Thoughts from the Director...

As we approach the fall, I want to remind all of our mentors of that we are still taking nominations for this year’s F-GAP program. All of our mentors, even those from doctoral programs, can nominate (and should be nominating) students for this program. So, if there are students in your department who should be thinking about graduate school, be sure to nominate them! All students, even those who have direct access to doctoral faculty at their home university, can benefit from the F-GAP program!

This year’s (virtual) Field of Dreams Conference will take place November 5 and 6. Our Agenda Committee has been working hard to confirm speakers and panelists, and I hope that I can announce the complete program in next month’s newsletter.

I couldn’t let this month’s note go past without mentioning the passing of Bob Moses on Sunday, July 25. Dr. Moses’s accomplishments and contributions to the Civil Rights Movement are legendary and this short note can’t do them justice, but I encourage everyone to read his obituary. Moses was not only showed incredible bravery, character and front-line leadership at several of the most critical points of Civil Rights Movement, he also was a tireless advocate for the notion that mathematical literacy was a civil right, and he founded the Algebra Project to help address this very important need. Bob Moses visited with the leadership of the Math Alliance just prior to the opening session of the 2016 Field of Dreams Conference. This was my first year as Executive Director, and it truly was an honor to spend some time discussing his work and our shared goals with him. That meeting and his passing serves as a good reminder that there is a lot at stake in the work we do together, and there is much to be accomplished. But it is also a reminder that when a Math Alliance Scholar completes their doctorate, it not only impacts their life, but the lives of their family, and all those they will contact throughout their professional career. We hope, in this way, to play at least a small part in helping to realize Bob Moses’s vision of a country where access to mathematics, and to all the paths that math literacy opens up, is equitable and just. Bob Moses continues to be an inspirational figure to many of us, and I hope we continue to honor his work and his memory.
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 Senior or Master’s student who will be graduating in the Spring or Summer of 2022 and will be applying to graduate programs for Fall 2022 please submit student nominations here: https://mathalliance.org/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.”
Communicating Mathematics in a Research Proposal by Emily Clader*

Remembering Steve Zucker by David A. Cox, Micahel Harris* and Lizhen Ji

Washington Update by Karen Saxe*

Report of the Executive Director by Catherine Roberts*

Emille Davie Lawrence* and Manuel Rivera* Awarded Karen EDGE Fellowships from EDGE

*Math Alliance Mentor †Math Alliance Scholar

ASA Election Results

- Nicholas Horton* elected as Vice President of the ASA
- Kun Chen* is the Program Chair-Elect 2022 for Statistical Computing (COMP/CPGH)
- Nancy Zhang* is the Chair-Elect 2022 for Statistics in Genomics and Genetics (SGG)
- Kellie Archer* is the Chair-Elect 2022 for Statistical Learning and Data Science (SLDM)
- Arman Sabbaghi* is the Program Chair-Elect 2022 for Physical and Engineering Sciences (SPES/SPQP)
- Yichuan Zhao* is the Program Chair-Elect 2022 for Risk Analysis (RISK)
- Michael Pennell* is the Publications Officer 2022–2023 for Risk Analysis (RISK)

Lonni Philip Tabb* is the 2021 Annie T. Randall Innovator Award Winner.

*Math Alliance Mentor †Math Alliance Scholar

Math Alliance Sessions at MAA MathFest

MAA MathFest, August 4-7 features invited addresses by Math Alliance Mentors, and a session on diversity in the math sciences:

This year’s MAA MathFest will feature several events involving the Math Alliance community. Math Alliance Mentor, and Senior Advisor Rodrigo Bañuelos will give the featured Earle Raymond Hedrick Lecture series. Math Alliance Mentors Candice Price and Robert Vallin will deliver invited addresses. There will also be several sessions focusing on diversity, including a contributed paper session on Promoting Diversity, Equity, Inclusion, and Social Justice, which features talks on the Math Alliance Affiliated program BAMM! Building a Virtual Mentoring Community with Master’s Students (Math Alliance Mentors John Rock and Kim Seashore among the authors) and on The Math Alliance: 15 Years of Lessons from Building a New American Community in the Mathematical and Statistical Sciences (Math Alliance leadership members Terrence Blackman, David Goldberg, Phil Kutzko, Leslie McClure, and William Vélez co-authors). We hope to see many of you there!
Math Summer Program for Inclusive Excellence

A new program will be offered this summer by the University of Connecticut called the Math Summer Program for Inclusive Excellence. The aim of the program is to prepare students to attend graduate school in mathematics in Fall 2021. More specifically we hope to attract students whose identity or identities might be marginalized in mathematics, or who for any reason might not feel fully prepared for graduate school.

Our goal is to deliver some mathematical content during the program, but also to offer advice and information about graduate school that will be helpful to students in their first few years of graduate school, and to create a joyful, affirming community that will support our participants throughout their graduate studies.

More details about the program, and how to apply: https://spie.math.uconn.edu/. Please contact them at spiemath@gmail.com if you have questions.

NSF Postdoctoral Fellowships Awarded to Math Alliance PhD Graduates!

Three Math Alliance Scholars have been awarded 2021 Mathematical Sciences Postdoctoral Research Fellowships by the National Science Foundation:

- **Orsola Capovilla-Searle**— received her PhD from Duke and will begin a postdoc position at U.C. Davis in the fall.

- **Anthony Sanchez**— received his PhD from the University of Washington and will begin a postdoc position in the fall at U.C. San Diego in the fall.

- **Andres Vindas Melendez**— received his PhD from the University of Kentucky and will begin a postdoc position in the fall at U.C. Berkeley.

Congratulations to all of the NSF Postdoc Fellowship Winners!

AMS Mini-conference: Forming institutional collaborations to broaden student access

The American Mathematical Society (AMS) is delighted to invite you and your colleagues to participate in the annual Committee on Education Virtual Mini-Conference to be held virtually **Friday, October 1, 2021 from 12 pm – 5:30 pm EDT.**

Mathematics benefits when we cast the widest possible net for talent. Mathematicians have a vital role to play in ensuring that our institutions encourage and engage students in the mathematical sciences, with particular focus on students from communities traditionally overlooked by, underserved by, and underrepresented in mathematics. In particular, we can do more to foster talent from a wider range of higher education institutions.

This mini-conference will explore examples of and opportunities for meaningful educational and research connections between PhD granting universities, master's granting universities, liberal arts colleges, and community colleges. Representatives from funding agencies as well as established and burgeoning inter-institutional collaborations will participate in the discussions. [Click here for more information and to register.](#)
MSRI invites applications for Research Professors, Research Members and Postdoctoral Fellows in the following programs: **Floer Homotopy Theory** (August 22 - December 21, 2022), **Analytic and Geometric Aspects of Gauge Theory** (August 22 - December 21, 2022), **Algebraic Cycles, L-Values, and Euler Systems** (January 17 - May 26, 2023) and **Diophantine Geometry** (January 17 - May 26, 2023). 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 uses MathJobs to process applications. Interested candidates must apply online beginning August 1, 2021. To receive full consideration, applications must be complete, including all letters of support, by the following deadlines: Research Professorships, October 1, 2021; Research Memberships, December 1, 2021; Postdoctoral Fellowships, December 1, 2021. Application information can be found at [www.msri.org/application](http://www.msri.org/application).

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.

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MSRI invites applications for the 2022 **Summer Research in Mathematics (SRiM)** program. This program provides space, funding, and the opportunity for in-person collaboration to small groups of mathematicians, especially women and gender-expansive individuals, whose ongoing research may have been disproportionately affected by various obstacles including family obligations, professional isolation, or access to funding. Through this effort, MSRI aims to mitigate the obstacles faced by these groups, improve the odds of research project completion, and deepen their research experience.

The ultimate goal of this program is to enhance the mathematical sciences as a whole by positively affecting the research and careers of all of its participants and assisting their efforts to maintain involvement in the research community.

- Groups of two to six mathematicians with partial results on an established project may submit an application to the program.
- Each member of the group must have a Ph.D. in mathematics or advanced graduate standing. At least one member must be U.S.-based.
- **The visits must take place between June 6, 2022 and July 15, 2022.** Each group may apply to be in residence at MSRI for a minimum of two weeks, though longer visits are possible. All members of the group must be in residence for the duration of the visit.
- Applications will be made through MathPrograms beginning **August 1, 2021** and require a Project Description and bio-sketch of each group member, as well as additional information (see program website for details). Applicants may only apply as a member of one research group.
- Lodging at UC Berkeley, meals and reimbursement of travel expenses will be provided.
- For participants with children, MSRI will provide funding that makes it possible for the member to fully take part in the program. This may be in the form of lodging and reimbursement of travel expenses for children who accompany the member to Berkeley, plus lodging and travel expenses for a caregiver. It may also take the form of reimbursement of additional expenses incurred if the children stay home, thus allowing the member to attend the program.

The deadline for application will be **November 1, 2021**. Decisions will be announced by **December 15, 2021**. For more information, visit: [https://www.msri.org/web/msri/scientific/summer-research-in-mathematics](https://www.msri.org/web/msri/scientific/summer-research-in-mathematics).

Support for this program is provided by Priscilla Chou, Microsoft Research, and Kristin Lauter. MSRI has been supported from its origins by the National Science Foundation, now joined by over 100 Academic Sponsor departments, by a range of private foundations, and by generous and farsighted individuals.
Call for Program Proposals

The Mathematical Sciences Research Institute invites the submission of proposals for full- or half-year programs to be held at MSRI. Planning of such programs is generally done about three years ahead. Except in extraordinary cases, a subject is the focus of a program not more than once in ten years. A scientific program at MSRI generally consists of up to nine months of concentrated activity in a specific area of current research interest in the mathematical sciences. MSRI usually runs two programs simultaneously, each with about forty mathematicians in residence at any given time. The most common program length is four months (typically in the form of a Fall or Spring semester program). Each program begins with a Connections for Women workshop and an Introductory workshop, the purpose of which is to introduce the subject to the broader mathematical community. The programs receive administrative and financial support from the Institute, allowing organizers to focus on the scientific aspects of the activities.

The Scientific Advisory Committee (SAC) of the Institute meets in January, May and November each year to consider proposals for programs. The deadlines to submit proposals of any kind for review by the SAC are March 1, October 1 and December 1.

Please see our website for specific proposal requirements and further information: [www.msri.org/proposal](http://www.msri.org/proposal).

MSRI also invites the submission of proposals for Hot Topics workshops and Summer Graduate Schools.

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.

Math Alliance Mentors Win NSF CAREER Awards!

Math Alliance Mentors win [NSF DMS CAREER awards](http://www.msri.org/proposal):

- Owen Gwilliam
- Lucas Janson
- Nancy Rodriguez
- Hiro Tanaka

Congratulations to all the this year’s winners!
Virtual

STATFEST 2021
A Conference for Undergraduate Students

Organized by the American Statistical Association’s Committee on Minorities in Statistics

Saturday and Sunday
September 18 and 19, 11am ET

Join us!
StatFest encourages historically underrepresented undergraduate students to consider careers and graduate studies in the statistical sciences.

Enjoy two packed half days of discussion panels and talks from established professionals, academic leaders, and current graduate students.

Cost
FREE, registration required

Questions?
Contact co-chairs:
Dr. Therri Usher therri.usher@fda.hhs.gov
Dr. Brittney Bailey bebailey@amherst.edu

More Information
https://community.amstat.org/cmis/events/statfest/statfest-2021