



Upcoming Events

SAMSI Undergrad Workshop
Research Triangle Park, NC
Feb. 25-26, 2019

2019 SIDIM Conference
University of Puerto Rico Humacao, PR
March 1-2, 2019

SIAM Conference on Applications of Dynamical Sys.
Snowbird, UT
May 19-23, 2019

IMA- Alliance Summer Workshop
University of Minnesota, St. Paul, MN
June 6-8, 2019

2019 Field of Dreams Conference
St. Louis, MO
Nov. 15-17, 2019

Thoughts from the Executive Director...



David Goldberg
Executive Director of the Math Alliance

Happy New Year to everyone in our Alliance community!! The year is off to an exciting start. The recent Joint Mathematics Meetings (JMM) in Baltimore was full of activity of interest to us, and we pointed out many of those in the last newsletter. We had a great session all day Friday, January 18 which featured many recent doctorates who were Alliance Predoctoral Scholars! I want to apologize to all the speakers for being unable to be there due to illness that morning. Also, a personal thanks to Phil Kutzko for picking up the slack and running the session in my absence (and I understand Rolando Santiago provided some technical support, thanks!!!!). We hope we'll be hosting this session next year and hope to see many of you there!

Our 2019-20 Facilitated Graduate Admissions Process (F-GAP) program is starting right now! For those mentors who know Alliance Scholars who should be applying to graduate programs for the fall of 2020 (i.e., currently a junior or MS student), *please* nominate them for this program. The Alliance is partnering with the [Institute for Mathematics and its Applications \(IMA\)](#), to hold a summer workshop for some of the 2019-20 F-GAP students and their mentors this coming summer. The participants will be chosen from among students who are nominated and matched in this early part of the program. We'll have more details about this workshop soon, so be on the lookout for this information.

As I say again, and again, I am so lucky to be working for this organization, and am constantly bolstered and inspired by our students and mentors. I know we are going to have a great year!

IMA- Alliance Summer Workshop



Alliance Workshop at Institute for Mathematics and its Applications (IMA):

The Alliance and IMA will be hosting a workshop on the campus of University of Minnesota, St. Paul, June 6-8, 2019. This workshop will bring in 60 F-GAP students and their mentors to learn about opportunities for math science majors in areas outside of pure mathematics.

Mentors, be sure to nominate your students for F-GAP in a timely way so that we can bring them and you to this workshop!

We don't have a link to the workshop site yet, but will soon.

AMS NOTICES CELEBRATES BLACK HISTORY MONTH

The [February issue of the AMS Notices](#) has a section devoted to Black History Month. Alliance Mentor Robin Wilson was the editor of this section ([see Robin's notes](#)).

This section features research articles by Alliance Mentor Ryan Hynd ([Sticky Particle Dynamics on the Real Line](#)), Talea L. Mayo ([Predicting the 100-Year Flood to Improve Hurricane Storm Surge Resilience](#)), Edray Herber Goins ([The Ubiquity of Elliptic Curves](#)), and Alliance Mentor Jaqueline Hughes-Oliver ([Assessment of Prediction Algorithms for Ranking Objects](#)).

The section also features an article by Alliance Mentor, and founding member of NAM, Johnny Houston celebrating the [100th anniversary of the birth of David Blackwell](#), an article by Alliance Mentor Ron Buckmire on the [history of the Blackwell-Tapia Prize](#), and a memorial tribute to [Rudy Horne](#) (faculty member at Morehouse, and mathematical consultant on the movie adaptation of *Hidden Figures*) by Della Dumbaugh.



Robin Wilson



Ryan Hynd



Ron Buckmire



Jaqueline Hughes-Oliver

We've missed a few issues, so we want to make sure to mention some recent items in the November, December, and January editions of the AMS Notices:

November 2018

- [A tribute to Maryam Mirzakhani](#), the first woman (and only woman to date) to win the Fields Medal.
- [Alliance Scholar, and now Alliance Mentor, Alexander Diaz-Lopez interviews Alliance Mentor Ryan Hynd](#) in the Graduate Student Section
- An opinion column by William Yslas Vélez, Alliance Associate Director for Undergraduate Education, and member of our Executive Council entitled [Why Do We Need Minorities Among Our Faculty?](#)

December 2018

- [Report on 2016–2017 Academic Recruitment, Hiring, and Attrition](#)
- Katherine A. Ott, [Fostering Inclusive Communities: Reasons why YOU should organize a Mathematics Research Community](#)
- [People](#): Alliance Mentor Huixia (Judy) Wang appointed as Rotating Program Director at NSF

January 2019

- [JMM Sampler](#) provides previews (synopses) of featured lectures at the recent JMM, including
 Edray Herber Goins, *A Dream Deferred: 50 Years of Blacks in Mathematics*:
 Alliance Mentor, Pamela E. Harris, *A Mathematical Journey of Culture, Community, and Collaboration*:
 Alliance Mentor, Talithia Williams, *A Seat at the Table: Equity and Social Justice in Mathematics Education*:
- Alliance Mentor, Ron Buckmire, [A Survey of Significant Developments in Undergraduate Mathematics Education Over the Past Decade](#)
- [People](#): 2019 AWM Fellows named, including Alliance Mentors H el ene Barcelo and Ulrica Wilson

Padmanabhan Seshaiyer to be awarded Honorary Doctorate



Each year the [Vrije Universiteit Brussel](#), which is one of the top-ranked universities in Europe and in the top 200 in the world, awards honorary doctorates “to committed scientists who transcend the boundaries of their own disciplines and to personalities that have been at the frontiers of societal change.” These include world leaders, faculty and other distinguished members from across the globe that are nominated by the universities or the different colleges.

The list of last round of recipients can be found at <http://www.vub.ac.be/en/honorary-doctorates#doctor-honoris-causa> and the list of past awardees over the years can be found at <http://www.vub.ac.be/en/honorary-doctorates#archive>. **We are thrilled to announce that the Math Alliance’s Associate Director for Applied Mathematics Padmanabhan Seshaiyer is among this year’s honorees.**

Prof. Seshaiyer has been selected from the United States for scientific excellence and will receive this honor along with other distinguished recipients from the world. Please join us in congratulating him!

2019 SIAM Conference on Applications of Dynamical Systems

2019 SIAM Conference on Applications of Dynamical Systems
(aka the "Snowbird conference")
May 19-23, 2019
Snowbird, Utah.

Website: <https://www.siam.org/Conferences/CM/Main/ds19>.

The application of dynamical systems theory to areas outside of mathematics continues to be a vibrant, exciting, and fruitful endeavor. These application areas are diverse and multidisciplinary, covering areas of applications that include biology, chemistry, physics, finance, industrial mathematics, data science, and more. This conference strives to amass a blend of application-oriented material and the mathematics that informs and supports the discipline. The goals of the meeting are a cross-fertilization of ideas from different application areas and increased communication between those who develop dynamical-systems techniques and the mathematicians, scientists, and engineers who use them.

SAMSI Undergraduate Workshop

Undergraduate Workshop
February 25-26, 2019
SAMSI Campus, Research Triangle Park, NC

As part of its [Education and Outreach Program for 2018-2019](#), the **Statistical and Applied Mathematical Sciences Institute (SAMSI)** will host a two-day undergraduate workshop on topics of current interest in statistics and applied mathematics.

While students from universities not in the U.S. are welcome to apply, please be aware that priority is given to students who are enrolled at U.S. institutions.

If your application is accepted for the workshop, and you are traveling from outside the triangle region, SAMSI will reimburse predetermined travel expenses and provide shared lodging. Meals/breaks are provided for all participants during the days of the workshop.

**** *Deadline for applications is January 10, 2019* ****

To complete the application for this workshop, [visit this address](#).
For questions or concerns email: ugworkshop@samsi.info

2019 SIDIM Conference

The 34th SIDIM will be held the 1-2 of March 2019 at the [University of Puerto Rico in Humacao](#).

There is a webpage with more information at <http://sidim.uprh.edu> where potential participants can register among other things.

SUMaR 2019 at Kansas State University

During eight weeks, 10-12 undergraduate students will have the opportunity to visit K-State and carry out research projects under the mentorship of the mathematics department's faculty. This REU encourages applications from students preparing for graduate studies in mathematics, and those from community colleges who might otherwise not have an opportunity to experience mathematics work and consider graduate studies.

Since a subset of the student population we plan to recruit will be early in their studies, and hence expected to have limited experience with mathematical proof, the REU will feature a series of talks by Philosophy faculty [Scott Tanona](#), and [Graham Leach-Krouse](#) on epistemology of mathematics and propositional logic.

SUMaR receives its support from the [National Science Foundation](#). As such, according to NSF regulations, it is only open to US citizens and permanent residents. Participants in SUMaR 2019 will receive room and board, a research fellowship of \$4000. Limited travel assistance may be available for students with financial hardship.

For more information visit: <https://www.math.ksu.edu/research/reu/>.

Central State Mathematics Undergraduate Research (CeSMUR) 2019

If you wish to give a talk, include an abstract of about 1/4 of a page. Funding through a grant from the National Science Foundation is available to help defray participants' travel and lodging expenses. Priority will be given to students presenting talks.

There will be no registration fee and we will negotiate special rates at nearby hotels. We ask students to share rooms in order to be able to benefit the largest number of students with travel and lodging assistance.

The Central States Math Undergraduate Research conference is a joint project of the Departments of Mathematics of :

- Kansas State University
- University of Nebraska at Lincoln
- Truman State University

For more information: <https://www.math.ksu.edu/research/i-center/cesmur/2019/index.html>

Inquiries or registration: E-mail cesmur@math.ksu.edu.

To register, let us know if you wish to give a talk. Include the name of your school.

Summer Program in Biostatistics & Computational Biology at the Harvard T.H. Chan School of Public Health

Summer Program in Biostatistics & Computational Biology at the Harvard T.H. Chan School of Public Health

June 10, 2019 - July 19, 2019

Application Timeline: November 1, 2018 – February 1, 2019

Learn more about the [Summer Program](#) and [Eligibility Requirements](#)

The Biostatistics Department offers a comprehensive summer program to prepare and foster qualified underrepresented minority, disabled, and economically disadvantaged students to pursue advanced degrees in Biostatistics, Computational Biology, and Quantitative Public Health. Students take classes, do leading edge research, participate in professional development workshops, attend special seminars given by internationally renowned faculty, prepare for the GRE, and enjoy social outings to bond with the other participants. This fully funded six-week program has existed for over 20 years.

Watch some of our students and faculty from the 2017 cohort reflect on their experiences [here](#).

Summer Program in Biostatistics & Computational Biology

The Summer Program is an intensive 6-week program, during which qualified participants receive an introduction to biostatistics, epidemiology, computing and research in public health. The program is designed to expose undergraduates to the importance of quantitative methods in biological, environmental, and medical research. Housing, travel and a living stipend are provided.

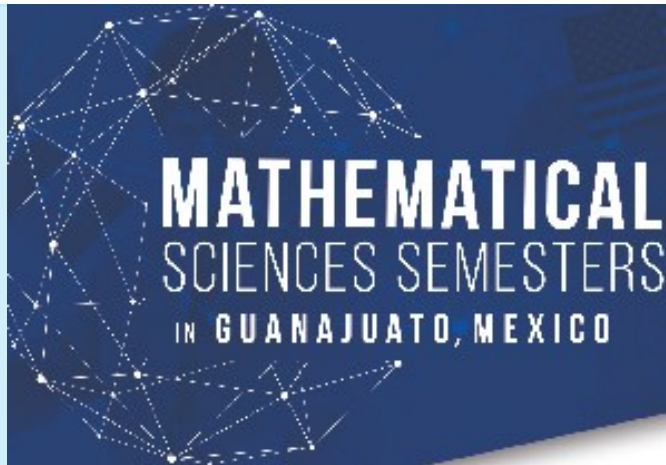
Summer Program Post-Baccalaureate Internship

The 2-3 month internship program is for post-bacs interested in or planning to attend a graduate degree program in biostatistics or computational biology. Travel is provided and interns receive a salary for their participation in the post-baccalaureate program. Interns participate in collaborative research projects, through 1-2 rotations, at academic and clinical centers at Harvard. They also attend seminars at Harvard and Dana Farber Cancer Institute on relevant topics.

Visiting Faculty Workshop

This workshop is for Faculty who are interested in learning more about the field of biostatistics, in order to better inform their undergraduate advisees. The Visiting Faculty Workshop is a 3-day, expense paid opportunity described [here](#).

CIMAT 2019



MATHEMATICAL SCIENCES SEMESTERS IN GUANAJUATO, MEXICO

An innovative undergraduate program in data science, modeling, and more, combining mathematics, statistics and computer science at the Guanajuato Mathematics Research Centre (CIMAT).

The Mathematical Sciences Program in Guanajuato gives students from across the United States, Canada, and other countries the opportunity to spend up to two semesters in Guanajuato, Mexico, studying mathematical sciences, while exploring the rich culture of Mexico and learning Spanish as they go.

The program offers:

- **Fall Semester in Mathematical Tools for Modeling**
- **Spring Semester in Mathematical Tools for Data Science**
- **Summer Program in Partial Differential Equations**
- **Optional courses in Spanish and Mexican Culture**

All three programs are taught entirely in English. Students will learn the fundamental theoretical bases of pure mathematics, quantitative methods, statistical models, and computer science, equipping them with the ability to choose relevant and efficient algorithmic solutions for solving problems in data science and mathematical modeling. The summer program combines theory, numerical methods, and applications to mathematical finance.



Centro de
Investigación en
Matemáticas, A.C.

CIMAT



GUANAJUATO, MEXICO

Capital of the state, the city is one of the architectural jewels of central Mexico and is listed by UNESCO as a World Heritage Site. Guanajuato is also the state's most important student city, home to the state's largest educational institution, the University of Guanajuato. Thousands of visitors from all over the world flock to the city each year, making this one of the liveliest and most cosmopolitan cities in all Mexico, famed for its cuisine, its nightlife, and its friendliness to visitors.

PARTICIPANT PROFILE

- Intended major in mathematics, statistics or computer science, or any major with a strong grounding in mathematics.
- At least one Linear Algebra course and Differential, Integral and Multivariate Calculus courses.
- Interested in exploring mathematics to a deeper, more sophisticated level.
- Eager to experience life in a different culture.
- The specific requirements for each semester and the summer program can be found at:

mathsciencesgto.cimat.mx



► ABOUT CIMAT

The program has been developed based on the strengths of CIMAT, one of Mexico's leading research centers in the fields of mathematics, statistics, and computer science, focusing particularly on enhancing the relationship between these disciplines. With four decades of experience, CIMAT is recognized both at home and abroad for its tradition of educational excellence and its contribution to the development of students from both Mexico and around the world. CIMAT is also well-known for its applied research projects, its technological and consulting services, and its training programs and initiatives for the dissemination of mathematical knowledge.

www.cimat.mx

USTARS 2019

USTARS 2019
April 26-28, 2019
Ames, Iowa

We are excited to announce that the ninth annual Underrepresented Students in Topology and Algebra Research Symposium will be hosted by Iowa State University, April 26-28, 2019. USTARS is an annual conference where students at all stages in their research present their work and form research and social support networks with other mathematicians with related research and professional interests. Presenters at USTARS give 30-minute research talks on various topics in the fields of topology and algebra. Two graduate students are chosen to give 1-hour presentations as the Distinguished Graduate Students (DGS). As this year's Invited Faculty Speaker, Dr. Minerva Catral (Xavier University) will give the keynote address. This symposium provides an invaluable opportunity for students who have not yet chosen a research topic, or have switched areas of study, to learn about potential research topics. In addition to the student lectures, a poster session highlights undergraduate research, and an early-career faculty development workshop precedes the symposium.

Application Deadline: February 1, 2019

Visit us at www.ustars.org to apply and for more information about current and past USTARS events.



(Photo of USTARS 2018 Participants, Reed College, Portland, OR)

Transforming Analytical Learning in the Era of Big Data

An Undergraduate Summer Institute in Biostatistics
The University of Michigan
June 17—July 26, 2019

This full-time 6-week summer institute will introduce undergraduate students to emerging challenges at the intersection of *Big Data, Statistics, and Human Health*.



Lectures will be led by a diverse group of stellar biostatistics, statistics, electrical engineering, and computer science faculty at the University of Michigan. Working in teams, students will participate in mentored big data research projects. Full and partial stipends are available for selected applicants based on merit and need.

[Application Opens December 15, 2018](#)



For details, visit:
www.BigDataSummerInstitute.com



[Sponsored by NIH Big Data to Knowledge Program \(BD2K\)](#)



Launch the NExT stage of your career!

New Cohort Application Cycle and Search for Associate Director

The first round of applications for the 2019 cohort of MAA Project NExT has a deadline of **October 15, 2018**. Applications can be found at projectnext.maa.org. New(ish) faculty who are already in full-time teaching positions are strongly encouraged to use this deadline. Decisions will be made by December 1, 2018. Those accepting positions during this academic year (to start Fall 2019) may use the second application deadline of April 15, 2019.

MAA Project NExT is a year-long professional development program of the *Mathematical Association of America* (MAA) for new or recent Ph.D.s in the mathematical sciences. The program is designed to connect new faculty with master teachers and leaders in the mathematics community and address the three main aspects of an academic career: teaching, research, and service. MAA Project NExT Fellows join an active community of faculty who have gone on to become award-winning teachers, innovators on their campuses, active members of the MAA, and leaders in the profession.



2017 MAA Project NExT cohort

MAA Project NExT welcomes and encourages applications from new and recent Ph.D.s in postdoctoral, tenure-track, and visiting positions. We particularly encourage applicants from under-represented groups (including women and minorities).

In addition, the MAA expects to hire a new Associate Director whose term will begin in Summer 2019. Information about the application process will appear at projectnext.maa.org. Questions? Contact projectnext@maa.org.

IAS School of Mathematics Accepting Applications

2019-2020 MEMBERSHIP



THE SCHOOL OF MATHEMATICS

The School of Mathematics welcomes applications from postdoctoral, mid-career, and senior mathematicians and theoretical computer scientists, and strongly encourages applications from women and minorities.

Stipends, on-campus housing, and other resources are available for periods of 4-11 months for individual researchers in all mathematical subject areas. The School supports approximately 40 post-docs per year. In 2019-2020, there will be a special-year program called "Optimization, Statistics, and Theoretical Machine Learning" led by Sanjeev Arora of Princeton University, however, Membership will not be limited to mathematicians in this field.

For more information, please visit:
math.ias.edu/administration/membership



Programs:

EMERGING TOPICS
math.ias.edu/emergingtopics

WOMEN & MATHEMATICS
math.ias.edu/wam/2019

SUMMER COLLABORATORS
math.ias.edu/summercollaborators

*Application
Deadline:*

December 1, 2019
mathjobs.org





MATH ALLIANCE PARTNER INSTITUTION

Tenure-Track Positions in the Departments of Mathematics and Computer Science at Purdue University

PURDUE Tenure-Track Professorships in Quantum Information Science
Departments of Math and Computer Science, College of Science, Purdue University
UNIVERSITY

The Departments of Mathematics and Computer Science in the College of Science at Purdue University invite applications for up to five positions in Quantum Information Science (QIS). These positions would be at the assistant/associate level with the potential for full professor appointments based on scholarly record. When appropriate, successful candidates may be considered for joint and interdisciplinary appointments across the College.

QIS is at the frontier of several traditional research disciplines including applied math and computer science, information theory, condensed matter physics, atomic, molecular, and optical physics, and chemistry. QIS strives to harness the unusual quantum mechanical properties of superposition and entanglement to provide breakthrough advances for computing, secure communications, and novel device functionalities. As such, QIS is part of a large-scale interdisciplinary hiring effort across key strategic areas in the College of Science—Purdue's second-largest college, comprising the physical, computing, and life sciences—these positions come at a time when the College is under new leadership and with multiple commitments of significant investment.

The College of Science is especially seeking to enhance our existing strengths in research at the interface within Computer Science and Math through strategic hiring of creative scientists to be part of the cutting-edge interdisciplinary environment provided by Purdue University. Successful candidates will have research interests that can build a comprehensive suite of capabilities in quantum algorithm research, information theoretic analysis, topological quantum computing, chemical physics, and quantum materials, experimental and/or theoretical quantum computing with superconducting qubits, spins in semiconductors and other condensed matter systems, cold atomic ions, Rydberg, photonic systems chemical physics, or quantum materials.

Candidates must have a PhD in math, computer science, physics, chemistry or other fields related to QIS, with outstanding credentials in research, an excellent track record of publications and potential for developing a vibrant research program, as well as a strong commitment to excellence in teaching. Successful candidates are expected to develop a vibrant research program supported by extramural funding and teach courses at the undergraduate and/or graduate level. Applicants should submit a letter of application electronically, including their curriculum vita, summary of planned research, and a statement on teaching philosophy, to: <https://hiring.science.purdue.edu/>. Applicants should also arrange for three letters of recommendation to be uploaded. Applications will be reviewed beginning December 1, 2018, and will remain in consideration until the position is filled.

All of Purdue University's Departments are 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.

A background check will be required for employment in this position. Purdue University is an ADVANCE institution.

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



MATH ALLIANCE PARTNER INSTITUTION

Tenure-Track positions in the College of Science at Purdue University

PURDUE
UNIVERSITY

Tenure-Track/Tenured Faculty Positions in Data Science

The College of Science at Purdue University invites applications for up to six positions in Data Science, with a tenure home in the department of Computer Science, Mathematics, or Statistics, to begin August 2019. These appointments will be at the level of assistant/associate professor with the potential for full appointments based on scholarly record. Assistant professor candidates with exceptional qualifications may be considered for an early career endowed professorship.

These positions come at a time of new leadership and with multiple commitments of significant investment for the College of Science, comprising the mathematical, physical and life sciences. These positions are 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, and aligns with the new campus-wide key strategic priority declared by Purdue's Board of Trustees including the Integrative Data Science Initiative. We are interested in all aspects of data science, including theoretical foundations, methodology, data intensive computations, and applications. We particularly encourage candidates who demonstrate the potential for collaboration across multiple disciplines.

Successful candidates 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. Candidates must have a Ph.D. (or its equivalent) in Computer Science, Mathematics, Statistics, or a closely related field.

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

Applicants should apply online to the "Data Science Cluster" position within the departments of Statistics, Mathematics, or Computer Science at <https://hiring.science.purdue.edu>, or at <https://www.mathjobs.org/jobs/jobs/13057>. A background check will be required for employment. Review of applications and interviews will begin in November 2018, and will continue until positions are filled. Inquiries can be sent to DS-search@science.purdue.edu.

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 the cover letter, indicating past experiences, current interests or activities, and/or future goals to promote a climate that values diversity, and inclusion. Salary and benefits are competitive, and Purdue is a dual-career friendly employer.

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



MATH ALLIANCE MEMBER INSTITUTION

Post-Doctoral Fellow Position at University of Michigan Biostatistics Department

The Department of Biostatistics, University of Michigan School of Public Health invites applications for a post-doctoral research fellow, to be working in the area of electronic health records, gene-environment interaction, shrinkage estimation and statistical methods for analyzing biobank data in collaboration with [Dr. Bhramar Mukherjee](#). Candidates should have a doctoral degree in Biostatistics, Statistics, Mathematics, Computer Science, Human Genetics, Epidemiology, Bioinformatics or any related quantitative field. A qualified candidate will have a demonstrated track-record of successful research as evidenced by papers, software and preprints. Strong written and communication skills are desired along with a passion for conducting impactful and influential scientific research. The successful applicant for this position will work in a team of graduate students, post-doctoral fellows, staff and faculty colleagues. Experience in R programming is required, programming in Python, C++ or other programming language, a broad interest in computational statistics and developing R packages and scalable algorithms is an added plus.

Expertise or experience in any of the following areas will be helpful: Bayesian methods, causal inference, high-dimensional statistics, machine learning, mediation, missing data, sample survey, selection and shrinkage methods. This is a two-year position with a possible third year. Salary and benefits are competitive. Considerations of applications will begin immediately and continue until the position is filled. The University of Michigan is an affirmative action/equal opportunity employer. Applications from women and minorities are welcomed and strongly encouraged.

Applicants should submit a cover letter, CV, name and contact information of three references to:
Davina Barron, B.Sc.
1415 Washington Heights
Ann Arbor, MI 48109-2029
Email: davinab@umich.edu
Phone: 734-936-0458

The start is flexible but ideally the candidate can start early in 2019.

The [University of Michigan School of Public Health](#) (UMSPH) is internationally recognized for its excellence, and has been ranked consistently as a premier entity. Since its organization in 1941, the School has produced a cadre of prominent public health leaders (for example, thirteen American Public Health Association presidents have been University of Michigan faculty or graduates). The School aims to provide an understanding of the health aspects of human beings, their interaction with the biological, physical, and social environment, and the application of this knowledge to community health problems.

The [Department of Biostatistics](#) within UMSPH is ranked number one in the nation by the National Research Council. The department consists a thriving body of 46 faculty, 202 students and 111 research and administrative staff members. The department has been at the forefront of research and training in Biostatistics. Department faculty have active, well-funded research programs emphasizing development of statistical methods and their application to biomedicine. Direct cost grant funding for 2017 was \$27 million. The Department has close ties with the Department of Statistics, the Institute for Social Research, the Medical School, the Michigan Institute for Data Science, The Institute of Health Policy and Innovation and other research groups across campus. The University of Michigan offers competitive salaries and excellent benefits. Ann Arbor is a progressive city of about 118,000 year-round residents, and approximately 43,000 students, with excellent schools and a wide variety of sporting and musical activities. It is rated very highly in national surveys for its quality of life and has the amenities of a city many times its size.



MATH ALLIANCE MEMBER INSTITUTION

Two Year Postdoctoral Position in the Department of Mathematics at The University of Pittsburgh



**University of
Pittsburgh**

The Department of Mathematics at the University of Pittsburgh invites applications for a two-year postdoctoral position on the formalization of mathematics, to begin in the Fall Term 2019.

We seek excellence in research and significant experience with proof assistants. Salary and benefits are competitive.

Submit a vita, three letters of recommendation, a research statement electronically through <https://www.mathjobs.org/jobs/jobs/13437>. Review of completed files will begin January 15, 2019 and will continue until the position is filled.

The University of Pittsburgh is an Affirmative Action, Equal Opportunity Employer. Women and members of minority groups under-represented in academia are especially encouraged to apply.



MATH ALLIANCE MEMBER INSTITUTION

Postdoctoral Fellowship in Environmental Health Biostatistics at University of Rochester

POSITION TITLE: Postdoctoral Fellowship in Environmental Health Biostatistics

The Department of Biostatistics and Computational Biology 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 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) RNA sequencing to quantify the effect of dioxin exposure on CD8+ T-cell gene expression accounting for an unknown mixture of responders and non-responders; and (d) methods to quantify morphologic changes in microglia in response to pharmacological alterations of noradrenergic signaling in the brain. 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 <https://www.urmc.rochester.edu/biostat/training-grant.aspx>.

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, excellent programming skills and good communication.

Appointment: The position is available for 12 months initially



MATH ALLIANCE MEMBER INSTITUTION

Tenure-Track Assistant Professor in the Department of Mathematics and Statistics at Saint Louis University



**SAINT LOUIS
UNIVERSITY.**
— EST. 1818 —

Saint Louis University invites applications for a tenure-track position as an Assistant Professor in the Department of Mathematics and Statistics. The position will begin in August, 2019. Applications received by 1/4/2019 are assured of full consideration.

Ph.D. required in Mathematics or a related area. The department seeks candidates with outstanding potential in both research and teaching, who will contribute to the overall strength of the department. Candidates should demonstrate the ability to enhance established research groups at SLU. The department is especially interested in candidates whose research program also has an applied or computational component.

Duties include:

- Maintaining an active research program.
- Teaching both undergraduate and graduate courses, with a typical load of two courses per semester for active researchers.
- Eventual participation in the supervision of master's theses and doctoral dissertations.
- Participation in department governance and university service.

Our department currently consists of twenty-six faculty members whose research areas include algebra, analysis, geometry, topology, and statistics. The department has undergraduate majors in mathematics and data science, and offers graduate master's and doctoral degrees in mathematics. The department web page is <http://mathstat.slu.edu>.

Please apply via MathJobs: <https://www.mathjobs.org/jobs/jobs/12943>.

Applications must include: CV, statement of research interests, teaching statement, and three letters of recommendation (including at least one that addresses teaching).

Founded in 1818, Saint Louis University is one of the nation's oldest and most prestigious Catholic universities. SLU, which also has a campus in Madrid, Spain, is recognized for world-class academics, life-changing research, compassionate health care, and a strong commitment to faith and service.

Saint Louis University is an equal opportunity/affirmative action employer. All qualified candidates will receive consideration for the position applied for without regard to race, color, religion, sex, age, national origin, disability, marital status, sexual orientation, military/veteran status, gender identity, or other non-merit factors. We welcome and encourage applications from minorities, women, protected veterans, and individuals with disabilities (including disabled veterans). If accommodations are needed for completing the application and/or with the interviewing process, please contact Human Resources at 314-977-5847.



MATH ALLIANCE MEMBER INSTITUTION

Tenure-Track Assistant Professor in Department of Mathematics and Statistics at Saint Louis University



**SAINT LOUIS
UNIVERSITY**
— EST. 1818 —

Position Title: Tenure Track Position in Statistics or Data Science
Position Type: Tenured/Tenure-track faculty
Subject Area: Statistics, Data Science, or a related area broadly defined

Saint Louis University invites applications for a tenure-track position as an Assistant Professor in the Department of Mathematics and Statistics. The area of emphasis is statistics or data science. The position will begin in August, 2019. Applications received by 1/4/2019 are assured of full consideration.

Ph.D. required in Statistics, Data Science, or a related area broadly defined. The department seeks candidates with outstanding potential in both research and teaching, competitive for external funding, and who will contribute to the overall strength of the department. The department recently revamped its undergraduate statistics offerings so that students use R to interact with data in each course, and we seek candidates who are eager to incorporate technology and coding into their teaching.

Duties include:

- Maintaining an active research program.
- Teaching both undergraduate and graduate courses in statistics, with a typical load of two courses per semester for active researchers.
- Eventual participation in the supervision of master's theses and doctoral dissertations.
- Contributing to the growth and direction of the statistics program and the new data science program.

Our department currently consists of twenty-six faculty members whose research areas include statistics, time series, machine learning, topological data analysis, and mathematics. The department has undergraduate majors in data science and a concentration in statistics, and offers graduate master's and doctoral degrees in mathematics. The University's medical school and school of public health offer opportunities for additional collaboration. The department web page is <http://mathstat.slu.edu>.

Please apply via MathJobs: <https://www.mathjobs.org/jobs/jobs/12942>.

Applications must include: CV, statement of research interests, teaching statement, and three letters of recommendation (including at least one that addresses teaching).

Founded in 1818, Saint Louis University is one of the nation's oldest and most prestigious Catholic universities. SLU, which also has a campus in Madrid, Spain, is recognized for world-class academics, life-changing research, compassionate health care, and a strong commitment to faith and service.

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MATH ALLIANCE MEMBER INSTITUTION

Tenure-Track Assistant Professor in Department of Mathematics and Statistics at California State Polytechnic University, Pomona



CAL POLY POMONA

The Department of Mathematics and Statistics in the College of Science at California State Polytechnic University, Pomona (Cal Poly Pomona) invites applications for a tenure-track position in Pure Mathematics at the rank of Assistant Professor to begin Fall Semester 2019. Join a growing and dynamic group of mathematicians, statisticians, and mathematics educators actively engaged in teaching and scholarship.

The Position: Throughout the academic year, you will typically teach a mix of courses in mathematics at the lower division, upper division, and graduate levels. As part of your professional development, we encourage you to engage our graduate students in your scholarly activities. Optimally, you will eventually become the academic adviser of some of our graduate students, helping them by supervising their thesis topics. There are many service opportunities available within our department, college, and university.

A Cal Poly Pomona application form (<https://www.cpp.edu/~faculty-affairs/documents/acadapplication.pdf>) will be required if you are selected as a finalist.

Submit *all* materials via AMS [MathJobs](https://www.mathjobs.org). **In addition, you must *also* submit your cover letter, curriculum vitae, and Student Success Statement to Interfolio:** <https://apply.interfolio.com/55753>.

Your completed application packet will be available to be examined by all tenured and tenure-track faculty of the Cal Poly Pomona Department of Mathematics and Statistics. This position is open until filled. Those applications completed and received by **November 14, 2018** will receive first consideration. Early response is encouraged.

For More Information:

<http://www.cpp.edu/~math/>

Cidni Griffith -mathstatsearch@cpp.edu

(909) 869-3496

3801 W Temple Ave.

Department of Math & Stats

Pomona, CA 91768-4007



MATH ALLIANCE MEMBER INSTITUTION

Tenure-Track Assistant/Associate Professor openings in the Department of Biostatistics at Harvard T.H. Chan School of Public Health

The Department of Biostatistics at the Harvard T.H. Chan School of Public Health seeks candidates to fill two tenure-track positions at the assistant or associate professor level. For at least one of the positions, we seek candidates with a strong background in biostatistical theory and methods, demonstrated expertise in the development of new methods, and an interest in collaborative research in public health and biomedical sciences. We also seek candidates with expertise in data science more broadly, including computational science, machine learning and related methods, with applications in health and biomedical research. Candidates should have the potential to become leaders in the development and application of biostatistical methods and computation in health sciences and should be enthusiastic about teaching, training, and mentorship through our graduate programs. Responsibilities will include methodological and collaborative research, teaching, and supervision of graduate students. Qualified applicants would have a doctoral degree in biostatistics, statistics, mathematics, epidemiology, computer science, computational biology, or a related field. Candidates are required to have their doctoral degree by the time the appointment begins, and academic rank will be determined in accordance with the successful candidate's experience and accomplishments.

The Department of Biostatistics (www.hsph.harvard.edu/biostatistics) offers an exceptional environment to pursue research and education in biostatistics while being at the forefront of efforts to benefit the health of populations worldwide. Our faculty are leaders in the development of methods for the design and analysis of clinical trials and observational studies, missing data, causal inference, precision health, network analysis, computational and systems biology, microbiome analysis, statistical genetics and genomics, neurostatistics, and environmental statistics. Our innovative approaches to the analysis of massive health-related data are strengthened by a deep foundation in theory and application. The department prides itself on having strong mentoring and a supportive environment for assistant and associate professors. Our unique and diverse community provides unparalleled collaborative opportunities with academic departments across Harvard, the Dana-Farber Cancer Institute, and other world-class Harvard affiliated hospitals.

Please apply to: <http://academicpositions.harvard.edu/postings/8474>

For questions, please contact:

Chair, Search Committee for Assistant/Associate Professor of Biostatistics

c/o Susan Luvisi

Department of Biostatistics

Harvard T.H. Chan School of Public Health

Email: biostatjrsearch@hsph.harvard.edu

The Harvard T.H. Chan School of Public Health seeks to find, develop, promote, and retain the world's best scholars. We are committed to upholding the values of diversity, equity, and inclusion in our school and the communities we serve.

Harvard University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Information on resources for career development and work/life balance at Harvard T.H. Chan SPH can be found at: <http://hsph.me/resources-career-development-and-work-life-balance>.

The committee will review applications on a rolling basis, beginning immediately, until both positions are filled.



MATH ALLIANCE MEMBER INSTITUTION

Tenure–Track Positions Announced at the University of California, Riverside

The Department of Mathematics at the University of California, Riverside is running 2 searches this year, in hopes to fill 6 tenure-track level positions (3 in pure mathematics and 3 in applied mathematics). The links to official advertisements can be found here:

<https://www.mathjobs.org/jobs/UCR>

1. Tenured/Tenure-track Assistant Professor of **Applied Mathematics** in the Department of Mathematics. Full ad is available here: <https://www.mathjobs.org/jobs/jobs/12811>.
2. Tenure-Track Faculty Positions for Emerging Scholars in **Applied Mathematics** with Initial Postdoctoral Year. Full ad is available here: <https://www.mathjobs.org/jobs/jobs/12814>.

For more information about the positions, please contact Dr. Mark Alber, Department of Mathematics, University of California, Riverside: malber@ucr.edu. For inquiries regarding the application process, please contact Mary Stuart, Academic Personnel, at mary.stuart@ucr.edu.

1. Tenured/Tenure-track Assistant Professor of **Pure Math** in the Department of Mathematics. Full ad is available here: <https://www.mathjobs.org/jobs/jobs/12810>.
2. Tenure-Track Faculty Positions for Emerging Scholars in **Pure Mathematics** with Initial Postdoctoral Year. Full ad is available here: <https://www.mathjobs.org/jobs/jobs/12813>.

For more information about the positions, please contact Dr. Wee Liang Gan, Department of Mathematics, University of California, Riverside: wlgan@ucr.edu. For inquiries regarding the application process, please contact Mary Stuart, Academic Personnel, at mary.stuart@ucr.edu.

UCR is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission, such as engagement with diverse populations of students, role modeling and mentoring is a preferred qualification. For more information about UC's commitment to diversity, please visit <http://regents.universityofcalifornia.edu/governance/policies/4400.html>.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

List of other Position Announcements

University/Institution	Type of Position	Link for applications
Amherst College	Visiting Assistant Professor in Statistics	MathJobs
Appalachian State University	Tenure-Track Assistant Professor in Mathematics	Via email to mathscisearch@appstate.edu
Belmont University	Tenure-Track Assistant Professor in Mathematics	Apply Here
Clarkson University	Tenure-Track Assistant Professor in Mathematics	MathJobs
Marian University	Tenure-Track Assistant Professor in Statistics	Via email to hr@marian.edu
Millikin University	Tenure-Track Assistant Professor in Mathematics	Apply Here
Mt. Holyoke College	Assistant Professor of Mathematics	Apply Here
Mt. Holyoke College	Assistant Professor of Statistics	Apply Here
San Jose State University	Tenure-Track Assistant Professor position in Applied Mathematics	Apply Here
San Jose State University	Tenure-Track Assistant Professor position in Optimization	Apply Here
Smith College	Tenure-Track Assistant Professor in Mathematics	Apply Here
St. Edward's University	Tenure-Track Open Rank Faculty in Mathematics	Apply Here
St. John's University	Tenure-Track Assistant Professor in Mathematics or Computer Science	Apply Here
The New School	Assistant Professor of Mathematics	Apply Here
University of Hartford	Tenure-Track Assistant Professor in Mathematics	MathJobs
University of Washington, Tacoma	Tenure-Track Lecturer Postions in Math	Apply Here
University of Washington, Tacoma	Tenure-Track Assistant Professor in Statistics	Apply Here
University of Washington, Tacoma	Tenure-Track Assistant Professor in Mathematics	Apply Here
US Naval Academy	Tenure-Track Assistant Professor in Operations Research	MathJobs
US Naval Academy	Tenure-Track Assistant Professor in Mathematics	MathJobs
Villanova University	Tenure-Track Assistant Professor in Mathematics	MathJobs
Xavier University in Louisiana	Tenure-Track Assistant Professor in Mathematics	Apply Here