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The Women in AMIA

UPDATE

Monthly E-Newsletter



INTRODUCING YOUNG WOMEN TO INFORMATICS

In this issue of the newsletter:

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- Want to join the WIA Podcast Team? Contact Karmen (p. 6)

Previous issues of the WIA newsletter can be found on the Women in AMIA webpage [here](#).

Steering Committee Members:

Tiffani Bright, Wendy Chapman, Prerna Dua, Tiffany Leung, Allison McCoy, Omolola Ogunyemi, Margarita Sordo, Donghua Tao, Kelly Taylor (AMIA Staff), Rebecca Wilgus, Karmen Williams

The First Look Program

by Allison McCoy and Karmen Williams



Introducing Young Women to the Field of Informatics

In 2017, the Women in AMIA Pipeline Subcommittee, currently co-chaired by Drs. Allison McCoy and Karmen Williams, introduced the AMIA First Look Program to expose undergraduate women with an interest in biomedical informatics or STEM (science, technology, engineering, and mathematics) to the field of biomedical informatics through attendance and mentoring at AMIA's Annual Symposium. The objectives of the program includes: 1) providing students an opportunity to learn about biomedical informatics by attending key symposium events, 2) introducing and engaging students with the Women in AMIA community through assigned mentored guides and networking receptions, and 3) equipping students with resources for internship and post-graduation career "next-steps" in informatics by networking and making connections with industry and educational professionals. Industry partnerships allow First Look Program participants to receive student registration to the AMIA Annual Symposium and an AMIA student membership to encourage attendance and ongoing engagement.

Each program year, subcommittee members identified STEM programs (e.g., informatics, computer science, and statistics) at undergraduate colleges and universities that are local to the current year's AMIA Annual Symposium. Subcommittee members contacted faculty and staff in each program and requested that information about the AMIA First Look program, including a link to apply, be shared with women in the department. Current female members of AMIA were encouraged to apply to be mentors, and those who did were then paired with applicants.

In the first three years of the program, 144 undergraduate women applied to attend AMIA First Look (59 in 2017, 15 in 2018, and 70 in 2019), and 58 attended (22 in 2017, 8 in 2018, and 28 in 2019). Applicants were most often seniors (37%), sophomores (30%), or juniors (28%); not Hispanic or Latino (84%); and Asian (35%), Black or African American (33%), or White (21%). Applicant majors included computer science or information technology (33%), health sciences (18%), basic sciences (17%), biomedical or health informatics (15%), and engineering (14%). Most applicants were familiar with biomedical informatics (57% yes, 26% maybe) and had considered a career in biomedical informatics (49% yes, 33% maybe).

After attending, 17 participants completed surveys (9 in 2017, 1 in 2018, and 7 in 2019). Participants indicated that advice about careers and graduate school, information about scholarships and suitable programs, and meeting women expert in their desired area would be most helpful in the future. Perceived barriers to careers in informatics included lack of awareness, money, and confidence. In 2019, interest in pursuing a career in informatics increased from 57% to 86% after attending First Look, and 86% of attendees mentioned that they would recommend the First Look program to others. Participants in 2019 also indicated that the First Look lunch allowed them to connect with women in the field, and that the orientation and introduction to informatics sessions were welcoming, engaging, and informational. First Look participants have since received formal mentorship from Women in AMIA, completed internships and enrolled in PhD programs in biomedical informatics, and delivered presentations at subsequent AMIA meetings. These findings are reflective of the value of the subcommittee and the multiple benefits that participants are provided.

The pipeline subcommittee has used participant feedback to improve the First Look program over the years. For example, the introduction to informatics session was introduced in 2019 in response to feedback that participants preferred an agenda that included more interactive sessions with Women in AMIA, rather than an agenda that more heavily focused on attending scientific sessions. This new session included an overview of biomedical informatics from female leaders in AMIA, a lightning networking chat that allowed participants to talk to many women with diverse careers and experiences in the field, and a panel presentation by members of the pipeline subcommittee on challenges and successes as women in informatics.

As a result of survey responses and offline feedback from 2019, the pipeline subcommittee is increasing engagement of participants through the AMIA Connect Community and plans to provide more information about internships and graduate programs in biomedical informatics. The subcommittee is also encouraging continued contact between First Look mentors and participants to better meet the desires of participants and remove barriers to careers in the field. Finally, the subcommittee is identifying measure that can be implemented in future years to increase the number of women who are able to participate in the First Look program, as well as the number of participants who complete the survey to provide feedback after attending.

The AMIA First Look Program has successfully introduced more than 50 undergraduate women to biomedical informatics. Early findings demonstrate that First Look is a valuable program to AMIA; it is successfully furthering AMIA's commitment to diversity and inclusion and increasing the number of women in AMIA and the field of biomedical informatics overall. Interested undergraduate women are encouraged to apply for the Virtual AMIA First Look Program this year, current female AMIA members are encouraged to participate as mentors, and willing individuals and organizations are encouraged to sponsor the program to ensure the its continued success.

First Look Program and Mentor/Mentee Development Sessions at the 2017, 2018, and 2019 AMIA Annual Symposiums



HIGHLIGHT ON WOMEN LEADERS



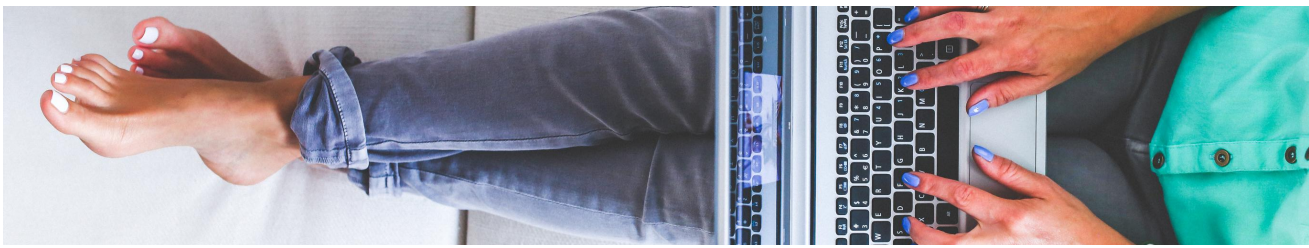
Polina Kukhareva

PhD, MS, MPH

Leadership positions: Evaluation Director for the Knowledge Management and Mobilization Group (University of Utah Health), JAMIA Editorial Board member, mentor for high school and undergraduate students through AMIA Pipeline Program.

What I'm excited about: After completing my PhD two years ago, I joined the Knowledge Management and Mobilization group at University of Utah Health to oversee and coordinate evaluation activities. Our group designs and develops electronic health record-augmenting digital innovations. To ensure that our digital innovations meet user needs and improve the quality of care, I established a rigorous evaluation program combining classic usability assessments with data science insights.

Participating in the Women in AMIA Leadership Program taught me that even early career informaticists have the power to reshape the informatics community. Some ways in which we can contribute include leading research in emerging informatics sub-domains, engaging our supervisors in our career development, raising awareness of our need for mentorship and sponsorship, and publicly thanking those who help us grow. Additionally, we are already senior enough to mentor others. In particular, I would like to help undergraduate students from immigrant families and first-generation female immigrants who face gender discrimination aggravated by complexities of immigration. These women often dream of building both meaningful careers and happy families. As female immigrant myself, I hope to become a role model for those women by achieving my full potential as a scientist without sacrificing my other life aspirations.



Drop us a line!

Women in AMIA would love to hear from you about what's working, what's not and what to feature in future editions of the newsletter. We also have some questions for you: How are you dealing with COVID-19? In these trying times, how are you focusing on the positive?

Please email us at:

AMIA-2020womeninamiasteeringcommittee@ConnectedCommunity.org



Want to be a part of the WIA Podcast team?

CONTACT KARMEN AT [KARMENSWILLIAMS@GMAIL.COM](mailto:karmenswilliams@gmail.com) FOR MORE INFORMATION