

Budapest Semesters in Mathematics

Volume 5, Issue 1

Spring 2016

The BSM Beat

Alumni newsletter for the BSM program

Report on the M'n M (Math and More) conference - October 3, 2015!

The first "in-country" reunion event and undergraduate math conference, the Math and More Conference, was held on October 3, 2015 at St. Olaf College in Minnesota. The conference was wonderful and about 80 people attended throughout the day.

The conference began with a keynote address titled "Loose Cannons or Loyal Foot Soldiers? Assessing Interest Group Influence in the New Era of Campaign Finance" by Dr. Erika Franklin Fowler. Dr. Fowler is a BSM



alum who earned her BA in mathematics and political science from St. Olaf College and earned a Ph.D. in political science from the University of Wisconsin -Madison. She is currently an Assistant Professor of Government at Wesleyan University where she directs the Wesleyan media Project, which tracks and analyzes all political ads aired on broadcast television in real-time during elections.

Following Dr. Fowler's address, there were three concurrent sessions of undergraduate talks on many different and interesting topics. There were four talks in each session and students spoke about research they had done, topics of interest to them, or any mathematical topic of their choosing. The presentations were excellent!

The group reconvened for lunch on the beautiful fourth floor which had a nice

view of St. Olaf and the surrounding area. Students had the opportunity to chat with each other and with the speakers and panelists at the conference and alumni had a chance to reconnect with each other.

After lunch there was a Career Panel with five different BSM alumni: Elizabeth Atkinson who



works in the Division of Biomedical Statistics and Informatics at the Mayo Clinic in Rochester, MN, Meghan Steach who manages the Customer Outreach and Offers Analytics team at Bank of America in St. Louis, MO, Paul Boisen who participated in the very first semester of BSM in Spring of 1985, Dr. Fowler, and Jim Larsen from Google. The career panel was a great opportunity for students to learn about the variety of career paths one can choose with a math degree and also to hear how the BSM experience shaped the lives and careers of the panelists!

Our afternoon keynote speaker was Jim Larson from Google who spoke about "Math and a Career in Computing". Jim graduated from St. Olaf College with a BA in Mathematics and went on to earn both an M.S. in Mathematics and an M.S. in Computer Science. After the end of the conference, the BSM alumni joined together in a Reunion dinner where Dr. Paul Humke, former North American Director for BSM, gave a wonderful talk about "The History of BSM".

Inside this issue:

BSM Reunion 1 conference

Student Spotlight: 2
Anna Steinfeld

Information about 2 the Spring 2016 class

Update on new programs

3

The Director's 3 Mathematician in Residence program

Opportunities for 4 alumni

Spring Semester 2016

- Students arrive for language intensive course: January 19th
- Orientation and welcome party: February 7
- Classes begin: February 8
- Classes end: May 20th
- Final exams: May 23-25
- Program ends: May 26

Student Spotlight, Anna Steinfeld, BSM Spring 2016

Anna Steinfeld was born in Washington, D.C. and is currently a junior math major and computer science minor at St. Mary's College of Maryland. She heard about the BSM program from her advisor, Dr. Sandy Ganzell, and a fellow student, Nora Stack, who attended BSM in 2013. She has heard many positive things about BSM from her professors both at her home school and at the REU she attended and she is hoping that attending BSM will help her decide on a field of study for graduate school.

Anna was initially an undeclared major in college, but after taking Linear Algebra she was hooked and wanted to learn more. She had a very supportive linear algebra professor who encouraged her developing interest and throughout the course she became intrigued by upper level Her favorite math mathematics. courses so far have been abstract algebra and foundations of mathematics (an introduction to proofs course). She enjoyed the foundations course because it was the first time she moved toward theoretical math

from the more computation classes she had had such as calculus. One of her favorite proofs in the course was Euclid's proof of the infinitude of the primes because it was simple but profound. Taking abstract algebra allowed her to build on the techniques she learned in the foundations class while exploring foundational mathematics and improving her proof writing. She particularly enjoyed the second semester of algebra when the class covered rings and fields and ended with a taste of Galois Theory.

Anna is currently the president of St. Mary's Society for Industrial and Applied Mathematics chapter and the Association for Women in Mathematics. She is also a member of the math club and the equestrian club. She has traveled outside of the US twice, both on family trips - once to the Bahamas and once to Canada - so she is excited to explore Budapest and learn about Hungarian music, cuisine and culture. She will be taking the intensive language class and will be staying in an apartment in the city.

Anna has a fair amount of

undergraduate research experience. During her sophomore year, she worked with another student and two professors researching maps and mirrors. The group looked at famous map projections and determined which ones could be induced by a mirror surface. For her final project in a mathematical modeling class, she worked with a partner to model the Ebola epidemic in Sierra Leone, Guinea and Liberia. After modeling this epidemic, she wanted to learn more about mathematical biology so she attended the Winthrop University REU on bridging applied and theoretical mathematics. She worked with a partner to create a model of colon cancer and is currently working with a professor to model breast cancer.

Though not entirely sure what she wants to do after graduation, Anna is definitely learning toward graduate school and is currently looking at REU's in theoretical math and internships in cancer biology and epidemiology for this summer in hopes of narrowing her focus for graduate work.

What's happening in Budapest in the Spring 2016 Semester?

- 64students will attend the program
 - 2 seniors
 - 60 juniors
 - 1 sophomores
 - 1 post-graduate
- Students from 42 different schools
- Students from 12

countries

- 20 female students,
 44 male students
- There are 42 math majors, 1 math and computer science major, 7 math and physics majors, 1 math and economics major, 2 math and biology ma-

jors, 1 math and art history major, 1 math and German major, 2 math and chemistry majors, 1 math and statistics major.

 Interesting tidbits about the class: One student is a collegiate water polo player, one student plays the harp, the grandparents of one student were both math teachers, one student loves rock climbing and one student did an internship last summer with the Policy and Economic Analysis unit of UNICEF.

New BSM Fulbright Opportunity!

The Budapest Semesters in Mathematics program is now partnering with the Fulbright program to offer several exciting new opportunities for both faculty and students!

Faculty - The faculty Fulbright-BSM Fellowship will be a program awarding two grants per year, each up to a semester long (we anticipate one for fall and one for spring). Awardees would receive the usual Fulbright stipend, travel and living expenses. Awardees would be hosted jointly by BSM and the Renyi Institute. For the BSM part of the program, awardees would give colloquium lectures, host office hours at College International and be available to discuss graduate school opportunities with BSM students. At the Renyi Institute, participants would be introduced to the appropriate research groups and be apprised of the events of the institute. Applicants to the Fulbright program should mention their desire to combine research and BSM activities in their applications and to discuss their program with the BSM North American Director prior to the application deadline. Please contact North American Director Tina Garrett (garrettk@stolaf.edu) for more information.

Student - The student Fulbright fellowship will be made annually for a post-undergraduate student to study at the Budapest Semesters in Mathematics program for a full year. This program is designed for the undergraduate student who desires to strengthen their credentials for graduate work before entering graduate school. It is anticipated that applicants may come from smaller state universities or smaller colleges where the mathematics program is not sufficiently robust to provide a strong background for graduate work. The Fulbright organization will provide full services and funding for the year-long stay in Budapest and the BSM program will waive tuition for that period. This is a wonderful opportunity for talented students who have begun their careers at a place with fewer opportunities for math majors than large research institutions. Applicants should mention their specific interest in the BSM program in their application to the Fulbright program and should have applied to BSM prior to the Fulbright deadline.

BSM Director's Mathematician in Residence (DMiR) Program

After many years of having faculty ask us if they could please participate in the Budapest program somehow, we are happy to be able to announce the formation of a new program for faculty!

Program - The BSM Director's Mathematician in Residence Program (DMiR) provides US-based mathematics faculty the opportunity to spend 3-4 weeks in residence in Budapest in order to conduct individual or collaborative research projects, interact with BSM students and collaborate with Hungarian mathematicians.

DMiR Scholars will be provided with financial support to travel to and reside in Budapest during the program, office space, internet and library resources, and basic language instruction. DMiR Scholars would hold office hours for BSM summer students (to discuss careers in mathematics, discuss research problems and ideas, etc.), interact socially with students and other DMiR Scholars and give a short lecture series for students on their area of research.

Applications for up to 4 Scholar positions with residences beginning in July 2017 will be accepted beginning in November 2016. Joint applications from research pairs (collaborators on the same research project) are welcomed. Scholar awards will be announced at the Joint Meetings in 2017. For more information, contact BSM North American Director Tina Garrett (garrettk@stolaf.edu) or stop by the BSM table at the Exhibits at the Joint Meetings.

Volume 5, Issue 1 Page 3

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Have you updated your alumni contact information lately? Do so today!

The BSM organization would like to keep in touch with all of our alumni. If you move or your contact information changes, please contact us to update your information so we may continue to send you the BSM Beat and keep you informed about upcoming alumni reunion events. You will find an information update form on our website, www.budapestsemesters.com, under the Alumni heading or you may contact us in any of the following ways:

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Share the news about BSM!

BSM Alumni, we would like to encourage you to share your experiences with the Budapest program with others, particularly those of you who continue to work in higher education. If you are currently a math professor, and if you are interested in giving a talk to the math majors at your institution about the Budapest Semesters in Mathematics program, we have a complete PowerPoint presentation already put together that we would be happy to share with you.

In addition, if you are a graduate student or a math professor who will be attending a Regional Undergraduate Mathematics Conference and would be interested in being on a panel about academic or summer opportunities for math majors or would be willing to sit at a table and hand out brochures and talk to undergraduates about your experience with BSM, please let us know. We would

be happy to help you make contact with the RUMC organizers, provide you with brochures and handouts and we can also provide you with a small stipend to reimburse you for travel expenses.

To request the BSM Power-Point or to inquire about representing the BSM program at an undergraduate math conference, contact Dr. Kendra Killpatrick at

Kendra.Killpatrick@pepperdine.edu.

If you have further ideas about ways in which you can share information about the Budapest program with undergraduates, feel free to contact us and we will help you in whatever ways we can! You, the alumni, are our most valuable resource for recruiting the next group of talented BSM students.

BSM Alumni Directory

The BSM Alumni Directory will be emailed once a year to all alumni who have given us a current email address. If you haven't updated your contact information, you can do so now by going to the webpage and clicking on Update Your Contact Info. Please encourage other BSM alumni you may know to fill out the form so we can make the directory as up to date as possible!

