

## Math Alliance News January 2021 Volume 9, Issue 1

A publication of the Corporation for the National Math Sciences Alliance



**ENAR Fostering Diversity in Biostat** Workshop Virtual Mar. 13-14, 2021

**2021 WAM Program** Virtual May 22-28, 2021

## Thoughts from the Director...



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

The new year is here, and we want to be full of optimism. We knew it wouldn't be easy, or even any easier, just because the calendar turned over. Most predicted it would be harder at first, so we might have thought ourselves ready. However, so much has happened and is happening, that every time I have started to compose this column, something significant occurs, and I think I need to write about something else. The mob storming our nation's seat of government laid bare, once again, the underlying engrained white supremacy in our society. The reaction (and laxity thereof) of law enforcement reinforced a fact many of us grew up with and have long been trying to convey to those we thought might help if they understood. The false equivalences put forward by the apologists for the insurrectionists between that action, and those of social justice movements,

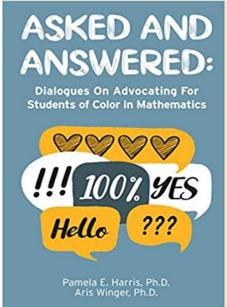
like Black Lives Matter, are so far from rational, and fly in the face of the facts these folks are trying to use, that we often don't know where to start. While many of us can say we might have imagined such a thing, we rarely thought it would become so real so quickly.

While I think we are mostly thankful that the transition of power has finally occurred, we are kidding ourselves if we think the problem is behind us. We also still have to know that belief in science is still at risk, and makes our work in the Math Alliance all the more critical. It has been refreshing to hear science return to prominence in decision making at the federal level, and here we have to be cautiously optimistic. We also are glad to hear the President call for unity, though there are some that seem to think unity means everybody do whatever they want, as opposed what it really means - working together for common purpose, finding common ground, and making reasonable compromises. We have to find new ways to work together, sometimes with people whose ways are unfamiliar to us. In a much different and welcome way, the Math Alliance has been able to forge new relationships, even in the midst of this pandemic. I want to mention two developing partnerships with non-academic interests, and opportunities this is presenting our students. Since last summer we have been having conversations with Bristol Meyers Squibb (BMS), a pharmaceutical company, about ways we can work together. BMS and the Math Alliance co-sponsored a wonderful event, "Day in the Life of an Industry Statistician" in October and we are discussing more such events on an ongoing basis. We hope to be making announcements about this soon. Also, through our partnership with the American Statistical Association, we have started to establish a relationship with Memorial Sloan Kettering Cancer Center (MSKCC), which began with their participation in last year's REU/Internship Fair. There are upcoming internship deadlines at both <u>BMS</u> and <u>MSKCC</u> (here is one more <u>link to a separate</u> program at MSKCC), and both have expressed interest in seeing applications from Math Alliance Scholars. So those who are looking for internships, please consider applying, and Mentors, please encourage your students. There are many more opportunities for the coming summer posted on our website. We are meeting more and more mathematical and statistical science professionals in non-academic settings, and we now want to create a system in which our Math Alliance Scholars have access to these folks as Math Alliance Mentors. The development of a cohort of non-academic Math Alliance Mentors, not to replace or academic mentors, but to work with them, is very exciting. We always describe the structure of our F-GAP program as a mentoring team, and we see this as a great opportunity to add expertise to a Math Alliance Scholar's mentoring team. By the way, F-GAP will be starting up soon, so please remember to nominate your students for F-GAP!

As I said, so many things have happened in such a short time span it has been hard to focus in. I haven't mentioned several things I thought I would, but luckily, I get to write another column next month! As always, thanks to all our mentors for all they do to make the Math Alliance a vibrant community which has impact, and thanks to the Math Alliance Scholars for their hard work and perseverance. We are so proud of them and thankful we could be any part of their success.

## Book Announcement: <u>Asked and Answered: Dialogues on Advocating For Students of</u> <u>Color in Mathematics</u>, authored by Dr. Pamela E. Harris and Dr. Aris Winger

By Zakiya Jones, Dr. Vanessa Rivera Quiñones, and Dr. Dwight Anderson Williams II



From the hosts of the podcast Mathematically Uncensored, Dr. Pamela E. Harris and Dr. Aris Winger, we present *Asked and Answered: Dialogues on Advocating For Students of Color in Mathematics*. This book is inspired by the authors' work on creating and leading professional development programs that bring together mathematics/math education faculty and K-12 STEM educators throughout the United States.

Through their five dialogues, Drs. Harris and Winger provide you a window into the process of going from bystander to advocate for students of color in mathematics. Readers are challenged to reflect on their advocacy journey through action that centers students of color in mathematics and their experiences.

If you care about marginalized students in math and want to do something to improve the math community, after reading *A sked and A nswered* there is no excuse not to. This book is a starting place for you to make an impact, for you to reflect on your history, and for you to assess your priorities, biases, and misconceptions. It is the check-in that anyone who is doing the work of advocating for students of color in math needs in order to reflect on

and reevaluate their approach to make sure it is centering students' experience and wellbeing. It answers important questions many people ask themselves when they decide they want to fight to create more supportive environments for marginalized students in math.

This book provides a clear and actionable path for educators at all stages of their careers to support students of color sustainably. It asks you to be uncomfortable, to take inventory of the tools at your disposal, to acknowledge where you have failed and succeeded, and where there is room to grow. This is a life-long and life-changing journey. By committing yourself to be an agent of change, you will join the Advocating For Students of Color in Mathematics community in embarking on its mission to uproot the culture of mathematics.

Now *A sked and A nswered* does not promise to be a quick-fix theorem. Rather, a consistent tone rings throughout that you must relentlessly dismantle conditions valuing mathematics over people. These pages confront the extraordinary power of your choices or inaction in transforming the lives of your students. And it is only through acknowledgment and intentional disruption of comfort that you'll understand,

"Your voice and actions have a deep impact and we believe that working together to advocate for students of color will create a culture shift which will allow students of color to thrive fully and authentically as themselves within the mathematical sciences." -- Preface, Asked and Answered: Dialogues on Advocating For Students of Color in Mathematics.



### Things to note in the AMS Notices

### January

Building Equity-minded Online Programs, Justin Lanier and Marissa Kawehi Loving\*†

Javier Rojo\* receives SACNAS Award

Myka Terry† appears in photo promoting JMM Grad Fair

### **February**

A word from Robin Wilson\*

An Opportunity for Inclusion: A Course in the History of Mathematics that Includes Mathematical Contributions of Non-European Culture, Candice Price\*†

Intersections of Mathematics and Society, Ranthony Edmonds\*† and John Johnson\*

Designing a Course Connecting Mathematics with Latin American Cultures, Colleen Duffy

I am a Black Mathematician, John Urschel

Othering and Such Climatic Joy Killers, Arlie Petters

<u>James A. Donaldson—Black Mathematician, Advocate, Gentleman (1941–2019)</u>, Fern Hunt, Robin Wilson\*, and Daniel Williams

From Segregation to Department Head, Nat Whitaker

Considerations for Increasing Participation of Minoritized Ethnic and Racial Groups in Mathematics, James A Mendoza Álvarez and Minerva Cordero\*

MSRI's ADJOINT: African Diaspora Joint Mathematics Workshop, Helene Barcelo\* and Edray Goins

<u>Updated "MAD Pages" Website Unveiled October 9, 2020, Edray Goins</u>

Math Alliance DPG U. Texas Arlington AMS Student Chapter featured.

Overtoun Jenda\*: A STEM Mentor Extraordinaire, Ash Abebe, Suzanne Lenhart, and Brittany McCullough

Masamu Program, a US-Africa Partnership, Overtoun Jenda\* and Edward Lungu

Six Surfaces (Almost) Surely, Danny Calegari\*

Alliance Mentors Duane Cooper and Kiran Kedlaya <u>elected</u> AMS Council Members at Large, Math Alliance Mentor Barbara Lee Keyfitz <u>elected</u> to Editorial Boards Committee

An Interview with [new AMS President] Ruth Charney, Evelyn Lamb

Math Alliance Mentors Dawn Lott, Gretchen Matthews, Ami Radunskaya, Catherine Roberts, and Talitha Washington named AWM Fellows.

Abba Gumel\* to give Einstein Lecture

\* designates status as a Math Alliance Mentor/† designates status as a Math Alliance scholar

### Items of Interest in the AMSTAT NEWS

### **December**

ASA President Wendy Martinez: "What a Year it has Been"

Special issue of Chance magazine co-edited by Math Alliance Mentor Seša Slavkovic

### January

ASA President Rob Santos: "2021: A Year of Hope and Helping"

### 2020 AAAS Fellows Named

Math Alliance Mentors Malgorzata Peszynska and Jack Xin have been <u>named as 2020 AAAS Fellows!</u> Congratulations to Professors Peszynska and Xin!

For more information on the AAAS organization see their website.

### 2021 WAM (Women and Mathematics) Program

The 2021 WAM (Women and Mathematics) program is accepting applications for their one week math and mentoring program May 22-28, 2021. It is open to undergraduates, grads, postdocs and new faculty.

The plan is to have an e-program this year due to the pandemic.

Information about this year's program can be found here: <a href="https://www.ias.edu/math/wam/2021">https://www.ias.edu/math/wam/2021</a>

### **Application Info**

**Application Deadline: February 17, 2021** 

## **Summer Internships with Gilead Sciences**



There are undergraduate student summer research internships in the Foster City, CA campus of Gilead Sciences. Gilead Sciences, Inc. is a research-based biopharmaceutical company that discovers, develops and commercialises innovative medicines in areas of unmet medical need. With each new discovery and investigational drug candidate, we seek to improve the care of patients living with life-threatening diseases around the world. Gilead's therapeutic areas of focus include HIV/AIDS, liver diseases, cancer and inflammation, and serious respiratory and cardiovascular conditions.

See the links below for more information:

Medicinal Chemistry Internship

Virology Internship

Biology Internship

Data Science Internship

### **REU Opportunities**

We wanted to tell you about opportunities for doing undergraduate mathematical research. In summer REUs (Research Experiences for Undergraduates), you spend 6-10 weeks doing research, get paid, and sometimes even get to have your name on a paper. Due to the pandemic, the programs may run virtually (as they did last summer). If you add your name to this list and we will send you updates. You can find more information about some of these programs.

If you would like to talk about these opportunities, discuss your personal statement for your application, or any questions, feel free to email us at Adam.Sheffer@baruch.cuny.edu or sjm1@williams.edu.

### **Paid Summer Research Programs!**

### PathwaysToScience.org

Most programs offer both a stipend and housing and travel support. Programs range across all STEM disciplines and all areas of the country! Deadlines are coming right up for most programs!

550+ programs for undergraduates

50+ programs for graduate students

Use our advanced search page to filter programs by multiple criteria

Contact us with your level of study and disciplinary interests for help finding a program: <a href="mailto:ldetrick@ibparticipation.org">ldetrick@ibparticipation.org</a>



A Research Experience for Undergraduates in Algebraic Geometry and Number Theory June 13 - August 7, 2021

This virtual program will be administered by Pomona College.

Participants will receive a stipend of \$4,000.

Applications due February 15, 2021







http://research.pomona.edu/prime Contact edray.goins@pomona.edu for more information.





# Transforming Analytical Learning in the Era of Big Data Biostatistics SIBS at The University of Michigan

204 Students trained

70+
Alum in graduate school

Students in our graduate program

20-25% Under-represented

minority students

June 7 - July 30, 2021

This part-time 8-week virtual summer institute will introduce undergraduate students to emerging challenges at the intersection of **Big Data**, **Statistics**, and **Human Health**.

Application opens December 1, 2020

This summer's virtual program will include contributions from a diverse group of University of Michigan faculty in the biomedicine and public health fields and their perspective of big data. Working in teams, students will participate in mentored big data research projects.



www.BigDataSummerInstitute.com

NHLBI Summer Institute in Biostatistics Program - Grant R25HL147207

#### PRIDECVD-CGE

Programs to Increase Diversity Among Individuals Engaged in Health-Related Research

## SUMMER TRAINING FOR UNDERREPRESENTED JUNIOR FACULTY

Cardiovascular Disease Comorbidities, Genetics and Epidemiology (CVD-CGE) (July 12-28, 2021)

Washington University in St. Louis, St. Louis, Missouri MPI's: Victor Davila-Roman, MD and DC Rao, PhD Program Administrator: Linda Schreier (schreierl@wustl.edu)

The PRIDE Summer Institute Program in Cardiovascular Disease Comorbidities, Genetics and Epidemiology to Increase Diversity Among Individuals Engaged in Health-Related Research is now accepting applications. Space is limited for the 2021 mentored summer training programs so apply early!

<u>Who</u>: Eligible applicants are junior-level faculty or scientists with a background that is under-represented in the biomedical or health sciences, and are United States Citizens or Permanent Residents. Research interests should be compatible with those of the National Heart, Lung, and Blood Institute (NHLBI) in the prevention and treatment of heart, lung, blood, and sleep (HLBS) disorders.

<u>What</u>: Our *All-Expense paid* Summer Institute program with effective mentored training opportunities to enhance the research skills and to promote the scientific and career development of trainees with a research interest in Cardiovascular disease Comorbidities, Genetics and Epidemiology.

Trainees will learn effective strategies for preparing, submitting and obtaining external grant funding for research, including extensive tips on best practices.

<u>**Details:**</u> The Summer Institute is designed to prepare the participants to work at the interface of cardiovascular disease comorbidities, genetics, and epidemiology.

The program includes:

- Two 2-week summer sessions in 2021 and 2022, beginning with July 12, 2021
- Didactic lectures related to cardiovascular disease comorbidities, genetics, and Epidemiology
- 2-3 day mid-year meeting for all participants along with their mentors
- 2-3 day Annual meeting with all PRIDE sites and NHLBI for training and networking
- Workshops in grants-writing
- Opportunity to develop research skills necessary for genetic dissection of cardiovascular disease and risk factors
- Opportunity to develop a network of collaborators and resources to conduct research at the interface of genetics, epidemiology, and cardiovascular disease and risk factors

#### **Core Curriculum:**

- Survey Lectures such as: Primer in Bioinformatics; Primer in Epidemiology; Grant Writing & Grantsmanship; Biomedical Journal Publishing; Data Mining; Hypertension, Hypertensive Heart Disease and Genetics; Sleep Epidemiology & Genetics; Race/Ethnicity, and Health Disparities; Role of Genomics in Complex Disease; Overview of Dissemination and Implementation Science, Sample Size and Power; Biomarker Studies and Methods, and more
- <u>Small Research Projects (SRPs)</u> provide an opportunity to compete for pilot funds to generate preliminary data for developing NHLBI grant applications. Project duration 9-12 months beginning Fall after Summer 1.
- Group brainstorming sessions during most lunch hours with mentors and mentees for discussing and developing ideas for SRPs and new external grant applications and multiple mentor-mentee meetings throughout

PRIDE CVD-CGE Website PRIDE Flyer PRIDE Brochure

**Application Deadline**: Rolling admissions until all slots are filled. Apply Now!



## Launch the NExT stage of your career

MAA Project NExT (New Experiences in Teaching) is a year-long professional development program for new(ish) or recent PhDs in the mathematical sciences. The program is designed to connect new faculty with expert teachers and leaders in the mathematics community and address the three main aspects of an academic career: teaching, research, and service.

#### Recent program sessions have included:

- getting your research and grant-writing off to a good start.
- innovative teaching and assessment methods and why they work,
- finding your niche in the profession,

- attracting and retaining underrepresented students,
- balancing teaching, research, and service demands,
- starting an undergraduate research program, and
- preparing for tenure.

MAA Project NExT Fellows join an active community of faculty who have become award-winning teachers, innovators on their campuses, active members of the MAA, and leaders in the profession.

MAA Project NExT welcomes applications from new(ish) and recent PhDs in postdoctoral, tenure-track, and visiting positions. We particularly encourage applicants from underrepresented groups, including women and minorities. Applications for the 2021 cohort of MAA Project NExT Fellows are due on April 15, 2021 and can be found at projectnext.maa.org.

Project NExTers (Silver '19) at MAA MathFest in Cincinnati.



Application deadline: April 15, 2021 projectnext.maa.org • projectnext@maa.org



Vir<u>t</u>ual

**Diversifying Academia** 

Future Faculty Workshop @ University of Michigan

May 3 - May 7, 2021



### **Develop Your Career**

NextProf Science 2021 will help you—a talented scholar with a demonstrated commitment to diversity—explore how to pursue a rewarding career in a research university.

If you are a postdoctoral fellow or an advanced graduate student ready for the next step in your career, apply!



### Listen. Learn. Network.

At NextProf Science, learn how to:

- · form a teaching & mentoring philosophy
- · craft a diversity statement
- · build a successful research program
- · prepare for the faculty search process

Join colleagues and academic leaders from across the country. Share conversations with diverse faculty scientists and mathematicians. Dedicated time for your questions with University of Michigan faculty in your field.



### Apply!

Deadline: January 25, 2021

- People underrepresented in STEM especially encouraged to apply.
- Applicants must be U.S. citizens, permanent residents or undocumented students with Deferred Action for Childhood Arrival (DACA).
- · No cost to selected participants.

More info at: sites.lsa.umich.edu/nextprof-science/

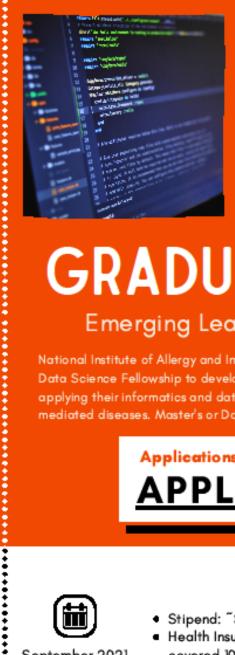




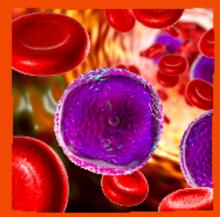
PAST PARTICIPANTS SAY

"I was blown away by this workshop. Lots of useful information I never would have gotten as a postdoc..."

"I think my favorite part was just being in a room with this diverse group of talented scientists ... a rare experience for me!"







## GRADUATE STUDENTS:

## Emerging Leaders in Data Science Fellowship

National Institute of Allergy and Infectious Diseases (NIAID) has established the Emerging Leaders in Data Science Fellowship to develop a cadre of talented data scientists who have a strong interest in applying their informatics and data science expertise to advance research in infectious and immunemediated diseases. Master's or Doctoral degree in related field must be received before start.

Applications close on 2/12/2021

## APPLY NOW!





September 2021



- Stipend: "\$80,990 \$91,958 annually
- Health Insurance: ORAU Premiums covered 100%
- Travel & Training Allowance: ~\$6,000 annually



Bethesda, MD



One year with potential to extend

## LEARN MORE AND APPLY AT:

https://www.zintellect.com/Opportunity/Details/NIH-NIAID-DataScienceFellowship-2021







## **ASPIRE Medical Research Experience**

Spend your next summer preparing for a professional, graduate-level program in the allied health field. The Ohio State University's ASPIRE medical research experience offers laboratory research and professional development, along with a generous stipend, to prepare students to be competitive in an MD, MD/PhD, or other health field.

### Why ASPIRE?

Communities across the U.S. continue to be impacted by disparities in healthcare access and health outcomes related to social determinants, implicit bias and inadequate access to translational research and culturally competent health care. Research experience and training for students from communities affected by healthcare disparities are keys to improving workforce diversity and unlocking collaborative solutions to these complex problems.

### Program Overview

Students will begin the program with meetings once or twice a week in a research lab during the spring semester, followed by eight to 10 weeks of experience in a research lab during the summer, and monthly meetings throughout the fall and spring semesters. Students enrolled in the program will be assigned to a principal investigator, working on a National Institutes of Health-funded grant. The principal investigator (PI) and the student may choose to extend the experience to two summers. (Stipend amounts for the PI, instructors and undergraduate students will be determined accordingly.)

### Learning Experiences

- Completion of a geographic opportunity map of the neighborhood and city where the undergraduate student lived to help identify social determinants of health
- Attendance at quarterly Group on Health Equity conferences
- Attendance at implicit bias awareness and mitigation classroom instruction
- Membership in a minority student organization, e.g., Society for the Advancement of Chicanos/ Hispanics and Native Americans in Science (SACNAS), Student National Medical Association Minority Association of Pre-medical Students (SNMA-MAPS)
- Mentoring by a medical student or biomedical science graduate student



### Who Should Apply?

The Ohio State University ASPIRE program encourages students from the following groups to apply:

- Students from groups underrepresented in medicine and biomedical sciences: African American, Hispanic or Latino, Native American or Alaska Native, Native Hawaiian or other Pacific Islander
- Students with disabilities, defined as those with a physical or mental impairment that substantially limits one or more major life activity
- Students from economically and/or educationally disadvantaged backgrounds
- Others whose backgrounds and experiences would bring diversity to the field

#### Additional Inclusion Criteria:

- Undergraduate students in their sophomore or junior year at Ohio State
- A letter of recommendation from at least one science professor
- Undergraduate transcripts
- A minimum GPA of 3.0

#### APPLICATIONS WILL BE ACCEPTED UNTIL JANUARY 29, 2021

For more information, call 614-685-9764 or email aaron.thomas@osumc.edu.go.osu.edu/medicine\_aspire

#### The Ohio State University College of Medicine

ASPIRE Medical Research Experience 1072 Graves Hall 333 W. 10th Ave., Columbus, OH 43210 614-685-9764

medicine.osu.edu



## Join us for the 2021 Fostering Diversity in Biostatistics Virtual Workshop

The Eastern North American Region (ENAR) of the International Biometric Society will be hosting the 2021 Postering Diversity in Biostatistics Virtual Workshop. The workshop will focus on connecting underrepresented minority students interested in biostatistics with professional (bio)statisticians in academia, government and industry.

Dates: March 13 and March 14

Saturday: 3/13/21

Times: 11:00am-2pm EST

Sunday: 3/14/21

Times: 11:00am-2:45pm EST



Keynote Speaker: Dr. Adrian Coles Senior Research Scientist Eli Lilly and Company

The workshop will feature:

- Hands-on computing activities for high school and undergraduate students.
- Roundtable discussions for professionals focusing on supporting, recruiting, and retaining students.
- Panel discussions between students and professionals focusing on career opportunities and mentoring.
- Panel discussions between undergraduate students and graduate students focusing on preparing for a graduate degree in biostatistics.
- An interactive virtual networking expo among undergraduates and graduate students and representatives from schools offering MS and PhD degrees in Biostatistics.
- An interactive virtual networking expo among undergraduates and graduate students and representatives regarding summer programs and job opportunities.

Register here: https://www.enar.org/meetings/FosteringDiversity/



2019 Workshop Attendees

To learn more, please contact the workshop co-chairs:

Felicia Simpson, PhD

Assistant Professor

Department of Mathematics

Winston-Salem State University

Phone: (336) 750-2489

Email: griffinfr@wssu.edu

Loni Phillip Tabb, PhD

Associate Professor

Department of Epidemiology and Biostatistics

Drexel University Phone: (267) 359-6217

Email: lpp22@drexel.edu





## Summer 2021 DRUMS Directed Research for Undergraduates in Mathematics and Statistics

The Mathematics and Statistics Departments of North Carolina State University invite qualified applicants for a Research Experiences for Undergraduates (REU) program that pairs mathematics and statistics students for interdisciplinary summer research projects. Proposed projects span applications in applications including disease modeling (COVID-19), physiology, imaging, and extreme weather events; using tools from linear algebra, partial differential equations, probability, sensitivity analysis, parameter inference, optimization, and machine learning. In addition to the technical aspects of the program, students also receive a background in useful auxiliary skills like mathematical programming, writing reports in LaTeX, applying for graduate school, and preparing scientific presentations. Details of this program and a list of projects can be found at <a href="https://math.sciences.ncsu.edu/undergraduate/drums/">https://math.sciences.ncsu.edu/undergraduate/drums/</a>.

The DRUMS program will use a hybrid format in which some students will work at NCSU and some will participate remotely for 10 weeks during summer and during the 2021 fall semester. Formal summer activities will be May 24th – August 1st, with arrival on 23rd. The work during the fall semester will be conducted online via zoom. The time commitment for this part of the program will be approximately 5 hours per week including a 1h weekly remote meeting.

We encourage students of all backgrounds to apply. This includes students who might have nontraditional mathematical and/or statistical training, or who are just beginning their mathematical studies.

Students will need to submit a curriculum vitae/resume, a transcript (unofficial is fine), and two reference letters. In addition, students will need to submit a one-page personal statement. One letter should list a local faculty member who is willing to serve as a contact to NCSU faculty (the contact person is needed to help coordinate activities during the fall semester). The personal statement should include the reason(s) why you wish to participate in the DRUMS REU at NCSU.

Due to restrictions from NSF and NSA, our program is restricted to US citizens and permanent residents, and participants must be undergraduate students at the time of participation.

Students will receive a stipend in the amount of \$6,000 for the 10 weeks, housing, a partial meal allowance, and travel support up to \$500 per student to cover transport to and from NCSU.

Application Deadline: Review of applications begins February 15 and will continue until all slots are filled. Please apply at https://www.mathprograms.org/db/programs/1054

### **Contact Information:**



Mette Olufsen (<u>msolufse@ncsu.edu</u>) Professor of Mathematics North Carolina State University



Brian Reich (<u>brian\_reich@ncsu.edu</u>) Distinguished Professor of Statistics North Carolina State University

## **University of Minnesota Master of Financial Mathematics (MFM) Two Fully Covered Fellowships for the Incoming Class of 2021**

We are pleased to let you know about the University of Minnesota's Master of Financial Mathematics (MFM) program. We are now accepting applications for the incoming class of fall, 2021. Oftentimes STEM students are not aware that they are a great fit for the field of quantitative finance. We invite you to consider our MFM and the many opportunities we provide, which include two special, fully funded fellowships, each with an approximate value of \$94,000 to cover tuition and living costs for the two-year MFM.

#### What is the MFM?

The MFM will prepare you to enter the high-paying, fascinating and satisfying field of quantitative finance, where you can combine skills in mathematics, statistics and data science to do detailed risk modeling. Examples of "quant" jobs include derivatives traders, quantitative risk analysts, investment research analysts, model validators, actuaries, risk regulators, data scientists and academics with a focus on quantitative finance and related domains.

#### Benefits of the MFM:

- Ninety percent placement rate over the past 5 years
- Highly supportive, tight-knit community of students and alumni
- The MFM program's curriculum, combining theory and practice, is designed by practitioners
- The MFM is housed in the U of MN School of Mathematics, rated 9th in the U.S. for Applied Mathematics
- Strong alumni network—they work in wide variety of firms-The Federal Reserve Bank, Amazon, Slack, Citi, Travelers, Morgan Stanly, and Allianz. They also move on to PhD programs that further support their interest in quantitative finance.

Learn more: MFM homepage, MFM Fellowships, Attend an Information Session

- First Round of Applications are due by 2/1/21;
- We accept applications after this date for the second round of applications reviewed between March and May of 2021
- You should apply for the MFM and the MFM Fellowships simultaneously

## Program for Research in Markets and Organizations (PRIMO) at Harvard Business School

Applications to the <u>Program for Research in Markets and Organizations (PRIMO)</u> at Harvard Business School are now open. PRIMO is a selective 10-week summer community of undergraduates participating in research affiliated with HBS faculty.

The program is open to students from any American 4-year undergraduate institution who may be considering doctoral studies. We have had a fantastic experience with our fellows and are hoping that you might be able to recommend outstanding rising sophomores, juniors, or seniors who are Math Alliance Scholars and might be considering doctoral studies after graduation. **The tentative program dates for Summer 2021 are June 5<sup>th</sup> to August 14<sup>th</sup>**. Whether the program will be offered virtually or in person has not yet been determined. In the summer of 2020, PRIMO was offered virtually, and fellows worked on research projects with faculty and participated in all activities via Zoom from their homes. No matter the decision, PRIMO fellows will receive a modest research stipend.

The deadline to submit applications is **Thursday**, **February 18<sup>th</sup>** at **12:00 pm EST**. For complete application instructions, see <u>Apply</u>.

To learn more about the program and the application process, interested students are invited to join us for one of the Information Sessions – on Tuesday, January 26<sup>th</sup> at 4:00 pm EST or on Wednesday, February 3<sup>rd</sup> at 7:00 am EST.

Register here.

## Postdoctoral Positions at the Department of Homeland Security

### **Threat Detection Technology Postdoctoral Research Scientist**

https://www.zintellect.com/Opportunity/Details/DHS-TSL-PostDoc-Fellowships-2021

### **Seeking Qualified Candidates Now**

The U.S. Department of Homeland Security (DHS) is offering postdoctoral fellowships for their *Visiting Scientist Program* cohort at the Transportation Security Laboratory (TSL). You will join a cohort of postdocs in a new endeavor in threat detection technology and applied research, specifically related to synthetic data generation, testing, and evaluation.

The program is seeking postdocs that have experience in modeling and large data sets and have a foundational knowledge of the physics or engineering applicable in learning to create high-fidelity synthetic data. Within the proposed project, there are multiple opportunities available to engage in your applied research and evaluation interests. These include, but are not limited to,

- Deep learning algorithm testing
- Synthetic signature and/or image generation
- Data manipulation and quality assurance

Threat analysis testing and evaluation

Location: Atlantic City, NJ

**Anticipated Start Date:** TSL is ready to make appointments immediately. Applications are reviewed on an ongoing basis and fellowships will be filled as soon as qualified candidates are identified.

#### **Benefits**

Stipend starting at \$80,000 based on your academic level and experience

Health Insurance Allowance

Relocation Allowance up to \$5,000, if you are located more than 50 miles one way from the hosting facility.

#### **Qualifications**

Have received or expect to complete all requirements for a Doctoral degree by the anticipated start date. Applicants currently pursuing a doctoral degree must provide proof of completion of all degree requirements before the fellowship start date.

Be a U.S. Citizen

### Interested in this research opportunity? To learn more and apply, visit:

https://www.zintellect.com/Opportunity/Details/DHS-TSL-PostDoc-Fellowships-2021







### **MSRI Director Search**



The Mathematical Sciences Research Institute (MSRI) in Berkeley, California invites applications for the position of Director. This appointment is for a five-year term beginning July 1, 2022, with the possibility of renewal.

MSRI is one of the world's preeminent centers for research in the mathematical sciences and has been advancing knowledge through mathematical research since 1982. Located in the hills above the University of California, Berkeley campus, MSRI hosts some 2,000 mathematicians each year, for stays of up to one academic year. MSRI is independent of UC Berkeley but enjoys a close relationship with the mathematics department and the campus at large. To learn more, visit our website at <a href="mailto:msri.org">msri.org</a> or watch this introductory film: <a href="mailto:Introduction to the Mathematical Sciences Research Institute">Introduction to the Mathematical Sciences Research Institute (MSRI)</a>.

MSRI also serves the wider community through activities in mathematics education, public outreach and films for general audiences. Through its public outreach programs, MSRI makes mathematics visible and attractive to those outside the field. MSRI is also widely known for its events highlighting the fundamental role played by mathematics in our cultural heritage. It has been supported from its origins by the National Science Foundation, now joined by the National Security Agency, over 100 Academic Sponsor Institutions, by a range of private foundations, and by generous and farsighted individuals.

The incoming director has a unique opportunity to build on these successes and to lead MSRI in the advancement of its multifaceted mission.

#### View full position details and apply at msri.org

This is a full-time, exempt position with a competitive compensation, benefits package. This position is partially funded through a grant from the National Science Foundation (NSF).



## **Assistant Professor Position in Mathematics at Purdue University**

The Department of Mathematics in the College of Science at Purdue University invites applications for one appointment in Mathematics at the level of assistant professor. The appointment would start in August 2021.

The position comes at a time of engaged leadership and growth in the College of Science - Purdue's second-largest college, comprising the mathematical, physical and life sciences. This position is a central component of a large-scale interdisciplinary hiring effort across key strategic areas in the College, including mathematical and computational foundations, quantum computation, and data science. Research within the Department of Mathematics spans multiple areas of pure and applied mathematics and extends to collaborations with partners across science and engineering. For more information about our department, see <a href="https://www.math.purdue.edu">www.math.purdue.edu</a>.

A successful candidate will combine an outstanding record of research excellence with a commitment to effective and engaged teaching. Appointments will be made based on demonstrated research and teaching qualifications. Candidate must have a Ph.D. (or its equivalent) in mathematics or a closely related field.

Preference will be given to outstanding applicants in the areas of

- Algebra (including algebraic topology and operator algebras),
- Analysis and Geometry (including harmonic analysis, partial differential equations, complex analysis, and symplectic/differential geometry), and
- Applied Mathematics (including data science, machine learning, the modeling of physical or biological systems, inverse problems, computational methods).

A successful candidate is expected to develop a vibrant research program supported by extramural funding, teach undergraduate and/or graduate mathematics courses to a diverse student body, and supervise graduate students. Senior faculty are also expected to mentor junior faculty and participate in the governance of the department, the College of Science, and Purdue University by serving on faculty committees.

Purdue University's Department of Mathematics is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. A background check will be required for employment in this position.

Applications should be submitted online through <a href="www.mathjobs.org">www.mathjobs.org</a> and should include (1) the AMS cover sheet for academic employment, (2) a cover letter, (3) diversity statement, (4) a curriculum vitae, (5) a research statement, (6) a teaching statement, and (7) at least four letters of recommendation, one of which discusses the candidate's teaching qualifications. In addition, for purposes of equity, to be considered for the position, applicants will also need to create a profile including voluntary demographic data at:

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=11943&company=purdueuniv. Reference letter writers should be asked to submit their letters online through <a href="www.mathjobs.org">www.mathjobs.org</a>. Direct all inquiries to <a href="kstroud@math.purdue.edu">kstroud@math.purdue.edu</a>. All applications received by December 7, 2020 will be given full consideration. <a href="Purdue University">Purdue University is an EOE/AA employer fully committed to achieving a diverse workforce. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.



## Golomb Visiting Assistant Professor Position in Mathematics at Purdue University

The Department of Mathematics in the College of Science at Purdue University invites applications for multiple three-year positions as Golomb Visiting Assistant Professor (for new and very recent Ph.D.s). These positions come at a time of dynamic leadership and with significant investment in the College of Science - Purdue's second-largest college, comprising the mathematical, physical and life sciences. For information about our department, see <a href="https://www.math.purdue.edu">www.math.purdue.edu</a>.

Qualifications: These positions will commence August 2021 and are open to mathematicians who demonstrate exceptional research promise and a strong teaching record. Ph.D. (or its equivalent) in mathematics or closely related field by August 10, 2021 is required. Successful candidates will have research interests in common with Purdue faculty and a record of early research excellence. Duties include continued research production, engagement with faculty and students, and teaching of undergraduate and graduate mathematics courses.

Purdue University's Department of Mathematics is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. A background check will be required for employment in this position.

Applications should be submitted online through <a href="www.mathjobs.org">www.mathjobs.org</a> and should include (1) the AMS cover sheet for academic employment, (2) a cover letter, (3) diversity statement, (4) a curriculum vitae, (5) a research statement, (6) a teaching statement, and (7) at least four letters of recommendation, one of which discusses the candidate's teaching qualifications. In addition, for purposes of equity, to be considered for the position, applicants will also need to create a profile including voluntary demographic data at: <a href="https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=11947&company=purdueuniv">https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=11947&company=purdueuniv</a>.

Reference letter writers should be asked to submit their letters online through <a href="www.mathjobs.org">www.mathjobs.org</a>. Direct all inquiries to <a href="kstroud@math.purdue.edu">kstroud@math.purdue.edu</a>. Direct all inquiries to <a href="kstroud@math.purdue.edu">kstroud@math.purdue.edu</a>. All applications received by December 7, 2020 will be given full consideration. Some offers will be made before the end of January 2021.

Purdue University is an EOE/AA employer fully committed to achieving a diverse workforce. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply



### Tenure-Track/Tenured Professors in Mathematics – Data Science Positions Announced at Purdue University

The Departments of Mathematics, Statistics and Computer Science in the College of Science at Purdue University invite applications for positions in Data Science at the level of assistant/associate professor. The appointments would start in August 2021 or a future date subject to negotiation. Early career candidates with exceptional qualifications may be considered for a term-limited early career endowed professorship.

**Qualifications:** Candidates must have a PhD in mathematics or a closely related field, with outstanding credentials in research related to data science, an excellent track record of publications and potential for developing a vibrant research program, as well as a strong commitment to excellence in teaching. All candidates in the broad area of data science are relevant and particular interest will be given to outstanding applicants in the areas of

- Topological data analysis, functional data analysis, applied probability, applied analysis, approximation theory for the foundation of data science, machine learning
- Data-driven modeling, simulation, inverse problems, computational methods for big data, optimization, scientific machine learning

Successful candidates are expected to develop a vibrant research program supported by external funding, teach undergraduate and/or graduate mathematics courses to a diverse student body, and supervise graduate students. Senior faculty are also expected to mentor junior faculty and participate in the governance of the department, the College of Science, and Purdue University by serving on faculty committees. We particularly encourage candidates who can demonstrate the potential for collaboration across multiple disciplines that complements existing areas of strength within Purdue. Joint appointments in different departments are possible.

**Data Science at Purdue:** Data science positions come at a time of significant investment in the College of Science, comprising the mathematical, computational, physical and life sciences. Purdue is home to world-class faculty spread across multiple colleges, engaged in fundamental and applied research in Data Science. The Purdue College of Science hosts top faculty, graduate and undergraduate students who excel at a national and international level as well as unique research facilities, and a culture of collegiality and excellence. Our vision is to be at the forefront of advancing Data Science-enabled research and education by tightly coupling theory, discovery, and applications while providing students with an integrated, Data Science-fluent campus ecosystem. Over the past five years alone, Purdue has attracted over 100 new tenure-track faculty with expertise in data science fundamentals and applications.

Application: Applications from data science candidates with strong focus on mathematics should be submitted online through <a href="www.mathjobs.org">www.mathjobs.org</a> and should include (1) the AMS cover sheet for academic employment, (2) a cover letter, (3) diversity and inclusion statement, (4) a curriculum vitae, (5) a research statement, (6) a teaching statement, and (7) at least three letters of recommendation, one of which discusses the candidate's teaching qualifications. In addition, for purposes of equity, to be considered for the position, applicants will also need to create a profile including voluntary demographic data at SuccessFactors. Reference letter writers should be asked to submit their letters online through <a href="www.mathjobs.org">www.mathjobs.org</a>. Direct all inquiries to kstroud@math.purdue.edu. All applications received by December 15, 2020 will be given full consideration.

Purdue University is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. A background check will be required for employment in this position.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.



## **Assistant Professor of Practice Position Announced in Mathematics at Purdue University**

The Department of Mathematics in the College of Science at Purdue University invites applications for two appointments as Professor of Practice in Mathematics to begin August 2021. These appointments will be at the level of Assistant Professor of Practice.

These positions are non-tenure track faculty positions with multi-year contracts, a promotion track, and a focus on undergraduate teaching and course administration. Duties will typically include teaching 5 courses each academic year, including teaching and administering large-lecture courses. Successful applicants will have a record of excellence in teaching, particularly at the level of calculus, have the ability to teach a range of courses in the undergraduate curriculum, have enthusiasm for teaching and interaction with students, and have experience in course management software and online homework systems. Candidates must have a Ph.D. (or its equivalent) in mathematics or a closely related field. For more information about our department, see www.math.purdue.edu.

Professors of Practice faculty will be actively involved in departmental activities and have professional development opportunities. Salary and benefits are competitive.

Applications should be submitted online through <a href="www.mathjobs.org">www.mathjobs.org</a> and should include (1) the AMS cover sheet for academic employment, (2) a cover letter, (3) diversity statement, (4) a curriculum vitae, (5) a research statement, (6) a teaching statement, and (7) at least four letters of recommendation, one of which discusses the candidate's teaching qualifications. In addition, for purposes of equity, to be considered for the position, applicants will also need to create a profile including voluntary demographic data at: <a href="https://career8.successfactors.com/sfcareer/jobregcareer?jobId=11971&company=purdueuniv">https://career8.successfactors.com/sfcareer/jobregcareer?jobId=11971&company=purdueuniv</a>.

Reference letter writers should be asked to submit their letters online through <a href="www.mathjobs.org">www.mathjobs.org</a>. Direct all inquiries to <a href="wstroud@math.purdue.edu">kstroud@math.purdue.edu</a>. All applications received by December 7, 2020 will be given full consideration.

Purdue University's Department of Mathematics is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. A background check will be required for employment in this position.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.



### Tenure-Track Assistant Professor of Actuarial Science Position Announced at Purdue University

The College of Science at Purdue University invites applications for an appointment in Actuarial Science, within the Departments of Mathematics and Statistics, to begin August 2021. This search is part of a larger faculty hiring investment in the areas of computational and data sciences. The appointment will be at the level of assistant professor, or possibly associate professor in the case of exceptional achievements. We are interested in all aspects of Actuarial Science, including theoretical foundations, methodologies, and data intensive applications. We particularly encourage candidates who demonstrate the potential for collaboration across multiple disciplines.

These positions come at a time of dynamic leadership and with significant investment in the College of Science, which comprises the computing, physical, and life sciences at Purdue. The College has committed considerable resources in Actuarial Science and provides highly competitive start-up packages. Currently, Purdue's Actuarial Science has two tenure-track faculty and three lectures, who are all credential actuaries. There are more than 350 students majoring in Actuarial Science at Purdue.

Successful candidate will have an outstanding record of research excellence, a commitment to effective and engaged teaching, and a record of accomplishment in the field of Actuarial Science. Appointment will be made based on demonstrated research and teaching qualifications. Candidates must have a Ph.D. (or its equivalent) in Actuarial Science, Mathematics, Statistics, or a closely related field.

Successful candidate is expected to develop a vibrant research program supported by extramural funding, teach undergraduate and/or graduate mathematics and/or statistics courses to a diverse student body, mentor students, and participate in the design and development of the Actuarial Science program and curriculum. Senior faculty will also mentor junior faculty and participate in the governance of the department, the College of Science, and Purdue University by serving on faculty committees.

Applications should be submitted online through <a href="www.mathjobs.org">www.mathjobs.org</a> and should include (1) the AMS cover sheet for academic employment, (2) a cover letter, (3) diversity statement, (4) a curriculum vitae, (5) a research statement, (6) a teaching statement, and (7) at least four letters of recommendation, one of which discusses the candidate's teaching qualifications. In addition, for purposes of equity, to be considered for the position, applicants will also need to create a profile including voluntary demographic data at

https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=11948&company=purdueuniv. Reference letter writers should be asked to submit their letters online through <a href="www.mathjobs.org">www.mathjobs.org</a>. A background check will be required for employment. For additional information, contact Jianxi Su via e-mail at <a href="jianxi@purdue.edu">jianxi@purdue.edu</a>. Applications are considered on a continuing basis, but candidates are urged to apply by December 15, 2020 for full consideration.

Purdue University's College of Science is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in their cover letter, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply. For more information about our departments, see <a href="www.math.purdue.edu">www.math.purdue.edu</a>; <a href="https://www.stat.purdue.edu">https://www.stat.purdue.edu</a>.

## Three Tenure-Track Assistant Professor Positions at University of Texas Rio Grande Valley

The School of Mathematical and Statistical Sciences at the University of Texas Rio Grande Valley (UTRGV) has three (3) tenure-track Assistant Professor positions. UTRGV is a Hispanic Serving Institution located in the Rio Grande Valley, in the southern tip of Texas close to the U.S.-Mexico border.

<u>Assistant Professor in Statistics, Computational Mathematics</u> (statistics with computational skills)

<u>Assistant Professor in Computational Mathematics</u>

<u>Assistant Professor in Mathematics Education</u>

We seek applicants who are dedicated to serving The University of Texas Rio Grande Valley's diverse student body as an Assistant Professor of Mathematics and Statistical Sciences beginning in the 2021-2022 academic year.

The School of Mathematical and Statistical Sciences (SMSS) at UTRGV invites applications for tenure-track faculty positions at the rank of Assistant Professor pending budget or programmatic approval. The appointment involves teaching at the undergraduate and graduate levels as well as active research, service, and grant activities. The School offers multiple graduate and undergraduate degrees in mathematics, statistics, and mathematics education. The School is anticipating its own interdisciplinary Ph.D. program in Mathematics and Statistics with Interdisciplinary Applications which is currently at the final stage of approval. Excellent opportunities exist for collaborations with colleagues in several colleges and departments across the university, including the School of Medicine, School of Nursing, College of Health Professions, College of Sciences, College of Engineering and Computer Science, and the College of Business and Entrepreneurship. The School of Mathematical and Statistical Sciences faculty closely collaborate with the South Texas Institute of Diabetes and Obesity (Edinburg), Doctor's Hospital at Renaissance (Edinburg), and the University of Texas School of Public Health (Brownsville).

The SMSS is part of the College of Sciences at UTRGV. With over 182 faculty and 4,000 undergraduate and graduate students, the College of Sciences takes pride in preparing students for diverse careers via many educational programs, including the Nation's largest UTeach program that prepares Math and Science majors for careers as educators at the middle and secondary school levels.

Thanks to a steadfast commitment to safety and success, UTRGV yielded record-breaking outcomes in enrollment and student success in the fall 2020 semester. For additional information, please visit our website at <a href="https://www.utrgv.edu">www.utrgv.edu</a> or the SMSS Math website at <a href="https://www.utrgv.edu/cos">www.utrgv.edu/cos</a> or the College of Sciences website at <a href="https://www.utrgv.edu/cos">www.utrgv.edu/cos</a>

#### **Additional Hiring Opportunities**

For additional hiring opportunities for your significant other, please visit <a href="https://www.utrgv.edu/hr/careers/">https://www.utrgv.edu/hr/careers/</a>

If you have any questions, please do not hesitate to contact Dr. Cristina Villalobos <u>cristina.villalobos@utrgv.edu</u>



## Assistant Professor in Applied Mathematics at University of Colorado, Boulder Position Announcement

The Department of Applied Mathematics at the University of Colorado Boulder (CU Boulder) encourages applications for a tenure track faculty position at the Assistant Professor level to begin August 2021. We are looking for candidates in the area of computational mathematics, with possible areas of emphasis including numerical analysis of differential equations, randomized numerical linear algebra, optimization and inverse problems, scientific computing, and related areas.

This position requires a commitment to supporting the diverse student populations in our department and its associated campus educational mission, a dedication to teaching in our undergraduate and graduate programs, and developing and conducting an innovative independent research program. The department firmly believes that the effectiveness and creativity of a group is strengthened by contributions from a broad range of perspectives. As such, we particularly welcome candidates from groups that are historically underrepresented in our field and/or candidates that have demonstrated leadership toward building an equitable and inclusive scholarly environment.

The University of Colorado Boulder is committed to building a culturally diverse community of faculty, staff, and students dedicated to contributing to an inclusive campus environment. We are an Equal Opportunity employer, including veterans and individuals with disabilities.

For more information: https://jobs.colorado.edu/jobs/JobDetail/?jobId=27537

Applications submitted by **January 30, 2021** will receive full consideration. The position will remain open until filled.

Note: Application materials will not be accepted via email. For consideration, applications must be submitted through <u>CU Boulder Jobs.</u>



## Postdoctoral Fellowship in Environmental Health Biostatistics at University of Rochester



The Department of Biostatistics and Computational Biology (DBCB) at the University of Rochester (UR) announces an opening for a postdoctoral traineeship in Environmental Health (EH) Biostatistics, funded by an NIEHS T32 training grant. The appointee will develop

and apply novel statistical methodology for projects related to EH, under the mentorship of a Biostatistics faculty trainer (Drs. Sally W. Thurston, Matthew N. McCall, Brent Johnson, Tanzy Love, Michael McDermott, David Oakes, or Robert Strawderman). The specific methodological focus may be based in part on the trainee's interests, and will involve co-mentorship from a leading environmental health researcher. Examples of EH topics to which methodology may be developed and applied include studies of (a) the associations between air pollution exposure and biomarkers thought to indicate increased risk of future cardiac events; (b) effects of pre- and post-natal mercury exposure from fish consumption on multiple outcomes in childhood and adolescence; (c) heterogenous responses to environmental exposures among a population of cells; and (d) changes in microglial morphology in response to exposure. Methodological expertise among T32 faculty trainers includes Bayesian MCMC methods, models for multiple outcomes, latent variable models, measurement error, missing data, causal inference, survival analysis, clustering, statistical genomics, molecular systems biology, and bioinformatics. The appointee will also receive training in advanced biostatistics and in toxicology, and be involved in other collaborative work with EH researchers. For more information see <a href="https://www.urmc.rochester.edu/biostat/training-grant.aspx">https://www.urmc.rochester.edu/biostat/training-grant.aspx</a>.

**Position qualifications:** In accordance with NIEHS requirements, trainees must be a US citizen or permanent resident, and must have completed a doctoral degree in statistics or a related subject by the appointment start date. We seek a highly motivated candidate with a strong statistical background and excellent programming and communication skills.

**Appointment:** The position is available for 12 months initially with the possibility of renewal for a second year. We anticipate an early 2021 start date, but seek the best candidate even if the start date is delayed.

**To apply:** A cover letter describing research experience, a current CV and contact information for three references should be sent by email to Sally\_Thurston@urmc.rochester.edu (please reference "NIEHS postdoctoral position" in the subject line).

The UR and its Medical Center (URMC) are equal opportunity and affirmative action employers, and share a vision of cultivating a diverse and inclusive environment that guides and transforms its approaches to education, research, healthcare, and community partnerships. As a member of both institutions, the DBCB is strongly committed to fostering and supporting a workplace culture inclusive of people regardless of their race, ethnicity, national origin, gender or gender identity, sexual orientation, age, physical abilities, religious beliefs, veteran status or any other factor that cannot lawfully be used as a basis for recruiting or hiring decisions. Any applicant that meets our stated position qualifications is strongly encouraged to apply.



## Tenure Track Faculty Position in Biostatistics at University of Rochester



The Department of Biostatistics and Computational Biology (DBCB) at the University of Rochester (UR), in partnership with the Del Monte Institute for Neuroscience, is seeking highly qualified applicants for an open rank tenure-track faculty position. Academic rank will be commensurate with

credentials. The Department and Institute have a strong preference for attracting applicants with dual interests in the development of statistical methodology (theory and/or computation) and collaborative scientific research. This is a targeted search, with a focus on candidates with research interests in statistical or computational neuroscience, particularly brain imaging (including MRI) or neural signal data analysis, ideally along with training or expertise in areas such as high-dimensional data analysis, spatial temporal data analysis, machine learning, data integration and data visualization. An explicit expectation of this position involves engaging in collaborative research with investigators and trainees in the Del Monte Institute for Neuroscience, the Intellectual & Developmental Disabilities Research Center, the Center for Advanced Brain Imaging & Neurophysiology, and related groups that overlap with these constituencies.

The UR DBCB currently has 17 tenure-track and 3 research track faculty; several postdoctoral fellows, masters-level statisticians, and programmers; and 28 graduate students, of which 26 are pursuing a PhD degree in statistics. Most department faculty have active independent methodological research interests and collectively we span a broad cross-section of topics in both biostatistics and statistics. In addition to outstanding potential for research, successful candidates must also demonstrate a strong commitment to graduate teaching and advising in Statistics. The Del Monte Institute for Neuroscience (DMIN) supports over 100 faculty across the UR campus and is home to the Neuroscience Graduate Program, with 55+ current PhD students enrolled. The successful candidate would be expected to actively participate in the activities of the Institute and to contribute to the graduate neuroscience program. More information about DBCB and Neuroscience can respectively be found at <a href="https://www.urmc.rochester.edu/biostat.aspx">https://www.urmc.rochester.edu/del-monte-neuroscience.aspx</a>

Position Qualifications: Doctoral degree in biostatistics, statistics or strongly related discipline working in areas directly relevant to this targeted search. Candidates must have excellent oral and written communication skills. Candidates for Associate and Full Professor positions should also have an established track record of peer-reviewed publications in leading journals, demonstrated success in attracting extramural research funding, and evidence of teaching excellence at the graduate level.

To apply: Candidates should submit a brief cover letter, a current CV, and statements covering your current research and teaching interests and goals for the future. In addition, candidates are asked to submit a Statement of Contribution to Diversity, Equity and Inclusion with their application materials. Up to 3 published or submitted works can be included with your application. Assistant professor candidates should arrange for 3 letters of reference to be sent directly from the recommender; candidates for higher ranks should supply the contact information for at least 3 supporting references. The review of applications will begin immediately, and continue until this position is filled. Please submit all required materials by email to BSTFacultySearch@urmc.rochester.edu.

The UR and its Medical Center are equal opportunity and affirmative action employers, and share a vision of cultivating a diverse and inclusive environment that guides and transforms its approaches to education, research, healthcare, and community partnerships. As members of both institutions, the DBCB and DMIN are strongly committed to fostering and supporting a workplace culture inclusive of people regardless of race, ethnicity, national origin, gender or gender identity, sexual orientation, age, physical abilities, religious beliefs, veteran status or any other factor that cannot lawfully be used as a basis for recruiting or hiring decisions. Any applicant that meets our stated position qualifications is strongly encouraged to apply.



### **Tenure-Track Assistant Professor of Mathematics** at George Mason University



The Department of Mathematical Sciences at George Mason University invites applications for three tenure-track positions at the rank of Assistant Professor, to begin in August 2021. George GEORGE Mason University has a strong institutional commitment to the achievement of excellence and J diversity among its faculty and staff, and strongly encourages candidates to apply who will enrich Mason's academic and culturally inclusive environment.

#### **About the Department:**

The Mathematical Sciences Department at George Mason University offers strong and flexible programs in undergraduate, graduate and Ph.D. Mathematics. Students can specialize in a diverse selection of areas in pure, applied and computational mathematics. A faculty of world-class educators with exemplary qualifications and progressive experience attracts new research opportunities; recruits highly qualified and motivated students from across the country and abroad; and provides unparalleled insight and expertise toward the development of marketable academic programs. For more information about the department, visit us on the web at math.gmu.edu.

#### Responsibilities:

The successful candidates will be expected to teach at both the undergraduate and graduate levels and to support the department's Ph.D. program in Mathematics. These positions are in support of the state-funded Tech Talent Investment Program (TTIP) which seeks to increase the number of Virginia graduates at the bachelor's and master's level in technology and computing related fields including mathematical sciences. The search will focus on applicants with expertise in the areas of computational and theoretical mathematics related to modeling, dynamical systems, graph theory, combinatorics, and probability, but all disciplines will be considered.

#### **Required Qualifications:**

Candidates must possess a Ph.D. degree by 25 August 2021 and must have strong records in both research and teaching.

#### **Preferred Qualifications:**

Candidates with postdoctoral experience are preferred. Preference will be given to candidates whose research interests align with those of the department and with the TTIP goals.

### **Special Instructions to Applicants:**

For full consideration applications must be received by January 29, 2021, but applications will be accepted until the position is filled. Applications must include a cover letter, curriculum vitae, research statement, teaching statement and at least four letters of recommendation, one of which discusses teaching. Applications must be submitted online at https://jobs.gmu.edu/.

Other correspondence may be directed to math@gmu.edu or by regular mail to: Search Committee (Tenure-Track Assistant Professor) Department of Mathematics Sciences Exploratory Hall, Room 4400 Mail Stop 3F2 George Mason University Fairfax, VA 22030

George Mason University is an equal opportunity/affirmative action employer, committed to promoting inclusion and equity in its community. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or veteran status, or any characteristic protected by law.



## Tenure-Track Assistant Professor in Data Science at West Virginia University

Assistant Professor-Data Science Department of Mathematics Job No. 16067



The Eberly College of Arts and Sciences at West Virginia University invites applications for a tenure-track assistant professor position in Data Science starting August 2021. The Data Science program is part of the new School of Mathematical and Data Sciences. A PhD or equivalent degree in Computer Science, Mathematics, Statistics or a closely related field with a research specialization in data science is required at the time of employment. The successful candidate is expected to develop a research program, obtain external funding, mentor and teach students in the undergraduate data science major and minor programs, and be an active interdisciplinary collaborator. This is the second position in a series of new positions in Data Science and is an exciting opportunity for someone to join a nascent program and help to shape its growth. For additional information email snehalata.huzurbazar@mail.wvu.edu.

WVU (<a href="https://www.wvu.edu">https://www.wvu.edu</a>) is a comprehensive land-grant university with a total enrollment of 29,000 students. It is classified as "R1-very high research activity" by the Carnegie Foundation. WVU is located in Morgantown (<a href="https://www.morgantownwv.gov/">https://www.morgantownwv.gov/</a>), a city ranked in the Top 100 Best Places to Live in America (<a href="https://livability.com/best-places/top-100-best-places-to-live/2019/wv/morgantown">https://livability.com/best-places/top-100-best-places-to-live/2019/wv/morgantown</a>). The immediate region has a diverse population of about 200,000 residents, and is readily accessible to Pittsburgh and Washington, DC. The city lies within a high technology corridor that includes several federal research facilities such as DOE's National Energy Technology Laboratory, CDC's NIOSH Laboratory, the NASA IV&V facility, as well as resource-based industries and the Virgin Hyperloop Certification Facility.

To apply for this position, visit <a href="https://careers.wvu.edu">https://careers.wvu.edu</a>, navigate to the position title listed above, and submit, (1) a single PDF file including a statement of research interests, a statement of teaching philosophy, a current curriculum vitae, and a statement describing the candidate's potential to further our progress in building a diverse and inclusive academic community (to be reviewed without consideration of your personal demographics); and (2) a list of names and e-mail addresses for at least three individuals who can provide prompt letters of recommendation.

Review of applications will commence on **February 15, 2021**, and will continue until the position is filled. WVU is an EEO/Affirmative Action Employer and welcomes applications from all qualified individuals, including minorities, females, individuals with disabilities, and veterans.