 654-7800

**Though all materials received will be reviewed, for priority consideration please submit materials by March 16, 2020.**

*Penn State University is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.*