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Upcoming

Events

2020 Field of Dreams Conference Nov. 6-8, 2020

IM&A INSTITUTE FOR MATHEMATICS AND ITS APPLICATIONS

MATH ALLIANCE *Building a New American Community in the Mathematical and Statistical Sciences*

Virtual Field of Dreams Agenda

Friday, November 6

10:45 - 11:00 a.m.   **Welcome Remarks**

11:00 - 12:00 p.m.   **Four Parallel Sessions**

Panel 1: The Value of Undergraduate Research Experiences (undergrads)
Panelists: Alexander Barrios (Carleton College)
            Melissa Gutierrez Gonzalez (Occidental College)
Moderator: Zsuzsanna Szanilslo (Valparaiso University)

Panel 2: Maximizing Productivity in Graduate School (graduates)
Panelists: Ayo Adeniran (Pomona College)
            Julianne (Julie) Vega (Kennesaw State University)
Moderator: <u>Syvillia Averett</u>

Guided Conversation 1: Mentoring Successful Undergrad Programs (faculty)
      Bill Velez (University of Arizona)

Guided Conversation 2: Mentoring Successful Graduate Programs (faculty)
      Edray Goins (Pomona College)

12:00 - 1:00 p.m.   **Two Parallel Sessions**
Panel 3: Careers in Government and Industry
Panelists: David Murillo (American Express)
            Calandra Tate Moore (US Department of Defense)
            Venkat Sethuraman (Bristol-Myers Squibb)
Moderator: Roosevelt Johnson (NASA, Ret.)

Guided Conversation 3: Mentoring Across the Continuum (faculty)
      Bill Velez (University of Arizona)
      Edray Goins (Pomona College)

1:00 - 2:00 p.m.   **Lunch**

2:00 - 2:45 p.m.   **Plenary Conversation 1:**
Ranthony Edmonds (Ohio State University)
Interviewer, Victoria Uribe (Arizona State University)
Intro: Phil Kutzko (University of Iowa)

2:45 - 3:15 p.m.   **Social Tea/Networking**
3:15 - 4:30 p.m.   **Fairs (Career Fair and Math Science Professional Organizations)**

5:00 - 8:00 p.m.   **Evening Social Activities**

Virtual Field of Dreams Agenda *con't*

Saturday, November 7

11:30 - 12:30 p.m.   **Two Parallel Sessions**

    Panel 4: Preparing for your First Professional Position (graduates)
    Panelists: Reggie McGee (College of Holy Cross)
                  Ariel (Bowman) Leslie (Lockheed Martin)
    Moderator: Leslie McClure

    Panel 5: Preparing for graduate school (undergrads)
    Panelists: Joe Omojola (Southern University at New Orleans)
                  Vanessa Rivera Quiñonez (Sagrado Global)
    Moderator: Isaac Wright (Penn State University)

12:30 - 1:30 p.m.   **Report of the Math Alliance Leadership**

    Programs (F-GAP, Co-F-GAP?, Summer workshop,regional, gpgs…)
    Doctorates earned by Math Alliance Scholars
    Projects and Committees
    Q&A from community

1:30 - 2:30 p.m.   **Lunch**

2:30 - 3:30 p.m.   **Fields of Success - Stories from Math Alliance Alumni**
    Panelists: April Harry (Rover.com)
                  Others to be announced
    Moderator: TBA

3:30 - 4:00 p.m.   **Social Tea**

4:00 - 4:45 p.m.   **Plenary Conversation 2, Donald Cole (University of Mississippi)**
    Interviewer, Fabrice Ulysse (University of Notre Dame)
    Intro: David Goldberg

4:45 - 5:00 p.m.   **Closing Remarks / Concluding Remarks**

Thoughts from the Director...

David Goldberg

Executive Director of the Math Alliance

The month of October has been eventful, in many senses of the word. As we move towards November, I want to encourage everyone to vote. We're looking forward to our big Virtual Field of Dreams Event, November 6&7. The current agenda appears elsewhere in this newsletter. We thank our Partners at the Institute for Mathematics and its Applications (IMA) for helping us, hosting the event, and providing their expertise. They are staging the conference on the [Swapcard](#) platform. **Our Virtual Career Fair** will take place during this event, November 6, 3:15-4:30PM EST, and we encourage all **Math Alliance doctorates** to sign up to participate. Over 50 academic departments can choose to have a table at the event, and we expect non-academic employers, **including 3M, American Express, Bristol Myers Squibb, Eli Lilly & Co., Los Alamos National Labs and United Health.** These folks are interested in you, and this is a good chance to learn more about them.

We've had our Statistics Initiative meeting on October 17, panel on Day in the Life of an Industry Statistician, hosted by our friends at Bristol Myers Squibb (BMS), on October 23, and our REU/Internship and Graduate Fairs on October 24. Now we are looking forward to something which reminds us of our real Field of Dreams Conference and how we build community. This Virtual Field of Dreams Event and our recent Taking our Place in Graduate School workshop owe a great debt to our Agenda Committee – Kellie Archer (Ohio State), Pamela Harris (Williams), Angela Hicks (Lehigh), and Phil Kutzko (Iowa). Thank you all!!

Besides our Partners at IMA, and BMS, we are fortunate to have more Partners supporting our Math Alliance. The American Statistical Association provides us and our whole community with tremendous support and I want to thank them. We also have five University Partners – Penn State University, Purdue University, University of Minnesota, Washington University in St. Louis, and **our newest partner**, **Arizona State University!!** Thank you, ASU, for becoming a Partner, and for the staff at the Simon Levin Center at ASU for providing so much support, especially for our series of fall events. I know many of you have met Sherry Woodley and Becca Perlin from ASU over the last few weeks, and we can thank them for the superhuman efforts they made to get everyone registered, acclimated and running in Sococo, and we would not have been able to stage anything like the events we have without their help. Thank you, Becca and Sherry!! We also should especially thank Purdue University for their continuing support of our Math Alliance by giving us a home base. Of course, as always, we owe a great thanks to Rebecca Lank, our Program Manager, for her continual dedication and commitment to our work. Thank you, and thanks again to all of our Partners.

As I look back over this note, I realize how emblematic this month of activities symbolizes of our overarching philosophy, that we build community, and always work through that community. So many people and entities contribute to our success. As it was explained to me the first time I heard of the Math Alliance: If we all do some work, no one has to do too much. Thank you all for making that idea a reality!! I look forward to seeing you at the Virtual Field of Dreams Event!!!

Phil Kutzko Gives Talk

Here is a recording of a talk that Phil Kutzko, Math Alliance Founder and Emeritus Director, gave at the recent 2020 Paul J. Sally, Jr. Midwest Representation Theory Conference. This annual conference is named for Paul J. Sally, Jr. who, in addition to being internationally recognized for his mathematical research, devoted himself throughout his career to improving the education that Chicago public school students, most from minority backgrounds, received in mathematics. Phil viewed Paul as a mentor and close friend.

The title of Phil's talk, *"A Jew and an Irishman went to Heaven": My Friendship with Paul Sally*, is a reflection on the effects of discrimination on ethnic groups that were not yet considered "white" in the generation when he and Paul came of age.

Corona Crisis: Impact on Junior and Women Mathematicians

The Corona Crisis: Impact on junior and women mathematicians. Here is a link to an open letter from the European Women in Mathematics Association concerning the effects of COVID-19 on junior and women mathematicians https://www.europeanwomeninmaths.org/ewm-open-letter-on-the-covid-19-pandemic/.

AMS Elections: VOTE BY SUNDAY NOV. 1

Math Alliance Community Members on the AMS Ballot:

- Rodrigo Bañuelos, Vice President
- Duane Cooper, Council Member at Large
- Kiran Kedlaya, Council Member at Large
- Victor Moll, Council Member at Large
- Mark Tomforde, Council Member at Large
- Ron Buckmire, Nominating Committee
- David Savitt, Nominating Committee
- Barbara Lee Keyfitz, Editorial Board Committee

Officers and committees of the AMS have a chance to influence policies at the Society, which makes these elections very important for our profession. While there are many things to consider when casting your vote, we hope you'll weight the fact that these individuals, through their participation as Math Alliance Mentors, have made a commitment to working for change within the mathematical professional community. We need such voices represented in this governance structure.

Please be sure to vote, and please consider voting for our Math Alliance Mentor candidates!!

Graduate School GRE Requirements

We have added an updated list of schools with their updated GRE requirements to our webpage. Here is the link to find that information.

The information was compiled and provided by James Guillochon.

REU Opportunities

We wanted to tell you about opportunities for doing undergraduate mathematical research. In summer REUs (Research Experiences for Undergraduates), you spend 6-10 weeks doing research, get paid, and sometimes even get to have your name on a paper. Due to the pandemic, the programs may run virtually (as they did last summer). If you add your name to this list and we will send you updates. You can find more information about some of these programs.
 If you would like to talk about these opportunities, discuss your personal statement for your application, or any questions, feel free to email us at Adam.Sheffer@baruch.cuny.edu or sjm1@williams.edu.

Celebrating Hispanic Heritage Month with Lathisms

Lathisms (Latinx and Hispanics in the Mathematical Sciences) was founded in 2016 with the mission of showcasing the contributions of Latinx and Hispanic mathematicians during Hispanic Heritage Month United States from September 15 and October 15.

Honorees that are Current or Past Math Alliance Scholars:
- Lynette Guzman
- Anthony Sanchez
- Andrés Vindas Meléndez

Honorees that are current Math Alliance Mentors:
- Mario Banuelos
- Alexander Barrios: *was a predoctoral scholar.*
- Javier Alejandro Chávez-Dominguez
- Tim Chumley
- Maytee Cruz Aponte: *was a predoctoral scholar.*
- Jessica Deshler
- Alexander Diaz-Lopez: *was a predoctoral scholar.*
- Claudia Falcon
- Ralph Gomez
- Ryan Moruzzi Jr.: *was a doctoral scholar.*
- Angel Pineda
- Erwin Suazo

To see the full calendar of honorees, see their website.

MSRI Upcoming Programs

MSRI invites applications for Research Professors, Research Members and Postdoctoral Fellows in the following programs:
The Analysis and Geometry of Random Spaces (January 18 - May 27, 2022)

Complex Dynamics: from special families to natural generalizations in one and several variables (January 18 - May 27, 2022)
Research Professorships are intended for senior researchers who will be making key contributions to a program, including the mentoring of postdoctoral fellows, and who will be in residence for three or more months. Research Memberships are intended for researchers who will be making contributions to a program and who will be in residence for one or more months. Postdoctoral Fellowships are intended for recent PhDs.

MSRI has been supported from its origins by the National Science Foundation, now joined by the National Security Agency, over 100 Academic Sponsor departments, by a range of private foundations, and by generous and farsighted individuals.

Looking for a new Editor-in-Chief for the AMS Inclusion/Exclusion blog

The AMS Inclusion/Exclusion blog is in need of a new Editor in Chief. This blog increases awareness of the experiences of marginalized and underrepresented groups in the mathematical sciences, with the goal of building a more inclusive, supportive, and diverse mathematical community.

Given the Editor-in-Chief's central role in providing leadership and vision for the blog, mathematical scientists who identify as members of marginalized or underrepresented groups are especially encouraged to apply. Editors are asked to commit to a three-year term, with an opportunity for both the editor and the AMS to review the commitment each year. AMS blogs are hosted on blogs.ams.org and maintained in WordPress, an editorially-independent platform that amplifies the voices of members of the mathematical community and furthers the AMS mission of creating connections among mathematicians and advancing research.

With sincere thanks to the current Editor-in-Chief of the Inclusion/Exclusion blog, applications for a new Editor-in-Chief will be reviewed beginning on October 26, 2020. To apply, please submit a writing sample from a blog or a piece written for a similar audience, a CV, a biographical sketch of no more than 200 words, and a statement describing your reason for interest in this role and your vision for the blog (such as examples of topics for blog posts). Applications and questions should be submitted to education@ams.org.

University of Minnesota Master of Financial Mathematics Fellowship for Opportunity and Advancement

APPLY NOW!

Do you want a high paying job that uses your mathematics, statistics, and data science skills? Are you intrigued by a career path that will allow you to continually advance and innovate in a field with high demand for people with strong mathematics skills? This fellowship covers all costs to complete the Master of Financial Mathematics (MFM) at the University of Minnesota's School of Mathematics in 2 years!

The Fellowship value is approximately $97,000 and is within the established cost of MFM attendance:

- Fully paid tuition
- Annual living stipend of $25,000 per year
- Subsidized health and dental insurance coverage for up to two years while in the MFM
- Many opportunities for paid summer internships at donor, local, and other national firms

This Fellowship is made possible by the generous gifts from inaugural leadership donors Cargill Risk Management (CRM) and Allianz Investment Management (AIM). They frequently hire MFM alumni and are committed to increasing diversity in the University of Minnesota's MFM student body.

The Master of Financial Mathematics prepares students to enter the high paying and fascinating field of quantitative finance which merges the disciplines of mathematics, statistics, economics, data science and finance. The program has a strong academic curriculum and a multifaceted career development support. MFM students develop a foundation in mathematical and statistical modeling, data science and risk analysis within the specific domain of quantitative finance.

Our alumni work in a wide range of quantitative finance and data science jobs. While in the program get involved with a tight-knit group of classmates, professors and advisors. Interact with our involved alumni and practitioner network in Minneapolis-St. Paul, nationwide and globally. All courses are held at night so full time students can engage in additional academic and career activities during the day.

Click Here and Apply Now! https://cse.umn.edu/mcfam/mfm-fellowship-opportunity-and-advancement

Stop by the University of Minnesota Virtual Booth at the Field of Dreams 2020 Conference on 10/24/20

Data Science For All / Empowerment Program

Society for the Advancement of Hispanics, Chicanos and Native Americans in Science (SACNAS)
Student Chapter at the University of Illinois at Urbana-Champaign

Email: sacnas.uiuc@gmail.com **Web:** http://publish.illinois.edu/sacnasuiuc/
Facebook: http://www.facebook.com/groups/425287234189847

Data Science For All / Empowerment is an online program that offers the world's best data analytics training to talented participants from Black, Hispanic, LGBTQ+, and other underrepresented communities.

Data skills are an increasingly important function of every type of job, not just technical ones. Employers are requiring these skills for roles like finance, sales, marketing, and product, among others, as well. Our program teaches the data skills that professionals across all industries and positions need.

The program is taught by world-class instructors from Harvard and connects participants to an amazing peer network and mentors.

DS4A / Empowerment is 100% free for participants, because we want the best talent to participate. The program is funded by corporate sponsors, who target graduates for job opportunities. Past participants of our programs have graduated to work at partner companies like Google, Lyft, Deloitte, JP Morgan, Twitch, Citadel, Memorial Sloan Kettering, and Johnson & Johnson.

2021-2022 MEMBERSHIP

IAS | INSTITUTE FOR ADVANCED STUDY

PROGRAMS

WOMEN & MATHEMATICS
math.ias.edu/wam/2021

SUMMER COLLABORATORS
math.ias.edu/summercollaborators

MEMBERSHIPS

The IAS School of Mathematics welcomes applications from mathematicians and theoretical computer scientists at all career levels, and strongly encourages applications from women, minorities, and mid-career scientists (5-15 years from Ph.D.). Competitive salaries, on-campus housing, and other resources are available for periods of 4-11 months for researchers in all mathematical subject areas. The School supports approximately 40 post-docs per year. In 2021-2022, there will be a special-year program, **h-Principle and Flexibility in Geometry and PDEs**, led by Camillo De Lellis and László Székelyhidi, Jr., Distinguished Visiting Professor; however, Membership will not be limited to mathematicians in this field.

To apply, submit your application
at mathjobs.org by December 1, 2020.
For more information, please visit: math.ias.edu

Postdoc Positions at the Department of Homeland Security

Threat Detection Technology Postdoctoral Research Scientist

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

Seeking Qualified Candidates Now

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

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

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

Threat analysis testing and evaluation

Location: Atlantic City, NJ

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

Benefits
Stipend starting at $80,000 based on your academic level and experience
Health Insurance Allowance
Relocation Allowance up to $5,000, if you are located more than 50 miles one way from the hosting facility.

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

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

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

DOE Scholars Program Now Accepting Applications

The DOE Scholars Program introduces students and recent college graduates to the U.S. Department of Energy (DOE) mission and operations.

Being selected as a DOE Scholar offers the following benefits:
- Stipends starting at $600 per week for undergraduates and $650 per week for graduate students and post graduates during the internship period
- Limited travel reimbursement to/from assigned location
- Direct exposure to and participation in projects and activities in DOE mission-relevant research areas
- Identification of career goals and opportunities
- Development of professional networks with leading scientists and subject matter experts

Eligibility
- Be a U.S. citizen.
- Be an undergraduate, graduate student, or recent graduate of an accredited institution of higher education. Must be pursuing a degree or have received a degree within 5 years of their starting date in a science, technology, engineering or mathematics (STEM) discipline **or** field that supports the DOE mission.

How to Apply
Applications and supporting materials must be submitted at
https://www.zintellect.com/Opportunity/Details/DOE-Scholars-2021

Deadline
January 4, 2021 11:59:00 PM Eastern Time Zone

For more information
Visit https://orise.orau.gov/doescholars
Download program flyer: https://orise.orau.gov/doescholars/files/doe-scholars-flier.pdf

Questions? doescholars@orise.orau.gov

DOE has partnered with the Oak Ridge Institute for Science and Education (ORISE) to administer this program.

MSRI Director Search

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

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

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

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

View full position details and apply at msri.org

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

Assistant Professor Position
Announced at Fresno State

FRESNO STATE
Discovery. Diversity. Distinction.

California State University, Fresno (Fresno State) is currently searching for a tenure-track, assistant professor with a specialty in Mathematics Education (position No 497759), to join our faculty in August 2021.

Duties include teaching and mentoring undergraduate and Masters students, conducting research in Mathematics Education and participating in service to the University and the community. An earned doctorate (Ph.D.) in Mathematics Education or other closely-related disciplines from an accredited institution (or equivalent) is required, and a Masters in Mathematics (or comparable coursework in mathematics) is expected as well.

Required Education
1. An earned doctorate (Ph.D.) in Mathematics Education, or a closely-related discipline from an accredited institution (or equivalent) and a Master's degree, or comparable coursework, in Mathematics.
2. Candidates nearing completion of their doctorate (ABD) may be considered. However, for appointment, the doctorate must be completed by August 1, 2021.

Required Qualifications
1. Potential for successful teaching at Fresno State, as required by the position description.
2. Evidence of ability to conduct successful research related to mathematics education.
3. Ability to work effectively with faculty, staff, and students from diverse ethnic, cultural, and socioeconomic backgrounds.

Preferred Qualifications
1. Ability to teach master's level courses on (1) cognition in mathematics and (2) research methods in mathematics education.
2. Publication record in mathematics education commensurate with experience and/or involvement in research related to PreK-16 mathematics teaching or learning.
3. Successful teaching, or supervising, experience in a credential program setting.
4. Potential to successfully obtain external funding.
5. Potential for active involvement in community-based outreach related to mathematics.

Fresno State is a Hispanic-Serving Institution (HSI), and an Asian American/Native American/Pacific Islander-Serving Institution (AANAPISI). Fresno State is an affirmative action/equal opportunity institution.

Review of applications will begin November 30, 2020, and will continue until the position is filled.

For inquiries, contact:
Dr. Oscar Vega, Search Committee Chair
Department of Mathematics
California State University, Fresno
5245 N. Backer Avenue, MS PB 108
Fresno, CA 93740-8001
E-mail: ovega@csufresno.edu

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
HARRY E. PREBLE DEAN OF THE COLLEGE OF LIBERAL ARTS & SCIENCES

The University of Illinois at Urbana-Champaign, a preeminent public land grant university and the flagship campus of the University of Illinois System, is seeking nominations and applications for the Harry E. Preble Dean of the College of Liberal Arts & Sciences.

Founded in 1867 as one of the nation's original public land-grant institutions of higher education, the University of Illinois at Urbana-Champaign engages in transformative undergraduate, graduate, and professional teaching, conducts ground-breaking research in virtually all areas of academic inquiry, undertakes extensive and influential public engagement and education, including through life-changing extension, continuing education and online learning opportunities, and promotes a diverse environment of intellectual curiosity that welcomes, cultivates, and respects the contributions of all. Illinois faculty have been awarded 24 Nobel Prizes; three faculty and 23 alumni are Pulitzer Prize winners; and our faculty and alumni are prominently represented across the memberships of the National Academy of Engineering, American Academy of Arts and Sciences, and the National Academy of Sciences. The University of Illinois at Urbana-Champaign has an enormous international footprint and impact. We collaborate with institutions and individuals around the world through cutting-edge research, institutional agreements, education abroad programming, and on-campus training initiatives. And we are always among the top handful of universities in the nation in the size and academic quality of our international student population.

For more than 100 years, the heart of the University of Illinois at Urbana-Champaign has been the College of Liberal Arts & Sciences (LAS), whose variety and depth of educational offerings and innovative research have profoundly shaped the arc of the careers and lives of hundreds of thousands of its graduates throughout the state, nation and world. LAS faculty members make groundbreaking discoveries in the lab, library and field; translate those discoveries for consumption and discussion in the classroom; promote the intercultural and linguistic competencies needed to thrive and lead in diverse public and private institutions and societies in the 21st century; and help develop the critical analytic and communication skills and knowledge needed to navigate social debates and cultural realities, and to locate historical events in their proper context. Our graduates understand that their educations here are designed to equip them not simply to earn a living, but to become full and active participants in all aspects of society and governance.

Across its 68 units, including five schools, 37 academic departments, and the Illinois Global Institute, LAS represents a breadth that serves as a model for a comprehensive research university. The College is home to 610 tenure-system faculty members (LAS faculty account for 1/3 of all faculty on the Urbana- Champaign campus), over 260 specialized faculty members, and 12,000 undergraduate and 2,600 graduate students, including some in online professional degree programs. Thanks to its disciplinary span and interdisciplinary ethos, as well as its responsiveness to the ever-changing world, LAS has enabled students to pursue their interests and to fashion educational pathways and attain outcomes that meet their varied needs. It is no surprise that the College's pedagogical strengths and research prowess - and the accomplishments of our alumni have been acclaimed throughout the nation and the globe.

The next dean will be expected to bring outstanding scholarly credentials and broad intellectual insights, a deep appreciation of the full range of the many disciplines that make up LAS - from the arts and humanities to the sciences and social sciences - and how they can best be harmonized and integrated within the College to maximize opportunities for collaboration and synergy, a skill for communicating effectively and efficiently to all constituencies within the College, an ability to refine and build on the College's strategic vision, and a talent for explaining, promoting, marketing and implementing that vision. In addition, the position requires a demonstrated commitment to diversity, equity and inclusion; excellent administrative and budgetary capabilities; demonstrated capacity for fundraising; and facility for managing cutting-edge undergraduate, graduate, and professional education in a comprehensive world- class interdisciplinary university environment.

As part of the senior leadership on campus, the successful dean is expected to help continue and advance the strong culture of cross-campus interdisciplinary research and entrepreneurial activity that are hallmarks of Illinois. The campus is home to world-famous institutes and centers like the Beckman Institute for Advanced Science and Technology; the Cancer Center; the Carl R. Woese Institute for Genomic Biology; the Center for Social and Behavioral Sciences; the Humanities Research Institute; the Institute for Sustainability, Energy, and Environment; the Interdisciplinary Health Sciences Institute; the National Center for Supercomputing Applications; and the Prairie Research Institute. Teamwork between humanists, engineers, life scientists, social scientists, artists, and physical scientists, as well as other experts and scholars from throughout the country and the world, is the norm.

New and emerging opportunities for LAS to collaborate abound, including at the Carle-Illinois College of Medicine, the first medical school to be founded at the intersection of engineering and medicine, the Siebel Center for Design, a large cross-campus, multidisciplinary effort to harness the potential of design thinking and design learning in teaching, research, and engagement, the C3.ai Digital Transformation Institute, and the recently announced National Science Foundation and U.S. Department of Agriculture Artificial Intelligence Institutes to be housed on campus. The nationally distinguished Research Park adjacent to the University offers opportunities for entrepreneurship and includes more than 120 companies that employ upwards of 2,200 people in high-tech careers and provides opportunities for more than 800 student interns.

Even as it looks to the future, LAS, as a core part of the campus, retains its pivotal role in honoring and continuing the venerable tradition of the public land-grant university. From its founding, LAS and the University of Illinois at Urbana-Champaign have been dedicated to - and will continue to be focused on - providing access to, and serving the needs of, the people whom we are proud and privileged to serve.

Candidates for this exciting opportunity must hold a terminal degree and have a distinguished record of teaching and scholarly accomplishments. Additionally, a proven record of achievement, commensurate with an appointment at the rank of Professor is required. This is a full-time, 12-month appointment with a summer 2021 start date. Salary will be commensurate with experience.

For more information about the position, please visit: www.imsearch.com/7609

Inquiries, nominations, and applications are invited. The university strongly encourages nominations of, as well as applications from, individuals traditionally underrepresented in academia. Review of applications will continue until the position is filled. For full consideration, applications should be received by **December 1, 2020**. All inquiries, nominations/referrals, and applications should be sent electronically to:
Natalie Leonhard, Partner
John Muckle, Partner
Becky Piper, Senior Associate
Isaacson, Miller
www.imsearch.com/7609

The Mathematics Department at the University of California (UC), Santa Cruz invites applications for a position in Analysis /Geometry/Topology/Dynamical Systems at the Assistant Professor (tenure-track) level. The successful candidate will be expected to contribute to the undergraduate and graduate degree programs, teach, mentor and advise students at the graduate and undergraduate level individually and in the classroom, and undertake service obligations for the department and campus consistent with a ladder-rank faculty member. The successful candidate will also be expected to contribute to research and professional leadership, and must be able to work with students, faculty, and staff from a wide range of social and cultural backgrounds. We welcome candidates who have engaged in teaching, research, professional and/or public service contributions that promote diversity, equity, and inclusion. These can take a variety of forms such as, but not limited to, effective pedagogical strategies used for the educational advancement of students in underrepresented groups; demonstrated contributions to the advancement of access and equal opportunity in education; and participation in activities that support the recruitment, retention, and success of scholars and students. We seek colleagues who will interact and collaborate with faculty from our Department as well as build connections with researchers in other STEM departments on campus such as Physics or Applied Mathematics.

UC Santa Cruz values diversity, equity, and inclusion and is committed to hiring faculty who share these values. UC Santa Cruz is a Hispanic-Serving Institution with a high proportion of first-in-family students. To be considered, candidates must demonstrate an understanding of the barriers facing traditionally underrepresented groups and describe their experience and future plans to promote equity and inclusion in teaching, mentoring, and professional activities. Activities promoting equity and inclusion at UC Santa Cruz will be recognized as important university service during the faculty promotion process.

APPLY AT:https://recruit.ucsc.edu/apply/JPF00943 Please refer to Position # JPF00943-21 in all correspondence.

Documents/Materials
▪ Cover letter that briefly summarizes your qualifications and interest in the position (required)
▪ Curriculum vitae (required)
▪ Statement of Contributions to Diversity, Equity, and Inclusion: statement addressing your understanding of the barriers facing traditionally underrepresented groups and your past and/or future contributions to diversity, equity, and inclusion through research, teaching, and service.* Candidates are urged to review guidelines on statements before preparing their application: https://apo.ucsc.edu/diversity.html
▪ Statement of Research (required)*
▪ Statement of Teaching (required)

*Initial applicant screens will focus only on these elements – Research Statement and the Contributions to Diversity Equity and Inclusion Statement. Please review the guidelines on the elements of a good diversity statement and the search committee's rubric for assessing diversity statements also found here:
(https://apo.ucsc.edu/diversity.html)

Reference Requirement
Applications must include confidential letters of recommendation (a minimum of four are required and a maximum of seven will be accepted) **. At least one letter must address teaching experience and ability. Please note that your references, or dossier service, will submit their confidential letters directly to the UC Recruit System.

**All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UC Santa Cruz's confidentiality statement at http://apo.ucsc.edu/confstm.htm.

RECRUITMENT PERIOD
Full consideration will be given to applications completed by December 1, 2020. Applications received after this date will be considered only if the position has not been filled.

The University of California offers a competitive benefits package and a number of programs to support employee work/life balance. For information about employee benefits please visit
https://ucnet.universityofcalifornia.edu/compensation-and-benefits/index.html

Visit the UCSC Web Site at: https://www.ucsc.edu . You can see the more details about this job advertisement on our website.

Lawrence University Assistant Professor of Math Position Announced

Lawrence University, a selective undergraduate liberal arts college and conservatory of music located in Appleton, Wisconsin, invites applications for a full-time tenure track position as Assistant Professor of Mathematics to begin September 1, 2021. The department seeks an excellent teacher who is passionate about working with undergraduates in a liberal arts setting while actively engaging in high-quality research. Teaching load is two courses per term for three ten-week terms a year, including participation in Lawrence's Freshman Studies program on a rotating basis. Mathematicians from all research areas are encouraged to apply. Must have a Ph.D. in mathematics (pure or applied) by September 1, 2021.

Submit via https://lawrence.peopleadmin.com/postings/418 a cover letter explaining interest in Lawrence particularly. Also submit a vita, statements on teaching and research, graduate transcripts, and contact information for 3 references (at least two of whom can address teaching). Letters of recommendation will be requested for select candidates after a preliminary review of applications. In your submitted materials, you should address issues of diversity and inclusion in an academic setting and ways that you could contribute to these efforts at Lawrence. The Committee is also interested to learn about your desire and ability to mentor students in a broad sense—examples might include advising, supervision of undergraduate research or applied projects, development of experiential or community-based learning, support of affinity groups for underrepresented students, or other activities of special interest to you. The position will remain open until filled; all materials received by November 15, 2020 will receive full consideration.

Lawrence is committed to enhancing the diversity of its faculty and staff. We encourage applications from individuals who will help us create a more inclusive Lawrence by: (1) further diversifying the faculty and/or (2) demonstrating experience with successful diversity-related initiatives, creative activity, or research; and (3) showing interest in developing inclusive pedagogy to address the needs of a diverse student body.

Appleton is a city of roughly 73,000 at the center of a metropolitan area of a quarter-million situated in Northeast Wisconsin. For more about Lawrence and its surrounding community, visit https://lawrence.peopleadmin.com as well as www.lawrence.edu and Colleges That Change Lives.

For further information, please contact Scott Corry (corrys@lawrence.edu), Professor of Mathematics and Chair of the Search Committee.

University of Massachusetts, Amherst Post-doctoral Researcher Position Announcement

University of Massachusetts Amherst

School of Public Health & Health Sciences
Department of Biostatistics & Epidemiology

Biostatistics Post-doctoral Research Associate
Reich Lab @ University of Massachusetts Amherst
Target start date: 1/4/2021
Application: https://careers.umass.edu/amherst/en-us/job/506573/postdoctoral-research-associate

Job Description:

The Department of Biostatistics and Epidemiology at the University of Massachusetts Amherst is hiring a post-doctoral researcher. The post-doc will be responsible for developing forecasting models for infectious diseases including COVID-19 and influenza, as well as ensemble methods to combine forecasts from multiple models. Researchers at the Reich Lab (http://reichlab.io/) are leaders in this field; the lab is currently leading the COVID-19 Forecast Hub, a dynamic global collaborative research initiative (https://covid19forecasthub.org/), and we have previously led similar initiatives for forecasting influenza. We have close collaborative relationships with many academic groups and public health agencies at the state and national level.

Specific projects will be determined taking into account the post-doc's interests and experience. Possible topics include ensemble forecasting of novel pathogens; mechanistic or statistical time series models for forecasting disease progression; using hierarchical structure or copulas to capture dependence across time and space; and the use of digital surveillance data to improve forecasts. In addition, depending on their interest, the post-doc could take advantage of professional development opportunities in areas such as leading large collaborative projects, writing grants, mentoring undergraduate and graduate students, and, if desired, obtaining some classroom teaching experience.
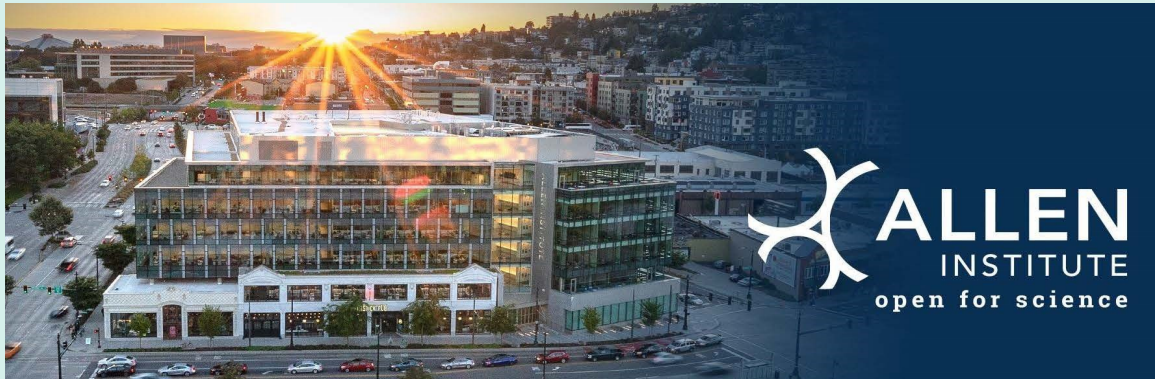
Requirements:
- Strong quantitative background and formal training in statistics, machine learning, data science, computational epidemiology, or a closely related field.
- Demonstrated proficiency with R or python is required.
- Doctoral Degree must be earned by time of appointment.

The target start date for this position is 1/4/2021, although earlier or later start dates could be negotiated. Review of applications will begin on 11/5/2020 and will continue until the position has been filled. The position would be for one year, with renewal based on available funding and performance. The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply, and in assessing many qualifications of each applicant of any race or gender, we would favorably consider an individual's record of conduct that includes students and colleagues with broadly diverse perspectives, experiences and backgrounds in educational, research or other work activities.

Postdoc Position at University of Washington

JOIN OUR TEAM

Scientist I/II – Machine Intelligence

Understanding the brain constitutes one of the foremost scientific challenges we face. An important aspect of understanding cortical function is to connect the anatomical construction of neural networks with the physiological response characteristics as well as the overall computation performed by the circuit. This effort will draw upon techniques and knowledge from machine learning, computer science, and biology.

We seek an exemplary scientist to join our efforts in understanding the cortical basis of computation. The successful candidate will demonstrate a facility with modern machine learning approaches as well as a strong theoretical foundation in statistics and machine learning. The ideal candidate will also have a strong knowledge of neuroscience, both experimental and computational, and reinforcement learning.

The successful candidate will pursue the construction and analysis of anatomically constrained, task-trained artificial neural network models of cortical function, with the aim of understanding the computational strategies and function of cortex. They will perform data analysis on neurophysiological data and work closely with experimentalists to understand our data.

Essential Duties

- Develop and analyze task-trained, anatomically constrained artificial neural network models.
- In close collaboration with experimentalists and other analysts, work as a team member to analyze large-scale neurophysiological activity.
- Contribute scientific ideas based on the analysis results.
- Develop and maintain computational and associated software tools.
- Publish/present findings in peer-reviewed journals and at scientific conferences.
- Maintain clear and accurate communication with supervisor and other team members.
- Communicate effectively and appropriately to the research community inside and outside the organization.

Required Education and Experience

- PhD degree in Computer Science, Computational Neuroscience, or related discipline.
- 0-2 years of post-doctoral experience.
- Strong computational/data analysis skills; ideally programming in Python.
- Familiarity with PyTorch or TensorFlow.
- Track record of scientific excellence and independent thinking.

Preferred Education and Experience

- Excited about team science and open science.
- Ability to meet aggressive timelines and deliverables in a collaborative environment.
- Excellent written and verbal communication skills.
- Experience in systems neuroscience (especially *in vivo* neural measurements and/or sensory neuroscience).
- Excellent organizational skills and attention to detail.

For more information or to apply, please visit:
https://alleninstitute.org/what-we-do/brain-science/careers/job-search/

Tenure-Track and Open-Rank Professor Positions in Applied Mathematics at University of Washington

UNIVERSITY *of* WASHINGTON

The Department of Applied Mathematics at the University of Washington announces the availability of a tenure-track and an open-rank faculty position to start in September 2021. Candidates will be considered for the Assistant, Associate, or Full Professor rank, either tenure-track or tenured, depending upon experience and qualifications. Candidates with expertise in any areas of applied mathematics are encouraged to apply. Areas of emphasis within the department for these searches are (in alphabetical order) data science, dynamical systems, numerical analysis, scientific computing and stochastic analysis. Applicants should hold a PhD, or foreign equivalent, in (applied) mathematics or a related field of application by the start of the appointment. Applicants should demonstrate accomplishments in research and a commitment to excellence in teaching, service, and mentorship, and to promoting diversity.

The department has current research strength in scientific computing and numerical analysis, nonlinear waves and coherent structures, mathematical biology, atmospheric science and climate modeling, mathematical methods, mathematical finance, data-driven methods, optimization etc., and has a long tradition of interdisciplinary collaboration. Candidates can complement these existing strengths or they can bring in new areas of expertise. See http://depts.washington.edu/amath/ for more details. The Department is committed to fostering a diverse and inclusive academic community: visit https://amath.washington.edu/diversity. All UW faculty members engage in teaching, research, and service.

To apply, applicants should upload all application materials to http://apply.interfolio.com/78103. Specifically, the following materials should be provided by November 1, 2020:

- Cover letter or AMS cover sheet,
- Curriculum vita,
- Research statement,
- Teaching statement (addressing your experiences, teaching and mentoring philosophy, and innovation) and evaluations (if available),
- Diversity statement (addressing how your professional experiences, background and philosophy demonstrate your commitment to promoting diversity, equity and inclusion), and by November 15, 2020.

At least four letters of reference, one of which addresses teaching, should be uploaded directly to Interfolio by the letter writers.
If you have any questions, contact Erica Coleman at ecoleman@uw.edu.

The University of Washington is building a culturally diverse faculty and staff and strongly encourages applications from women, minorities, individuals with disabilities and covered veterans. The University is the 2006 recipient of the Alfred P. Sloan award for Faculty Career Flexibility, and is committed to supporting the work-life balance of its faculty. Our NSF-supported ADVANCE program (http://advance.washington.edu/) is dedicated to increasing the participation of women in STEM disciplines.

Postdoc Fellowship at University of Washington

UNIVERSITY *of* WASHINGTON

The University of Washington Computational Neuroscience Center is seeking applications for a Postdoctoral Fellowship at the Swartz Center for Theoretical Neuroscience. The fellow will join the vibrant, collaborative UW theoretical neuroscience community. This fellowship provides the unique opportunity to work with any of the CNC's faculty members, with the freedom to design and develop projects and new collaborations.

Participating faculty members' research includes theory, computation and data analysis, and members interact extensively with colleagues in quantitative experimentation. Experimental work available for close collaboration at UW includes groups performing large-scale recording (electrophysiology, imaging) and neural manipulation (optogenetics) in diverse behavioral tasks. Collaborations with the Allen Institute for Brain Science are also possible.

The Fellowship is available with a starting date in fall 2020, and applications will be considered on a rolling basis until the positions are filled. The fellow will be able to work remotely. To apply please send your CV, a 1-2 page summary of research accomplishments, and a 1-2 page statement of research interests, to cncadmin@uw.edu, please arrange to have 3 letters of reference sent to the same email address.

Please address any questions or inquiries to cncadmin@uw.edu as well!