



## 2018 Field of Dreams Conference

### Panel Descriptions

Friday 11/2/18

---

- ❖ **Fields of Success:** Alliance doctorates tell their stories.
- ❖ **Maximizing opportunities:** The Field of Dreams conference provides an opportunity – often the first opportunity – for Alliance Predoctoral Scholars to get to know faculty at graduate schools as well as professionals in government and industry. And, as in all of life, first impressions are important! Our panelists, who were Alliance Scholars and are now doctoral students, will discuss strategies for maximizing opportunities at the Field of Dreams.
- ❖ **How to prepare for your first professional position:** A doctoral degree in a quantitatively intensive field gives you the credentials to embark on a whole variety of exciting careers. But each of these careers requires special skills and training. Our panelists will discuss ways in which you can gain these qualifications while in graduate school.
- ❖ **Mentoring at the undergraduate level:** Our Alliance faculty community is, first and foremost, a community of **mentors**. In this panel, Dr. William Vélez and Dr. Erica Walker, two of our profession's most skilled and knowledgeable mentors, will facilitate a discussion of the skills and strategies behind great mentoring at the undergraduate level.
- ❖ **Careers in Government and Industry:** Panelists will discuss the many different opportunities in government and industry available to PhDs in the mathematical sciences and other quantitatively intensive fields.
- ❖ **Introduction to the Mathematical Sciences Professional Organizations:** The mathematical sciences are blessed with a variety of professional organizations. Panelists will describe these organizations – what they do and who they serve.
- ❖ **Fields of Research:** There is a wide range of opportunities for research in the mathematical sciences and other quantitatively intensive fields. Our panel will explore these possibilities.

## Saturday 11/3/18

---

- ❖ **Mentoring at the Doctoral Level:** Alliance Doctoral Mentors will discuss their experiences and lessons learned. They will discuss the role that mentoring plays at PhD granting departments and give some practical advice for new mentors.
- ❖ **How do you know when you know math?:** Although this might seem like a simple question, it is at the heart of almost all mathematical discourse. (Just think of proofs for example.) And yet, this question is not discussed as much as it might be in our undergraduate mathematical sciences courses. Panelists will facilitate a discussion about this important question.
- ❖ **“What is ... ?” talks:** Have you ever wondered what Mathematical Epidemiology is?? Or how about a Stochastic Inverse Problem? Our “What is ... ?” talks are 20 minute presentations that answer questions like these in a way that is accessible to both students and faculty alike.
- ❖ **Paths to the doctorate: finding the right graduate program for you:** As a graduating senior you are faced with many choices when it comes to selecting a graduate program. Should you enter a doctoral program, or should you select a Master’s program or post baccalaureate program before entering a doctoral program? Should you pick a statistics program or a mathematics program? Or how about a biostatistics program or an interdisciplinary program? And, after you have made this decision, how will you know which program in your chosen field is a good fit for you? Our panelists will address these and related questions.
- ❖ **REU- The Value of a Research Experience:** In addition to providing a valuable introduction to research, summer internships are a great way to learn more about the climate and culture of graduate school.
- ❖ **The Statistics Initiative:** The statistical sciences have always played a central role in all aspects of the Alliance and this role has only become more important with the growth of data science. Yet many of our students report to us that they are not receiving the information they need in order to make informed choices about graduate education and career paths in these fields. Dr. Leslie McClure, Alliance Associate Director for Statistics, will facilitate a discussion about ways in which the dissemination of this information to our undergraduate and Master’s students can be improved and she will also bring us up to date on the activities of her Alliance statistical sciences working group. **This session is highly recommended for all faculty.**
- ❖ **The Doctoral Experience:** Our doctoral student panelists will facilitate a frank and informative discussion about how to succeed in a mathematical sciences doctoral program.

- ❖ **How to recruit Alliance students:** Year in and year out, the majority of our graduating seniors and Master's students choose a relative handful of our doctoral programs to enroll in. Panelists from these programs will share their approaches to recruiting Alliance students.