# MIH Math Alliance News 

## Upcoming

## MOCA Network

Workshop
Iowa State
University Aug. 6-10, 2018

StatFest 2018
Amherst College
September 22, 2018
Field of Dreams Conference
St. Louis, MO
Nov. 2-4, 2018

Thoughts from the Executive Director...


David Goldberg Executive Director of the National Math Alliance

One of the great things about my work with the Alliance is the expansive community it has given me, as an individual, beyond my other professional connections. I feel very lucky to have met so many mentors dedicated to making a difference, and so many talented and energetic students interested in being mathematical scientists. We also have a great team in leadership which supports our work and makes a lot of things possible.

I am pleased to announce we're adding two associate directors to our leadership team - Bill Vélez and Padmanabhan Seshaiyer, and there are more details elsewhere in this newsletter. Instead of a longer note this month from me, we'll have some thoughts from Leslie McClure, our Associate Director of Statistics, which will talk about our Statistics Initiative. I hope it will be a semi-regular feature. Next month, Bill Vélez will discuss the progress of the Alliance and our impact on the most recent AMS data on the profession. I am looking forward to having more of these columns from folks in our community as we move ahead.

# Math Alliance's Statistics Initiative 



Leslie McClure
Chair of the Department of Epidemiology and Biostatistics at Drexel University, and the Alliance Associate Director for Statistics

Welcome to the Alliance May Newsletter! If you're looking for David Goldberg, he's on hiatus this month. I'm Leslie McClure, the Alliance's Assistant Director for Statistics, and it's my pleasure to share some thoughts with you this month.

In April, David talked about Data, Data, Data!!! He shared the amazing success we've seen over time in the Alliance, as well as described the role of statistics in mathematical sciences. Over the next few months, the Alliance will be rolling out the webpage for the Alliance's Statistics Initiative. On this site, you will find links to resources about careers in statistics, research opportunities for undergraduates, and other summer programs. Over time, we will add new resources to the page that faculty and student alike can use to help understand the exciting field of statistics and to get a better picture of how statistics fits into the mathematical sciences. The proliferation of data in every realm: health care, social media, web-browsing, on-line shopping, finance... has created more opportunities for scientists trained in the ways of statistics than ever before. Not to mention the numerous academic jobs that allow the development of new statistical methods, as well as opportunities to collaborate with scientists across the spectrum, or the chance to play a role in the development of new drugs through careers at the Food \& Drug Administration (FDA), or to work with disease hunters at the Centers for Disease Control (CDC). The possibilities for statisticians are endless, which could be why CareerCase ranked Statistician as the \#1 best job in 2017 (https://www.careercast.com/jobs-rated/best-jobs-2017). And statistician isn't alone among the math sciences in the top 10: Data Science is \#5, and Mathematician is \#7. It's an exciting time to understand data!

For many of us, May signifies the end of the academic year. That could mean graduating and moving on for some, saying goodbye to students for others, or just getting ready for the next academic year to start! For those of you who are graduating, congratulations and don't forget to let Rebecca know where we can find you. For those who will be back, we hope to see you at the Field of Dreams Conference this November 2-4 in St. Louis, Missouri (and save the date for the 2019 Field of Dreams also in St. Louis: November 8-10).

On behalf of the entire Math Alliance team, I wish you a great summer and look forward to seeing you in St. Louis in November.

## New Associate Directors Named

The Alliance is pleased to announce the appointment of two new Associate Directors!


William (Bill) Yslas Vélez has agreed to take on the role of Associate Director for Undergraduate Programs. Professor Vélez is one of the Alliance's founding members, and has served on the Executive Council (previously the Board of Directors) for several years. Professor Vélez is well known for his work on increasing the number of undergraduate math majors, particularly at his home institution, University of Arizona, and received the Presidential Award for Excellence in Science Mathematics \& Engineering Mentoring (PAESMEM) in 1997 from President Clinton. The title of Associate Director for Undergraduate Programs formalizes the fact that Vélez has been involved in many of the crucial discussions and decisions of the Alliance for quite some time. We're glad to have Bill officially on the leadership team!


Padmanabhan (Padhu) Seshaiyer has agreed to be our Associate Director for Applied Mathematics. Professor Seshaiyer is on the faculty of George Mason University, where he is a full professor. Among a long list of accomplishments and service to the profession, Padhu has served as a rotating program officer at NSF, and is the Chair of SIAM's Diversity Committee. Since almost all the current Alliance Leadership's expertise lies in pure mathematics, Padhu gives us a much needed voice from the Applied Mathematics community, and we look forward to strengthening our ties with this group. Welcome aboard!

## 2018-19 F-GAP Program Now Accepting Nominations!

The Facilitated Graduate Applications Process (F-GAP) is an Alliance program that provides undergraduate seniors 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 senior or Master's student who will be graduating in the Spring of 2019 and will be applying to graduate programs for Fall 2019 please submit a form here: https://mathalliance.org/2018-fgap-nomination-form/ to nominate students.

"F-GAP has substantially helped me in finding the right programs to which I should apply."

"The attention and help that I receive of my F-GAP facilitator was outstanding. The tips given by him to improve my Personal Statement, CV and others application materials were phenomenal."


# 2018 Programs that Make a Difference Award awarded to CHAMP Program! 

The AMS has announced that the 2018 Mathematics Programs That Make a Difference Award winner is The Cougars and Houston Area Math Program (CHAMP).

You can read the full announcement here: http://www.ams.org/journals/notices/201805/rnoti-p552.pdf

# Graduate Student blog featured on the AMS website 

Recent Graduate Student blog featured on the AMS website written by a Math Alliance Scholar, Vanessa Rivera-Quinones, who is a PhD student in the Department of Mathematics, University of Illinois at Urbana-Champaign. Vanessa Rivera-Quinones is a fifth-year PhD student in mathematics who enjoys teaching, learning applications of math in different disciplines, and making math accessible to everyone.

Link to the full article: http://www.ams.org/journals/notices/201805/rnoti-
p547.pdf?utm_source=Informz\&utm_medium=email\&utm_campaign=Informz\%20Mailing

## Mathematicians of Color Alliance (MOCA)

The Mathematicians of Color Alliance(MOCA) Network will be hosting a one week workshop for mathematicians of color to collaborate with a secondary mathematics teacher in their local community. Mathematicians will share their expertise, experiences, and time with mathematics teachers in an effort to provide new perspectives, opportunities, and access to the teachers and their students of color.

The workshop will take place at Iowa State University (Ames, IA) on August 6-10, 2018. Participants will receive funding for travel and a stipend in the amount of $\$ 1000$ for participating in the workshop and periodic school-based collaborations. An application consists of a CV, personal statement, and completing a survey. The survey will be sent to applicants after the apply on MathPrograms. Postdoc, graduate students, and mathematicians in business, industry, or government are encouraged to apply also.

The Mathematicians of Color Alliance(MOCA) Network, is a network whose mission it is to create substantial and transformative relationships with students of color and their teachers in the school setting. The MOCA Network's goals include collaborating with teachers to develop and implement engaging mathematics with students of color in order to provide access to greater opportunities and to ensure these students are able to develop productive relationships with mathematics as a field that is welcoming and exhilarating. Apply Here

This workshop is funded by NSF Includes Grant \#1744463

## Visiting Assistant Professor in Mathematics at Manhattan College Position Announcement

The Department of Mathematics at Manhattan College seeks a committed teacher-scholar with a Ph.D. in the mathematical sciences for a full time position at the Visiting Assistant Professor rank, beginning with the Fall 2018 semester. The contract term is for one year, beginning August 2018, but is renewable. The Mathematics Department offers courses to all Schools in the College, and the course schedule is likely to include service courses. The class sizes are small, generally below thirty students, and the teaching load is twenty-one credits per year.

Current department members have expertise in algebra, data analytics, data mining, differential equations, dynamical systems, game theory, graph theory, hyperbolic geometry, linear and non-linear optimization, logic, machine learning, mathematics education, operations research, probabilistic and statistical methods, and topology.

Minimum qualifications: A Ph.D. in the mathematical sciences. All areas of mathematics will be considered. Candidates will be evaluated on their academic background, communication skills, potential for excellence in teaching, scholarly activity, potential for service to the college, and ability to bring new ideas and directions to the mathematics program. Teaching experience is strongly preferred.

Apply online. Applicants should submit, in electronic form, a single PDF file that includes a cover letter, curriculum vitae, a statement of teaching philosophy, and a research plan. Also arrange for three confidential letters of reference to be sent to math.search@manhattan.edu; at least one of these should address teaching ability. Indicate whether or not you have authorization to work in the United States at this time or will have it by the time the position begins. Review of applications will begin immediately and continue until the position is filled. No hard copy applications will be considered.

## Application Link:https://manhattan.clearcompany.com/car eers/jobs/e629a477-667a-de54-44b0-d2b33d76ebec/apply?source=738244-CS-25537

Manhattan College is an independent Catholic coeducational institution in the Lasallian tradition. We expect our faculty, administration, and staff to be knowledgeable about our mission and to make a positive contribution to the mission.

Applicants from historically under-represented segments of the population are encouraged to apply, as well as those attracted to a college with a Catholic identity. We are committed to a diverse campus community. AA/EO Employer M/F/D/V

## StatFest 2018: A One Day Conference for Undergraduate Students

Learn about statistics and data science careers in industry, government, and academia. Underrepresented students (African American, Hispanic, Native Americans) with analytical interests are particularly encouraged to attend and learn about exciting career and graduate study opportunities in statistics and data science. There are ample opportunities to network during breaks and the poster session.

Amherst College is one of the most diverse liberal arts colleges in the country. We are dedicated to the centrality of inclusiveness.

Date: Saturday, September 22, 2018
Time: 9:30-5:00 p.m.
Place: Amher st College, Amherst, MA

Contact: Nicholas Horton nhorton@amherst.edu Renee Moore renee.moore@emory.edu

Cost: Free (though preregistration is required by Wednesday, September 19th)

For more information and to register visit: https://nhor ton.people. amherst.edu/statfest

## Sponsored by the American Statistical Association's Committee on Minorities in Statistics



## ASAl$^{\prime}{ }^{\prime} \quad \because$ MassMutual

Keynote Speakers


Fernando Perez created iPython and co-created Project Jupyter.
He is a Professor of Statistics at the University of
California/Berkeley and Senior Fellow of the Berkeley Institute for Data Science.


Scarlett Bellamy is Past-President of ENAR (Eastern North American Region) of the International Biometrics
Society. She is a Professor of Biostatistics and director of the graduate program at the Department of Epidemiology and Biostatistics, Drexel University Dornsife School of Public Health.

Other sponsors: RStudio, Google, Boston Chapter of the ASA, Five College Statistics Program, and UMass/Amherst Biostatistics.

