# Math Alliance News

Volume 1, Issue 11

#### **Upcoming Events:**

Joint Mathematics Meeting Baltimore, MD January 15-18, 2014

**Topological Data Analysis** Research Triangle Park, NC February 3-7, 2014

Statistical Inference in Sparse High-dimensional Models: Theoretical and Computational Challenges Workshop

Research Triangle Park, NC February 24-26, 2014

#### SIDIM XXIX

Pontifical Catholic University of Puerto Rico in Ponce, Puerto Rico February 28- March 1, 2014

2014 Fostering Diversity in Biostatistics Workshop

Baltimore, MD March 16, 2014

Recruiting and Retaining Graduate Students in the Statistical Sciences and Applied Mathematics

Research Triangle Park, NC June 5-6, 2014

**Field of Dreams Conference** November 7-9, 2014

## Math Alliance:

### A new model for inclusion and diversity

Kathryn Chaloner gave a talk at the 2013 Field of Dreams about "Bayesian Statistics: From Bayes to Blackwell". Her talk explained the philosophical differences in how we interpret probability and gave a historical and mathematical perspective on Bayesian Statistics. Her talk did this by focusing on 3 key mathematicians, Thomas Bayes, Leonard Jimmie Savage, and David Harold Blackwell. Each of these 3 mathematicians made important original contributions that could be described as "out of the box" thinking, going against the cultural norms of mathematics at the time. Each of these 3 mathematicians were also excluded in some way from the educational system in which they lived: one because of his religion, one because of his disability and one because of his race. The slides from Kathryn's presentation can be found on the Alliance website here.

Kathryn was also asked to write a short piece for the Bulletin of the Institute of Mathematical Statistics (the IMS) about our Alliance. The piece first appeared in the Institute of Mathematical Statistics Bulletin, Volume 42, issue 8, December 2013.

We hope that this article will lead to additional Alliance Graduate Program Groups in Statistics and Biostatistics and more programs being represented at the 2014 Field of Dreams

The purpose of the IMS is to foster the development and dissemination of the theory and applications of statistics and probability. It is an international organization of statistical scientists working together, and publishes some of the best respected journals in statistics. See <a href="https://www.imstat.org">www.imstat.org</a>.

#### Kathryn writes:

The IMS is an amazing organization and I have been proud to be a member since I was a student. The primary paper from my thesis was published in one of their journals, The Annals of Statistics. My thesis advisor, Professor Morris H. DeGroot, was also the founding editor of my very favorite journal among all journals, published by the IMS and called Statistical Science. Statistical Science is designed to be readable and understandable by first year graduate students studying statistics or biostatistics -- and it is! I highly recommend that all Alliance scholars join the IMS where they will get access to IMS journals online.

Moreover, membership of the IMS is free to students! Yes, FREE! All you have to do is complete an application to be a member and provide the name, email and phone number of a faculty member at your college or university who can, if asked, vouch that you are indeed a student. That faculty member does not even have to be a statistician or a member of the IMS, and a mathematician faculty member is sufficient. The application can be found here, please click on the "new member" for the application.

As a student member of the IMS you will have access to the Bulletin, with interesting news and opinions about Statistics, and also access to the very readable journal Statistical Science where you will get a sense of whether or not graduate studies in Statistics or Biostatistics might be something you would like to explore.

And it is FREE!

#### National Alliance for Doctoral Studies in the Mathematical Sciences

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## Math Alliance Research Study: Thank you!



The Math Alliance Research Study would like to thank everyone who has participated in our data collection efforts. To date, we have collected over 260 online survey responses from faculty mentors and students involved with the National Alliance for Doctoral Studies in the Mathematical Sciences, focus group data from 45 Field of Dreams conference attendees, and interview data from three Graduate Program Group sites. In the upcoming year, we will continue our site visits and begin data analysis of the survey and focus group data.

Thank you again for your willingness to contribute to our understanding of how the Alliance works to make the mathematical disciplines more accessible to traditionally underrepresented students.

## 🕻 Ask | Rolando

Starting January we will have a new column "**Ask**|*Rolando*" featured in our newsletter every month. Rolando de Santiago, a University of Iowa



mathematics graduate student, thought it would be helpful to have an advice column for scholars to ask questions and

we couldn't agree more! Rolando is happy to answer any questions you may have about choosing a graduate program, how to talk to your mentor, or tips for success. He would love to hear from you!

Please send any questions you may have for Rolando to **mathalliance@uiowa.edu** and maybe yours will be featured in an upcoming issue.

## **Summer Program in Quantitative Sciences** at the Harvard School of Public Health

June 15—July 26, 2014

**Application Deadline: February 14, 2014** 



If you like mathematics and would like to learn how quantitative methods can be applied in the study of human health, then the Summer Program in Quantitative Sciences is for you. The Summer Program will introduce you to the power and excitement of math applications to public health, medicine, and biology, and possibly convince you that this is the career direction you've been looking for! There is both an Undergraduate Summer Program and a *new* Post Baccalaureate Summer Program.

The website for eligibility, requirements, and application are <a href="here">here</a>. Potential applicants should have some aptitude and interest in quantitative methods and an interest in public health as a career. Prior exposure to statistics is not required. Please email questions to: <a href="mailto:biostat diversity@hsph.harvard.edu">biostat diversity@hsph.harvard.edu</a>.

#### 2014 MBI Undergraduate Summer Research Program

June 2—August 15, 2014

**Application Deadline: January 27, 2014** 



This program introduces students to exciting new areas of mathematical biology and involves them in collaborative research with their peers and faculty mentors. The program consists of three parts - each with a mix of educational and social experiences. To learn more and apply click here.

### Joint 2014 MBI-CAMBAM-NIMBioS Summer Graduate Program

July 7—18, 2014

Application Deadline: February 15, 2014

This summer school will focus on the theory, mathematical modeling and experimental study of biological rhythms. The workshop will begin with a boot-camp introducing the basic mathematical tools and techniques used in studying biological rhythms. In depth explorations of specific problems will then be presented. Students will also work in small groups on projects, which will be presented at the end of the two week summer school.

Graduate students from the mathematical, physical and life sciences are encouraged to apply. To learn more and apply <u>click here</u>.