THE MATH ALLIANCE



DR. DAVID GOLDBERG Director

Happy New Year! Even though this is our "December" newsletter, we don't get it out until this first week of January, so we're in 2025 already as I write. I hope everybody is doing well, has had a great and joyful holiday season, and is finding some reason for optimism in the new year. Personally, it is hard to believe we are entering the last year of the first quarter of the 21st century. (The millennium still feels brand new to me.

We are coming up to the annual Joint Mathematics Meetings (JMM) in Seattle (January 8-11), and it is always good to see so many of our colleagues and friends there. The Math Alliance is always well represented at events throughout JMM. Years ago, I used to go through the program and compile a list of all the sessions and talks that were being given by Math Alliance Mentors, or Scholars, along with sessions which might be of interest to those in our community. As a sign of how much we've grown, that is a task which is too difficult to have it make any sense. We have tripled the number of Mentors and doubled the number of Scholars since we started being a presence at JMM. There are two Math Alliance sessions at JMM I will mention, and I hope many of those attending will be able to fit some of these activities into their busy JMM schedule. Great thanks are due to our Associate Director for Regional Alliances, Theresa Martines, who has been the principal organizer of both of these sessions.

On Friday, January 10, we will hold our 9th annual session featuring research talks by Math Alliance Scholars who have earned (or will soon earn) doctorates.

Save the Date:

2025 Field of Dreams Conference November 7-9 Atlanta, GA

You'll find it in your JMM program as "AMS Special Session on Research Presentations by Math Alliance Scholar Doctorates" (SS102A), and it will run 9AM-noon and 1:30PM - 5PM in Skagit 1 of the Seattle Convention Center. The morning session will feature talks by Sofia Rose Martinez Alberga, Maria Isabel Sanchez Muniz, Jorge Cisneros, Leila Mirsaleh Kohan, Jordan Collignon, and Govanni Granados. The afternoon speakers will be Lucas Hall, Josiah Sugarman, Jasmine Camero, Kevin Steine Harris, Daniel Benjamin Flores, Roberto Hernandez, and Johan Benedict Arroyo Cristobal. Many of these folks have been part of our community since they were sophomore or junior undergraduates, and it is always great to see how far they have come since those first encounters (usually at a Field of Dreams Conference). The titles and abstracts can be found at the JMM program. For those attending JMM, I hope you will consider dropping by for some of these talks, and supporting our Scholars and community.

On Saturday, January 11, in 4C-3, there will be a JMM Panel, "Fields of Success: Math Alliance Scholars Tell their Stories from Undergraduate to Graduate and Beyond", with panelists Jorge Cisneros, Ranthony Clark, and Talon Johnson, and Theresa Martines will moderate. This will be an opportunity for the wider mathematical sciences community to hear the stories that Math Alliance Scholar doctorates share with us each year at the Field of Dreams Conference. Again, it will be great to have as many folks from our community there as possible to support this activity.

While there are many, many, other great sessions at JMM, I will also take this opportunity to plug just one more. On Saturday, January 11, 11:30AM-1:00PM, in \$C-3, there will be the premiere of the second part of George Csicsery's film"Journeys of Black Mathematicians". Several from within the Math Alliance community have been involved in this production, most notably Johnny Houston (our Field of Dreams Keynote speaker in 2023), and just like the first part, this film will certainly feature many of our friends. I hope to see you there!!

What's Happening Next?

- **JMM 2025** Seattle, WA January 8-11, 2025
- Math For All Conference April 5, 2025
- 2025 Field of Dreams Conference (FOD 2025) Atlanta, GA
 November 7-9, 2025

ICERM WORKSHOP

ICERM welcomes participant applications for a topical workshop, "Uncertainty Quantification for Mathematical Biology", held during May 5-9, 2025, on-site at ICERM in Providence, RI, USA.

Workshop details: <u>icerm.brown.edu/program/topical_workshop/tw-25-uqmb</u>

The core goal of this workshop is to foster research and community collaborations at the intersection of computational and mathematical biology, UQ algorithms, and data-driven learning. This workshop aims to galvanize advancements across these fields. The week-long event will feature speakers, tutorials, panel and small-group discussions, and a poster session.

ICERM welcomes applications from faculty, postdocs, graduate students, industry scientists, and other researchers who wish to participate. To apply to attend, please submit an application through the website linked above. Some funding may be available for travel and lodging.

JMM Research Talks

(Titles and Abstracts available here)

Friday January 10 - Skagit 1 (Lower Level)

Time	Name	
9-930	Sofia Rose Martinez Alberga	Purdue University
930-10	Maria Isabel Sanchez Muniz	University of Minnesota
10-1030	Jorge Cisneros	University of Texas at Austin
1030-11	Leila Mirsaleh Kohan	Florida Atlantic University
11-11:30	Jordan Collignon	UC Merced
11:30-12	Govanni Granados	University of North Carolina

Time	Name	
130-2	Lucas Hall	Michigan State University
2-230	Josiah Sugarman	none
230-3	Jasmine Camero	Emory University
3-3:30	Kevin Steine Harris	Tacoma Community College
3:30-4	Daniel Benjamin Flores	Purdue University
4-4:30	Roberto Hernandez	Emory University
4:30-5	Johan Benedict Arroyo Cristobal	University of Nebraska

JMM Panel

JMM Panel on Fields of Success: Math Alliance Scholars Tell their Stories from Undergraduate to Graduate and Beyond.

Saturday January 11, 2 pm

Location 4C-3 Level 4

Jorge Cisneros – University of Texas at Austin

Ranthony Clark – Duke University

Talon Johnson - University of Texas at Arlington

Convexity MAY 18-23, 2025 and Combinatorics in Algebraic Geometry

UHLENBECK LECTURE COURSE

Tropical Geometry

Melody Chan | Brown University

Tropical geometry is a modern degeneration technique in algebraic geometry. Think of it as a very drastic degeneration in which one associates a limiting object to a family of algebraic varieties that is entirely combinatorial. I will introduce tropical geometry through the beautiful topics of tropical curves, tropical abelian varieties, and their moduli spaces.

Prerequisites: Exposure to combinatorics and graph theory, and a semester of algebraic geometry or algebraic topology.

TERNG LECTURE COURSE

Log-concavity and Matroids

Cynthia Vinzant | University of Washington

dence, such as that of edges in a graph and vectors in a linear space. I will introduce the theory of matroids along with their surprising connection to a class of multivariate polynomials that are log-concave on the positive orthant. Log-concavity is an important feature of many functions and discrete sequences appearing across mathematics, including combinatorics, algebraic geometry, convex analysis, and optimization. We will explore the real and combinatorial geometry underlying log-concavity along with applications to matroids and the mixing times of random walks.

Matroids are combinatorial structures that model indepen-

Prerequisites: Linear algebra and some exposure to each of algebra, combinatorics, graph theory, and probability.

ORGANIZERS

Wei Ho | IAS/University of Michigan/Princeton University, Director Michelle Huguenin | Institute for Advanced Study, Program Manager Dusa McDuff | Barnard College and Columbia University, Professor

APPLICATION DEADLINE IS FEBRUARY 14, 2025

For more information, please visit:

www.ias.edu/math/wam/program-years/2025-program-women-and-mathematics

 $W^{\dagger}AM$ is most grateful for renewed funding from the National Science Foundation, Lisa Simonyi, the Robert S. Hillas Fund, the Minerva Research Foundation and Princeton University Department of Mathematics. Their generous support enables $W^{\dagger}AM$ to continue its mission to recruit and retain more women in mathematics through new and sustained initiatives. $W^{\dagger}AM$ is open to all that support its mission regardless of gender.







MATH FOR ALL CONFERENCE April 5 2025

'irtual and In-person at

New Orleans, LA Austin, TX Boulder, CO Clemson, SC Salt Lake City, UT Virtual





For more information: https://biostat.centers.vt.edu/

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CUBE 2025 SUMMER PROGRAM

The Collaborative Undergraduate Biostatistics Experience (CUBE) program provides undergraduate students who are underrepresented in STEM programs with training and mentorship in a real-world collaborative health data science research project.



Program Dates:

June 2, 2025 through July 25, 2025

WHAT IS CUBE?

CUBE is an 8-week training program designed to provide undergraduate students who are underrepresented in STEM programs the opportunity to engage in a collaborative data science experience in the health field, along with related professional development activities. The goal is to offer students an experience working with a real-world dataset under the mentorship of experienced data scientists and clinical experts, to help them determine if they want to pursue a career in collaborative data science, and to provide them with professional development skills for the workplace or for graduate school.

WHO WILL HOST AND MENTOR STUDENTS?

Students will be hosted and mentored by faculty and staff at either Virginia Tech's (VT's) Health and Technology campus in Roanoke, Virginia or at the University of Virginia (UVA) located in Charlottesville, Virginia.

STIPEND?

\$4800 (housing and social outings will be covered by the program; student is responsible for food/meals; this stipend is taxable to the student)

MORE INFO

Scan this QR code to get more information about the CUBE summer program



FOLLOW US ON X (TWITTER)

@VT_BIOSTATS

APPLICATIONS

Applications Open:

October 1, 2024 to Febuary 28, 2025

Where can students apply?

https://biostat.centers.vt.edu/CUBE.html

WHO SUPPORTS THE CUBE PROGRAM?

CUBE is funded by the National Institutes of Health's (NIH) NIDA/NIAAA institutes under award number R25DA058482, AbbVie, as well as by Virginia Tech's College of Science, the University of Virginia's Division of Biostatistics, and the Integrated Health Research Institute of Virginia (ITHRIV).



OUR TEAM

The mission of the Center for Biostatistics and Health Data Science (CBHDS) is to achieve excellence in Virginia Tech's health- and medically-related research portfolio.



AMS Congressional Fellowship 2025–2026

The American Mathematical Society will sponsor a Congressional Fellow from September 2025 through August 2026. The Fellow will spend the year working on the staff of either a member of Congress or a congressional committee, contributing scientific and technical expertise to legislative and policy areas. They will bring their technical background and external perspective to the decision-making process in Congress. Prospective Fellows must be aware of and sensitive to political and social issues and have a strong interest in applying their knowledge to solve societal problems.

Now in its 20th year, the AMS Congressional Fellowship provides a unique public policy learning experience, and demonstrates the value of science-government interaction. The program includes an orientation on congressional and executive branch operations, and a year-long seminar series on issues involving science, technology, and public policy.

By the February 1, 2025 deadline date, applicants must:

- hold a PhD or an equivalent doctoral-level degree in the mathematical sciences.
- •be a US citizen.
- provide a statement of interest and qualifications.
- submit a current curriculum vitae and three letters of recommendation.

Applicants must not be a federal employee.

The Fellowship stipend is US\$105,812 for the Fellowship period, with additional allowances for relocation and professional travel, as well as a contribution toward health insurance.

"The fellowship definitely
will strengthen my communication
skills, and will allow me to apply
general logic and analysis skills in a
different setting than what I've
been used to. "

—Ellen Urheim, AMS Congressiona Fellow 2023–2024



Learn more at the JMM2025 session on *DC-based Policy* and Communications Opportunities, Friday, January 10, 2025 at 4:30 p.m.







Or visit www.ams.org/ams-congressional-fellowship to learn more and apply.

MSRI / Simons Laufer Mathematical Sciences Institute (SLMath) Programs

Register for Spring 2025 Scientific Workshops at SLMath

SLMath workshops are free to attend in Berkeley and online, thanks to the generous support of our funders, including the U.S. National Science Foundation. Register Online: slmath.org/workshops.

Probability and Statistics of Discrete Structures

- Connections Workshop (slmath.org/workshops/1085): January 23-24, 2025
- Introductory Workshop (slmath.org/workshops/1086): January 27-31, 2025
- <u>Detection, Estimation, and Reconstruction in Networks</u> (slmath.org/workshops/1098):
 April 21-25, 2025

Extremal Combinatorics

- <u>Connections Workshop Extremal Combinatorics</u> (slmath.org/workshops/1087): February 6-7, 2025
- <u>Introductory Workshop Graph Theory: Extremal, Probabilistic and Structural</u> (<u>slmath.org/workshops/1088</u>): February 10-14, 2025
- Algebraic and Analytic Methods in Combinatorics (slmath.org/workshops/1091): March 17-21, 2025

Other Workshops

- Hot Topics: Interactions between Harmonic Analysis, Homogeneous Dynamics, and Number Theory (slmath.org/workshops/1089): March 3-7, 2025
- <u>Critical Issues in Mathematics Education (CIME) 2025</u> (<u>slmath.org/workshops/1139</u>): April 2-4, 2025

Funding Support: Funding Support: Established researchers, postdoctoral fellows, and graduate students are invited to apply for funding. Funding awards are typically made eight weeks before the workshop; requests received after the funding deadlines are considered only if additional funds become available. Groups underrepresented in research-intensive contexts including women, gender-expansive individuals, minorities, and mathematicians not located at research centers are welcomed and encouraged to apply.

Resources for Workshop Attendees: SLMath is pleased to be able to offer a private room for nursing parents. Childcare grants are available for researchers with children under the age of 14 (limited to US Citizens and Permanent Residents, and foreign visitors with a visa status that allows for compensation, such as a J-1). See website for full details: slmath.org/family-services.

MSRI, now SLMath, has been supported from its origins by the U.S. National Science Foundation, joined by the National Security Agency, over 115 Academic Sponsor departments, private foundations, and generous and farsighted individuals.

MSRI / Simons Laufer Mathematical Sciences Institute (SLMath) -ADJOINT 2025

Call for Applications: ADJOINT 2025

June 16 - July 27, 2025

SLMath invites applications for the **2025 ADJOINT yearlong program** that provides opportunities for U.S. mathematicians and statisticians – especially those from the African Diaspora – to conduct collaborative research on topics at the forefront of mathematical and statistical research. Participants will spend two weeks on site in Berkeley taking part by either:

- Joining **ADJOINT** small groups under the guidance of some of the nation's foremost mathematicians and statisticians to expand their research portfolio into a new area, or
- Applying to **Self-ADJOINT** as part of an existing or newly-formed independent research group to work on a new or established research project.

The 2025 on-site director is Dr. Naiomi Cameron (Spelman College). For full details of ADJOINT projects and leaders, visit <u>slmath.org/adjoint</u>.

Eligibility All ADJOINT and Self-ADJOINT participants must be U.S. citizens or permanent residents, possess a PhD in the mathematical or statistical sciences, and be employed at a U.S. institution. Self-ADJOINT researchers may be part of only one group's application.

How to Apply: Applications will be hosted on MathPrograms.org beginning in Fall 2024. Application Deadline: **February 4, 2025**.

Funding & Support: Lodging, meals, travel expenses, and post-programmatic travel support. Childcare grants are available for researchers with children under the age of 17 (see website for restrictions) and a nursing room is available.



POSITION AT ARIZONA STATE UNVIERSITY

The School of Mathematical and Statistical Sciences (SoMSS) at Arizona State University invites applications for a full-time, tenure-eligible position in Actuarial Science at the rank of Assistant or Associate Professor. The anticipated start date is Fall 2025. The Actuarial Science programs at Arizona State University, established in 2014 and 2018 for the Bachelor's and Master's degrees respectively, have a total enrollment of approximately 100 students. Our Actuarial Science program obtained the Center of Actuarial Excellence (CAE) designation by the Society of Actuaries (SOA) in June 2024, which compliments the program's recognition at the gold level by the Casualty Actuarial Society (CAS). The program also has an active chapter of the Gamma lota Sigma, Kappa.

The essential duties of the position will be to conduct research and publish in appropriate top-tier journals on theory, methodology, or applications in the areas relevant to actuarial science, mathematical finance, and/or risk analysis and to deliver high-quality teaching in courses relevant for our undergraduate and Master's Actuarial Science programs, mentoring students, and engaging in professional service.

About Arizona State University

ASU exemplifies a new prototype for the American public research university. As articulated in the ASU Charter, ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Required qualifications:

- A Ph.D. in mathematical or statistical sciences or a closely related area by the time of appointment.
- Demonstrated potential for excellence in research and teaching, relative to career level.

Desired qualifications:

- Documented record of published research in actuarial science.
- Demonstrated ability or potential to secure grant support, relative to career stage.
- Demonstrated experience and/or interest in teaching and mentoring.
- Demonstrated potential for establishing interdisciplinary collaborations.
- Significant progress toward credentialing at the associateship or fellowship level with the Society of Actuaries (SOA), Casualty Actuarial Society (CAS), or a society mutually recognized by SOA or CAS.
- Demonstrated commitment to working with faculty, students, staff, and communities to advance the principles of the ASU Charter.

Application Instructions:

The application deadline is **December 24,2024**. Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled. Candidates will be asked to create or use an existing Interfolio Dossier to submit the following application materials:

Submit the following to the ASU Interfolio website: http://apply.interfolio.com/159695

- 1. A cover letter that briefly explains the candidate's interest in the position and addresses the candidate's commitment to the ASU Charter.
- 2. A curriculum vitae.
- 3. A personal statement addressing the candidate's research program.
- 4. A statement of teaching experience and philosophy.
- 5. Four (4) confidential letters of recommendation that address teaching and academic credentials. One of these letters should address the candidate's teaching qualifications.

Applications outside of Interfolio will not be considered.

For additional information regarding position specifics, please contact Tammy Palmer via email at tammy.palmer@asu.edu.

mathalliance@purdue.edu | www.mathalliance.org

This ad has been abbreviated to fit the page. You can see the ad in its entirety on our website.



POSITION AT ARIZONA STATE UNVIERSITY

The School of Mathematical and Statistical Sciences (SoMSS) at Arizona State University invites applications for Postdoctoral Research Scholar positions. Anticipated start date is August 16, 2025. These full-time academic year, benefits-eligible positions are renewable on an annual basis through spring 2028 contingent upon satisfactory performance, availability of resources, and the needs of the university. Applicants must be within five years of receipt of their PhD to be considered for initial appointments and subsequent renewals.

The essential duties of the position will be to conduct research in the mathematical sciences, along with a teaching load that is normally three courses per year.

About The College of Liberal Arts and Sciences

The College of Liberal Arts and Sciences is the academic heart of Arizona State University, committed to improving communities on a local, national and global scale. We support the professional development and growth of our faculty and staff in their cutting-edge research to advance these aims. Within The College, our faculty engage with a large curious student body, guiding them as they grow into socially aware, critical thinkers and writers able to succeed in a wide range of careers and to address the challenges of the twenty-first century. Advancing the success of our students remains our top priority. To learn more about The College of Liberal Arts and Sciences, please visit https://thecollege.asu.edu.

About Arizona State University

ASU exemplifies a new prototype for the American public research university. As articulated in the ASU Charter, ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.

Required qualifications:

- A Ph.D. in mathematics, applied mathematics, or a closely related area by the time of appointment.
- Demonstrated potential for excellence in research and teaching, relative to career level.

Desired qualifications:

- A documented research record in an area that meshes with the research interests of a current faculty member or group of faculty members. SoMSS has strong research groups in analysis, combinatorics, computational mathematics, differential equations, dynamical systems, geometry, graph theory, mathematical biology, mathematics education, number theory, probability, and statistics.
- Demonstrated commitment to working with faculty, staff, students and communities to advance the ASU Charter.

Application Instructions:

The application deadline is **December 24, 2024**. Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled. Candidates will be asked to create or use an existing Interfolio Dossier to submit the following application materials:

Submit the following to the ASU Interfolio website: http://apply.interfolio.com/159732

- 1. A cover letter that briefly explains the candidate's interest in the position and addresses the candidate's commitment to ASU's Charter.
- 2. A curriculum vitae.
- 3. A personal statement addressing the candidate's research program.
- 4. A statement of teaching experience and philosophy.
- 5. Four (4) letters of recommendation; one of these letters should address the candidate's teaching qualifications that address the candidate's teaching qualifications.

Applications outside of Interfolio will not be considered.

For additional information regarding position specifics, please contact Tammy Palmer via email at <u>tammy.palmer@asu.edu</u>.

POSITION AT MICHIGAN STATE UNIVERSITY

The Department of Mathematics at Michigan State University invites applications for two RTG Postdoctoral Associate positions with a starting date of Fall 2025. This is a three-year, benefits eligible position, associated with the NSF-funded RTG project "Algebraic and Geometric Topology at Michigan State." Topology at MSU is represented by a vibrant group of faculty and graduate students; a group with rich interaction amongst not only its members but also with the closely connected research groups at MSU in geometry and algebra. RTG Postdoctoral Associates will be integrated into the topology group through pairing with faculty mentors, participation and co-leadership in RTG activities, vertically integrated structured research projects, thoughtful curation of teaching assignments, and engagement in the department's active instructional mentoring program. Candidates will be evaluated on their potential in research, teaching, graduate and undergraduate mentorship, and their fit with the topology research community at MSU. Candidates are required to have a Ph.D. in Mathematics by August 10, 2025. Due to NSF rules, the position is restricted to US citizens, nationals, or permanent residents.

Some features of the RTG postdoctoral position include:

- Mentoring in research, teaching, and other aspects of professional development
- Summer support for two summers
- Funding in the amount of \$6000 per year for travel and supplies
- · A teaching expectation of one course per semester
- Participation in RTG activities such as seminars, conference organization, research collaboration with graduate students and faculty, and assisting with mentoring and directed reading programs for undergraduates

Applicants should submit the following items on Mathjobs.org to complete their application:

- Cover Letter
- Curriculum Vitae
- Research Statement
- Teaching Statement
- Four Reference Letters with at least one of which addresses teaching (Letters to be submitted online by the

reference writers at Mathjobs.org posting)

Applicants must submit their application materials via <u>Mathjobs.org</u> at <u>https://mathjobs.org/jobs/list/25010</u>.

Review of applications will begin on **December 8, 2024**, and will continue until the positions are filled. A background check is required for employment. Appointments will be renewed annually for up to three years, contingent on satisfactory performance.

For questions or further information:

- Teena Gerhardt (teena@math.msu.edu)
- Matthew Hedden (mhedden@math.msu.edu)
- Effie Kalfagianni (kalfagia@msu.edu)
- Matthew Stoffregen (stoffre1@msu.edu)

Department Website: https://math.msu.edu/

MSU is an affirmative-action, equal-opportunity employer and is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. The University actively encourages applications and/or nominations of women, persons of color, veterans and persons with disabilities. MSU is committed to providing a work environment that supports employees' work and personal life, and offers employment assistance to the spouse or partner of candidates for faculty and academic staff positions.

POSITION AT MICHIGAN STATE UNIVERSITY

Three Open-rank tenure system Faculty Positions in Computational Biology

The Department of Computational Mathematics, Science and Engineering (CMSE) at Michigan State University (MSU) invites applications for three open-rank tenure system faculty positions in computational biology beginning Fall 2025. All three positions will be appointed in CMSE, but joint appointments with other MSU departments are also possible based on the candidate's research interests and teaching portfolio. Two of the three positions are supported by the MSU Global Impact Initiative, and one position is supported by the MSU College of Natural Sciences. Duties of these positions include research, teaching and service. The review of applications will start on January 5, 2025 and the search will continue until the three positions are filled.

The CMSE Department, jointly administered by the College of Natural Science and the College of Engineering, is one of the newest units at MSU. Founded in 2015, CMSE recognizes computation as the "triple junction" of algorithm development and analysis; high performance computing; and applications to scientific and engineering modeling and data science. The CMSE department hosts leading faculty groups whose research spans a broad collection of foci, including Computational Biology and Bioinformatics, Machine Learning, Optimization, Scientific Computing, Statistical Data Analysis, and Topological Data Analysis. In conjunction with these research activities, the CMSE department boasts a strong PhD program and a vibrant postdoctoral program. The CMSE Department also offers BS and MS degrees in Data Science with minors in Data Science and CMSE, with many students continuing to advanced degrees.

Competitive candidates will have a Ph.D. in relevant fields for the position and, preferably, a minimum of 2 years of postdoctoral experience. Applicants must also have a strong track record of conducting cutting edge research in computational biology, demonstrate their commitment to teaching and mentoring of students, and to building an equitable and diverse scholarly and instructional environment. While preference will be given to appointments at the assistant professor level, associate or full professor appointments may also be considered depending on the experience and merits of the candidate.

All areas of computational biology will be considered, including, but not limited to, multi-omics integration, gene function prediction, single-cell and spatial omics modeling, quantitative genetics of complex traits, functional genomics and epigenomics, drug discovery, systems biology, protein structures, or metabolomics. Applicants considered for this cluster-hire will preferably develop innovative and scalable computational models (e.g. machine learning, deep learning, optimization or statistics) or carry out integrative data-driven applications to solve significant biological questions. The competitive candidates will be expected to establish synergistic and interdisciplinary collaborations with faculty across the MSU campus.

Applications will be considered complete if they include all of the following required components:

- 1.One-page cover letter that frames the application in the context of the ad of this cluster-hire and addresses the relation of the candidate's research to the areas of interest.
- 2.A current CV with list of publications, funding history, contributed and invited talks, teaching and mentoring roles, contributions to the academic community, and service to the community.
- 3.A two-to-six-page research statement highlighting past research accomplishments and future plans that frame the applicant's ability to conduct independent research. This statement should include experiences or plans to use research to advance diversity, equity, and inclusion within the computational biology research community.
- 4.A two-to-three-page teaching statement describing the applicant's experience in instruction and research mentoring of graduate and undergraduate students, including experiences or plans to create an inclusive and equitable learning environment for students.
- 5.At least three letters of reference. These letters should address the applicant's research ability, instructional experience and commitment, and/or service roles, if known.

Applications should be submitted via MSU careers website (<u>careers.msu.edu</u>), posting number 1001356. A background check is required for employment. Questions may be directed to the chair of the search committee, Prof. Jianrong Wang (wangj164@msu.edu).

Applicants are encouraged to explore the MSU Department of CMSE website at https://cmse.msu.edu.

MSU is committed to providing a work environment that supports employees' work and personal life, and offers employment assistance to the spouse or partner of candidates for faculty and academic staff positions.

POSITION AT MICHIGAN STATE UNIVERSITY

The <u>Department of Mathematics</u> at <u>Michigan State University</u> invites applications for Fixed-Term Departmental Postdoctoral Research Associates (Postdocs) and Fixed-Term Research Associates with a starting date of Fall 2025.

Postdoctoral Research Associates (Postdocs) comprise the department Postdoctoral Fellows program. Postdoctoral Fellows contribute to the research and instructional mission of our unit. These are academic year appointed positions.

Fixed-Term Research Associates support the research activities of currently funded external research grants, as outlined in the grants statement of work and budget. These positions are either academic or annual year appointments.

All positions are benefits eligible and potentially renewable on an annual basis through Spring 2028, contingent upon satisfactory performance and availability of funding. Candidates will be evaluated on their potential in research and teaching.

Candidates are required to have a Ph.D. in Mathematics or related field by August 10, 2025. Applications from all areas of mathematical research will be considered. Research Associates will be paired with faculty mentors with whom they have compatible research interests and will engage in our active instructional mentoring program.

Applicants should submit a curriculum vitae, statements on research and on teaching, and arrange for at least four (4) letters of recommendation to be submitted, one of which must specifically address the applicant's teaching experiences. It is helpful if the cover letter indicates if the applicant wishes to be considered by specific MSU faculty.

Applications must be submitted via <u>mathjobs.org</u>. Submit your application directly at <u>https://www.mathjobs.org/jobs/list/25186</u>. The evaluation process will begin on December 2, 2024, and review of applications will continue until positions are filled. A background check is required for employment.

Equal Employment Opportunity Statement: All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identify, national origin, citizenship, disability or protected veteran status.

POSITION AT WASHINGTON STATE UNIVERSITY

The Program in Data Analytics and the Department of Mathematics and Statistics at Washington State University invite applications for an Assistant Professor (Teaching), Career track faculty position in Pullman, WA, with a specialty in Data Analytics. This position is a fixed-term, nine-month, three-year appointment with the possibility of renewal. We seek applicants who have expertise in Data Science and Analytics with focus in fields related to data such as: data structures, machine learning, data mining, databases, data modeling, data ethics, corporate analytics or other data domain expertise. The successful candidate will be expected to teach undergraduate and potentially graduate courses for the Data Analytics program, create curriculum innovation, and work with us to continue to develop and expand the Data Analytics program at WSU. It is anticipated that the successful candidate will begin the appointment on August 16, 2025.

Required Qualifications: Earned Ph. D. in Data Science, Data Analytics, Statistics, Applied or Computational Mathematics, Computer Science or related fields grounded in Data Science or MS in one of the above fields, with industry experience in data science/analytics or teaching experience in one of the fields (mentioned above) of at least 3 years by appointment date. Demonstrated record of or potential for program and curricular development. Proven or potential for successful teaching and instruction. Demonstrated record of or potential for commitment to equitable and inclusive educational experiences as in alignment with WSU's land grant mission. Applicants must be authorized to work for any employer in the U.S. We are unable to sponsor or take over sponsorship of an employment Visa at this time.

To Apply: Visit <u>wsu.edu/jobs</u>, select your appropriate employment status, and search for R-12623. Applicants must upload the following required documents to their online application. External candidates, please upload all documents in the "Resume/CV" section of your application. Internal candidates, please upload all documents in the "Resume/Cover Letter" section of your application.

Applicants should include a cover letter addressing qualifications for this position as well as a response to the following prompt: As a land-grant university, our university has a continuing commitment to ensuring equitable and meaningful inclusion in our classrooms, collaborations, and academic work. The successful candidate for this faculty position will have the experiences, knowledge, and skills to build their pedagogy, curriculum, and service in ways that reflect and enhance this commitment. Using the job announcement for this position, please list at least three areas of responsibility you see as directly related to fulfilling this promise, and explain, in each , how your past education and teaching experiences, and resulting knowledge and skills, have prepared you to do this work. Please include your CV, teaching statement, names, addresses, and contact information of three references who can address your history of and potential for excellence in teaching and service.

Inquiries should be directed to Daryl DeFord <u>daryl.deford@wsu.edu</u> or Nairanjana Dasgupta <u>dasgupta@wsu.edu</u>.

Posting Close Date: Applicants must submit their completed application by **February 15, 2025,** at 12:00 a.m Pacific Time.

Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Members of ethnic minorities, women, special disabled veterans, veterans of the Vietnam-era, recently separated veterans, and other protected veteran, persons of disability and/or persons age 40 and over are encouraged to apply.

POSITION AT CASE WESTERN RESERVE

Description:

The Department of Mathematics, Applied Mathematics, and Statistics at Case Western Reserve University in Cleveland, OH invites applications for one or more limited-term visiting assistant professor faculty positions in the area of applied mathematics starting on July 1, 2025. Visiting assistant professor appointments are renewable for a total of up to three years, upon demonstration of satisfactory performance in research and teaching.

Visiting assistant professors are expected to teach a variety of courses based on the needs of the department. The teaching load is 2 courses per semester (2 semesters per academic year). These positions are open to qualified candidates in all areas of applied mathematics, but preference will be given to candidates whose research is closely related to that of current faculty in the department. Active research areas in the department include scientific computing, mathematical biology, biofluids, inverse problems, mathematical imaging science, uncertainty quantification, and applications in data science. Applicants are encouraged to consult https://bulletin.case.edu/arts-sciences/mams/ for more information about the applied mathematics undergraduate and graduate programs, and https://mathstats.case.edu/ for more information about the department.

Qualifications:

All candidates must hold a PhD in Applied Mathematics or a related field by the time of the appointment, have demonstrated teaching experience, and have a publication record appropriate to rank.

Applications instructions:

Application Instructions Applications must include: (1) cover letter (2) curriculum vitae, (3) statement of current and future research plans, (4) statement of teaching, and (5) at least three letters of recommendation be submitted directly by the writers, at least one of which should address teaching. All application materials should be submitted electronically at http://apply.interfolio.com/158390.

Review of applications will begin **January 15**, **2025**, and continue until all positions are filled. General correspondence about this position should be sent to Wanda Strychalski, Search Committee Chair, at <u>wanda.strychalski@case.edu</u>.

About CWRU: Case Western Reserve University is located in the University Circle cultural district of Cleveland, Ohio, home of the nationally top-ranked Cleveland Clinic, internationally famous Cleveland Orchestra, the Cleveland Museum of Art, the Cleveland Institute of Music, and the Cleveland Institute of Art. Within a five-mile radius from CWRU are the nation's second largest theater district, several professional sports teams, a wide range of musical, artistic, and culinary venues, recreational opportunities, and numerous diverse communities in which to live.

Case Western Reserve University strives to maintain a diverse and inclusive work environment. All applicants are protected under Federal law from discrimination based on race, color, religion, sex, national origin, disability, age and genetics.

Case Western Reserve University provides reasonable accommodations to applicants with disabilities. Applicants requiring a reasonable accommodation for any part of the application and hiring process should contact the Office of Equity at 216.368.3066 or equity@case.edu to request a reasonable accommodation. Determinations as to granting reasonable accommodations for any applicant will be made on a case-by-case basis.

POSITION AT CASE WESTERN RESERVE

Visiting Assistant Professor in Statistics, Case Western Reserve University

Description:

The Department of Mathematics, Applied Mathematics, and Statistics at Case Western Reserve University (CWRU) is searching for at least one visiting assistant professor in statistics, to begin in Fall 2025. These positions are open to candidates in all areas of statistics, but preference will be given to candidates whose research is closely related to that of current faculty in the department. Visiting assistant professors are expected to teach a variety of courses at both the graduate and undergraduate level, and to engage in active research. These positions are renewable for up to three years.

Qualification:

All candidates must hold a PhD in Statistics or a related field by the time of the appointment, have demonstrated teaching/mentoring experience, and have a publication record appropriate to rank.

Application Instructions:

Candidates should submit 1) a letter of application, 2) a curriculum vitae, 3) a statement of current and future research plans, 4) a statement of teaching philosophy and experience, and 5) the candidate should arrange for three letters of recommendation to be submitted directly by the writers dated within the last calendar year, at least one of which should address teaching. Case Western Reserve University and the Department of Mathematics, Applied Mathematics and Statistics value activities that support diversity and inclusion, and we invite applicants to describe such activities in their submitted materials.

All application materials should be submitted electronically at: http://apply.interfolio.com/156798.

Review of applications will begin January 15, 2025, and continue until all positions are filled. General correspondence about this position should be sent to Anirban Mondal, Search Committee Chair, at anirban.mondal@case.edu.

About CWRU:

Case Western Reserve University is located in the University Circle cultural district of Cleveland, Ohio, home of the nationally top-ranked Cleveland Clinic, internationally famous Cleveland Orchestra, the Cleveland Museum of Art, the Cleveland Institute of Music, and the Cleveland Institute of Art. Within a five-mile radius from CWRU are the nation's second largest theater district, several professional sports teams, a wide range of musical, artistic, and culinary venues, recreational opportunities, and numerous diverse communities in which to live.

Case Western Reserve University strives to maintain a diverse and inclusive work environment. All applicants are protected under Federal law from discrimination based on race, color, religion, sex, national origin, disability, age and genetics.

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POSITION AT UNIVERSITY OF CALIFORNIA, IRVINE

APPLICATION WINDOW- Open date: October 29, 2024

Next review date: Sunday, Dec 1, 2024 at 11:59pm (Pacific Time) Apply by this date to ensure full consideration by the committee.

Final date: Friday, Feb 28, 2025 at 11:59pm (Pacific Time)

Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

POSITION DESCRIPTION- The Department of Statistics (www.stat.uci.edu) in the Donald Bren School of Information and Computer Sciences (ICS) at the University of California, Irvine (UCI) invites applications for a tenure-track faculty position at the assistant professor level with an anticipated start date of July 1, 2025.

The Department of Statistics has a strong interdisciplinary flavor, focused on developing state-of-the-art methods for solving topical data-driven problems in natural and social sciences, medicine and engineering, and advancing the statistical theory that underlies those methods. We are searching for faculty with strong research potential, a commitment to excellence in teaching, dedication to inclusive excellence, and enthusiasm for helping our collegial department continue to grow. Applicants should hold a Ph.D. degree (or expected by Spring/Summer 2025) in statistics, biostatistics or a related field. Candidates with research interests in all areas of statistics will be considered.

The U.S. News and World Report 2024 Best Global Universities ranking identifies UCI as one of the top 30 universities for a graduate degree in statistics in the United States. The department is further ranked within the top 20 statistics graduate programs among all public institutions. Our Master of Data Science (MDS) was recently ranked No. 7 overall on Fortune's list of best Masters degree programs in data science and we are host to the first undergraduate degree in data science within the University of California system. The department currently consists of 16 primary faculty, 57 PhD students, 28 MS students, and 127 MDS students. Faculty distinctions in the department include 7 ASA fellows, 4 AAAS fellows, 3 IMS fellows, 3 Chancellor's professors, and 1 Distinguished professor.

The University of California, Irvine is ranked as a top 10 public university by U.S. News and World Report, has been identified by The New York Times as No. 1 among U.S. universities that do the most for low-income students, and is No. 2 in the west for diversity according to The Wall Street Journal/Times Higher Education. UCI has also done what no other school has done—rank among Sierra's Top 10 most sustainable colleges for 12 years in a row. UCI is located in Orange County, 4 miles from the Pacific Ocean and 45 miles south of Los Angeles.

Completed applications containing a cover letter, curriculum vita, inclusive excellence activities statement, teaching statement, research statement, and contact information of three recommendation letter writers should be uploaded electronically. Recommendation letters will be requested for applicants who progress to the next stage of the search. Please refer to the following web site for instructions https://recruit.ap.uci.edu/JPF09349. The review of applications will begin December 1, 2024, and full consideration will be given to all applications received by this date.

QUALIFICATIONS- Basic qualifications (required at time of application)
Applicants should hold a Ph.D. degree (or expected by Spring/Summer 2025) in statistics, biostatistics or a related field. Candidates with research interests in all areas of statistics will be considered

APPLICATION REQUIREMENTS- Document requirements

- Curriculum Vitae Your most recently updated C.V.
- Cover Letter
- Statement of Research
- Teaching Statement See our guidance for writing a reflective teaching statement.
- Inclusive Excellence Activities Statement Statement addressing how past and/or potential contributions to inclusive excellence will advance UCI's Commitment to Inclusive Excellence. See our guidance for writing an inclusive excellence activities statement.
- Sexual Misconduct, Harassment and Discrimination Declaration Form All applicants of academic
 positions at the University of California, Irvine must download, complete, sign, and upload the
 following form with their application: Sexual Misconduct, Harassment and Discrimination
 Declaration Form

Reference requirements- 3 required (contact information only)

Apply link: https://recruit.ap.uci.edu/JPF09349

mathalliance@purdue.edu | www.mathalliance.org