Math Alliance News

Upcoming Events

Workshop on Distributed Data Analysis with Applications in Finance and Healthcare March 21-22, 2016

SAMSI Workshop for Women in Math Sciences Research Triangle Park, NC April 6-8, 2016

Challenges in Functional Connectivity Modeling & Analysis

Research Triangle Park, NC April 8-10, 2016

Methodology for Precision Medicine: Integrating Statistical & Mathematical Approaches Workshop Research Triangle Park, NC April 11-12, 2016

Central States Mathematics Undergraduate Research Conference Kirksville, MO April 15-16, 2016

Curves, Loops, and Words in Geometry Princeton, NJ May 8-20, 2016

Games & Decisions in Reliability & Risk Workshop Research Triangle Park, NC May 16-20, 2016

Biology and Medicine Through Mathematics Conference Richmond, VA May 20-22, 2016

Interdisciplinary Workshop for Undergraduate Students Raleigh, NC May 22-27, 2016

NSF-CBMS Regional Conference 2016 Austin, TX May 31– June 4, 2016

Field of Dreams Conference St. Louis, MO November 4-6, 2016

Now Accepting Nominations for the 2016 Facilitated Graduate Applications Process



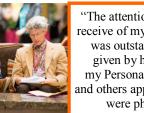
The Facilitated Graduate Applications Process (FGAP) is an Alliance program that provides undergraduate seniors and master's students with the advice and assistance needed to begin the application process as they apply to graduate programs. FGAP will help students choose departments that are most appropriate to their goals and

aspirations. The Alliance Community will work with the student as they prepare their applications to graduate programs and will assist in tracking the progress of their applications through the admissions process. The Alliance Community will assist in maximizing the chances that Alliance Scholars will be admitted, with support, to a department or program where they will thrive.

We are now accepting nominations for the 2016 FGAP program. If you know of a senior or master's student who will be graduating in the Spring of 2017 and will be applying to graduate programs for Fall 2017 please send Billie (<u>billie-townsend@uiowa.edu</u>) or Miles (<u>miles-dietz@uiowa.edu</u>) an email nominating them for this process. We will pair each eligible student with one of our Doctoral Alliance Mentors who will work with the students local mentor to create a mentoring team that will aid in the application process.

"FGAP has substantially helped me in finding the right programs to which I should apply."





"The attention and help that I receive of my FGAP facilitator was outstanding. The tips given by him to improve my Personal Statement, CV and others application materials were phenomenal." "The FGAP program is excellent! My facilitator assisted and encouraged me at every stage of the application process."



Summer Research Experiences for Undergraduate Students

Deadline-March 25, 2016

CSU, Pomona- Preparing Undergraduates through Mentoring toward PhD's (PUMP) East Tennessee State University- <u>SMART In Math</u> Texas State University- <u>Multidisciplinary Research Experiences for Undergraduates in Internet of Things</u> University of Nevada, Reno- <u>RUSIS@UNR Summer 2016</u>

Deadline– March 31, 2016 Lamar University– Stat REU

Deadline- April 15, 2016 The Ohio State University- Sampling Advanced Mathematics for Minority Students (SAMMS)

> To see all our Alliance Affiliated REU opportunities please visit: <u>http://mathalliance.org/math-alliance-partners/affiliates/</u>



AMAR UNIVERSITY Stat REU at LU is a ten week research and academic experience hosted by Lamar University in Beaumont, Texas. LU is one of eight institutions in the Texas State University System (TSUS) and has been classified as one of the 29 public universities nationally named a doctoral research university by the Carnegie Foundation. This REU site offers sophomores, juniors and seniors the oppor-

tunity to perform summer research in the fields of big data analytics, data dimension reduction, text mining and image processing.

Students at this site will be engaged in all stages of the big data analysis cycle. Stat REU at LU is designed to spark and sustain a new excitement about undergraduate research throughout the statistics discipline. The students will further be trained in all aspects of research, starting with the ethics code, participating in workshops on using library and online resources, and ending with training in delivering oral presentations, as well as in using LaTeX to write statistical papers. Applications are due by March 31, 2016. Please visit the following link to apply: http://www.lamar.edu/undergraduate-research/stat-reu/apply-now-for-stat-reu.html

Participants will receive reduced on-campus housing and meal plans from LU Dining Facilities. The program will run from June 6 to August 5, 2016. Students from institutions with limited research opportunities in statistics, including minorities, females, veteran students, and persons with disabilities, are strongly encouraged to apply.



Application Deadline: April 15, 2016 projectnext.maa.org projectnext@maa.org

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

Recent program sessions have included:

- getting your research and grant-writing off to a good start,
- · innovative teaching and assessment methods and why they work,
- finding your niche in the profession,
- attracting and retaining underrepresented students,
- · balancing teaching, research, and service demands,
- starting an undergraduate research program, and
- preparing for tenure



MAA Project NExT Fellows join an active community of faculty who have gone on to become award-winning teachers, innovators on their campuses, active members of the MAA, and leaders in the profession. MAA Project NExT welcomes and encourages applications from new and recent PhDs in postdoctoral, tenure track, and visiting positions. We particularly encourage applicants from under-represented groups (including women and minorities). More information can be found at projectnext.maa.org.

2016 summer short courses at The University of Alabama at Birmingham

UAB's Nutrition Obesity Research Center invites you to join them at one or both of our five-day short courses

June: The Mathematical Sciences in Obesity Research- The mathematical sciences including engineering, statistics, computer science, physics, econometrics, psychometrics, epidemiology, and mathematics qua mathematics are increasingly being applied to advance our understanding of the causes, consequences, and alleviation of obesity. These applications do not merely involve routine well-established approaches easily implemented in widely available commercial software. Rather, they increasingly involve computationally demanding tasks, use and in some cases development of novel analytic methods and software, new derivations, computer simulations, and unprecedented interdigitation of two or more existing techniques. Su ch advances at the interface of the mathematical sciences and obesity research require bilateral training and exposure for investigators in both disciplines.

July: Strengthening Causal Inference in Behavioral Obesity Research- Identifying causal relations among variables is fundamental to science. Obesity is a major problem for which much progress in understanding, treatment, and prevention remains to be made. Understanding which social and behavioral factors cause variations in adiposity and which other factors cause variations is vital to producing, evaluating, and selecting intervention and prevention strategies. In addition, developing a greater understanding of obesity's causes, requires input from diverse disciplines including statistics, economics, psychology, epidemiology, mathematics, philosophy, and in some cases behavioral or statistical genetics. However, applying techniques from these disciplines does not involve routine well-known 'cookbook' approaches but requires an understanding of the underlying principles, so the investigator can tailor approaches to specific and varying situations.

For full details of each of the courses, please refer to our websites below:

Mon 6/13/2016 - Fri 6/17/2016: The Mathematical Sciences in Obesity, <u>http://www.soph.uab.edu/energetics/shortcourse/third.</u> Mon 7/25/2016 - Fri 7/29/2016: Strengthening Causal Inference in Behavioral Obesity Research, <u>http://www.soph.uab.edu/energetics/causal_inference_shortcourse/second</u>.





BAMM! Biology and Medicine through Mathematics May 20-22, 2016

This is a Biomath conference that will be held at Virginia Commonwealth University in Richmond, VA from Friday, May 20 to Sunday, May 22, 2016. The conference will consist of plenary talks, break-out sessions, and a poster session. We welcome participation from researchers at all academic levels working in mathematical biology. Funding from NSF, SMB and MBI has been secured for travel awards for junior researchers. To learn more about BAMM! visit http://www.go.vcu.edu/bamm_Registration Deadline 4/10/2016.

Job Opportunities



Bridge to Enter Advanced Mathematics: Summer Faculty Positions

This summer, change the lives of talented 7th-grade students from underserved backgrounds: teach them what mathematics really is. Bridge to Enter Advanced Mathematics (BEAM), a project of the Art of Problem Solving Foundation, is seeking instructors for a program that gives everyone a chance to excel in mathematics. Faculty design and teach their own courses to bright, underserved middle school students. Ideal candidates include college or university professors (as well as graduate students) with strong teaching backgrounds, and middle or high school teachers with strong mathematics backgrounds. We've found that the community of teachers that we create, bringing together instructors from across many different academic areas, is one of the program's strengths and provides a great experience for all participants.

Good candidates will work well on a close-knit team and will be able to bring unique curriculum perspectives to the program. Experience with other extracurricular outreach programs (such as math summer programs or math circles, MATHCOUNTS, Bootstrap, or similar) are also a plus. We will provide mentorship, textbooks, and other resources as needed. The program will take place at two sites, Bard College and a second site TBD, both located about 2-3 hours outside New York City. Our students, all from high-poverty New York City public schools, will be discovering a new environment in these idyllic settings.

All instructors must be available July 6 through August 3 and must be available to prepare their classes prior to the program. The salary is \$5000 for faculty, and \$3300 for junior faculty who are graduate students or early-career teachers. In addition, food, housing, and transportation are all provided. For more information and the application, contact us at <u>info@beammath.org</u> or visit our website at <u>www.beammath.org</u>.

Bridge to Enter Advanced Mathematics: Summer Counselor/TA Positions

This summer, change the lives of talented middle school students from underserved backgrounds. Bridge to Enter Advanced Mathematics (BEAM), a project of the Art of Problem Solving Foundation, is seeking undergraduate students or recent graduates to be counselors and TAs for summer programs that give everyone a chance to excel in mathematics. You may work at one of our residential programs (with housing and transportation provided) or our new non-residential program in New York City.

We're looking for counselors who have a lot of initiative and maturity, who will inspire the students to do better, and who are good at math. The camp's academics will be challenging to everyone, with courses on topics such as combinatorics, number theory, problem solving, graph theory, game theory, and more, so you'll get plenty of chance to stretch your mathematical muscles. (You do not need to know these specific topics to apply.) All counselors must be available for July 6 through August 3 (the residential program) or July 8 through August 6 (the non-residential program). You will have a chance to take time off, but this is a very intense experience and you should be prepared for it! The residential program will take place at two sites, Bard College and a second site TBD, both located about 2-3 hours outside New York City. Food, housing, and transportation are provided. The non-residential program takes place in New York City, and provides breakfast and lunch. Salaries range from \$2600-\$3000 for first-time counselors. For more information and the application, contact us at info@beammath.org or visit our website at www.beammath.org.

The University of Texas RioGrande Valley of Texas Rio Grande Valley

The University of Texas Rio Grande Valley has just opened four tenure-track faculty positions: two in statistics, one in math education and one in applied mathematics. Please see the links to the announcements below.

Assistant Professor in the College of Sciences / Statistics https://careers.utrgv.edu/postings/10262

Assistant Professor of Applied Mathematics https://careers.utrgv.edu/postings/10302

Open Rank in Mathematics Education (Assistant, Associate, or Full Professor) https://careers.utrgv.edu/postings/10261

Assistant Professor of Computational Mathematics with Statistics https://careers.utrgv.edu/postings/10179_

For these positions, priority will be given to outstanding candidates with a research agenda in related areas (please see the individual announcements for these details). The appointment involves teaching at the undergraduate and graduate levels including the supervision of undergraduate research projects and Master's theses. Applicants with experience teaching a diverse student body are preferred as is the ability to use technology and innovative teaching methods to support students' learning.

The school has an active research program in statistics, pure mathematics, applied mathematics, and mathematics education with over 40 faculty members and over 300 undergraduate majors. The school has a B.S. program in Mathematics with concentrations in Applied Mathematics, Pure Mathematics, Economics, Science and Engineering, Statistics, Middle School and Secondary School, along with a UTeach program and a growing Master's program with four concentrations in Applied Mathematics, Pure Mathematics, Mathematics Teaching and Statistics.