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Career Panel:
Scientists in Science Education

Presented by
The Graduate School
Office of STEM Education Partnerships
Office of Postdoctoral Affairs
University Career Services
at
Northwestern University
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Participant Biographies

Alissa Bans
Postdoctoral Scholar, Adler Planetarium
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Alissa Bans received her PhD in Astronomy and Astrophysics from the University of Chicago, and is currently a postdoctoral scholar at the Adler Planetarium. Her research focuses on how solar systems form and evolve, particularly she focuses on the role that large-scale magnetic fields play and also matching theory with observations. In addition to astronomy research, part of her role at the Adler Planetarium is engaging the public through education and outreach. Alissa spends time teaching, developing science curricula, and developing STEM teen internship opportunities. She also works on Zooniverse citizen science projects at the Adler, designed to both captivate public interest and provide real-time scientific results. When not researching or working to make science accessible to the public, Alissa enjoys playing music and finding good vegan food around Chicago.

Rebecca Daugherty (panelist)
Assistant Director, Science in Society, Northwestern University
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While training as a cell biologist at Northwestern University, Rebecca became passionate about educating underserved populations. Volunteering with the Science Club program at the Pedersen-McCormick Boys & Girls Club (Chicago, IL) opened her eyes to the need for better science education and set her on a new path. Now, she serves as the Assistant Director of Science in Society, a Northwestern University office for science outreach and public engagement, where she leads a number of youth programs, including after school science clubs, in-class enrichment, and teacher support, and helps other scientists reach out to the community.

Emily Ferrin (moderator)
Teacher Development Specialist, Office of STEM Education Partnerships, Northwestern University
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Emily received her her PhD in biochemistry and cancer biology from Dartmouth College. While in graduate school, she wrote, developed, and taught science course materials for a variety of groups, including Simbiotic Software for Teaching & Research, Connections Education, and the Citizen Science program at Bard College. Emily joined the Office of STEM Education Partnerships at Northwestern University as a Teacher Development Specialist in January of 2013. She is the project manager for the Biotechnology Center of Excellence, a hub for K-12 curriculum development and teacher professional development in the field of biotechnology.

C. Zoe Hoeppner
Industrial Liaison and Lecturer, Master in Biotechnology Program, Northwestern University
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C. Zoe Hoeppner, PhD, is Industrial Liaison and Lecturer for Northwestern University's Master in Biotechnology Program. Her primary responsibility is the development and maintenance of relationships with the biotechnology and pharmaceutical industries- with the goal to be the development of programs and initiatives that benefit the students. She facilitates student placement, coordinates the Industrial Advisory Board members and meetings, and arranges seminars by industry professionals. She provides career development coaching to students, and helps them explore their fit in industry. Zoe oversees the Biotechnology Laboratory as well as teaches Critical Thinking in Molecular Biotechnology. In addition, she teaches various seminars on the

development of business relationships and networking, as well as selected topics in a Technology Commercialization course. Zoe has over 10 years' experience at the research bench, blended with several years sales experience, plus previous roles as an entrepreneur and educator. She earned her BS in Biological Science from the University of Tulsa and her PhD in Pharmacology from the University of Illinois at Chicago. She is passionate about pushing scientific discoveries forward and making an impact on human health.

Heather King (panelist)
Associate Project Director, Outlier Research and Evaluation, Center for Elementary Math and Science Education (CEMSE), University of Chicago
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Heather earned her PhD at the University of Chicago focusing on the African lungfish, one of the few living fishes that is more closely related to humans than to other fish. The walking behavior of the lungfish is important for understanding how the first tetrapods (animals with backbones) moved out of water and onto land 350 million years ago. Through her graduate experience, Heather did extensive volunteer work encouraging youth, especially young women, to pursue careers in science. These experiences fostered her interest in education careers, and after graduating from Uchicago in 2012, Heather joined Outlier as a postdoctoral scholar, and in 2013, as an Associate Project Director. Outlier's research work focuses on fidelity of implementation, spread and sustainability of innovations, STEM school models, and computer science education.

Stephanie Levi (panelist)
Adjunct Faculty, Math and Science Teacher Quality Education Program, Northeastern Illinois U.
Founder and Executive Director, Science is Sexy
Chicago STEM Pathways Cooperative & Government Relations Liaison, Project Exploration
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Stephanie Levi received her Ph.D. in Molecular Genetics and Cell Biology at the University of Chicago, where she studied the molecular basis of the cell's secretory pathway, and created a variety of science outreach, communication and mentoring opportunities during her pre-doctoral years. After completing her Ph.D., she centered her career at the nexus of science, outreach, education and communication, focusing on improving student recruitment, retention and success in the sciences, technology, engineering and math (STEM), particularly underrepresented students, first generation and low income students, and individuals with disabilities. Her impact has led to programmatic success and student achievement at a variety of venues, including the Midwest's only four-year Hispanic-Serving Institution, a national non-profit, local youth-serving organizations, museums and libraries, among others. Her passion for science is matched only by her passion for bringing it to the public. Public education and outreach with science, technology, engineering and math are critical components of her professional interests, particularly as they focus on adults. She is the creator of Night Lab and Science is Sexy, public outreach initiatives to build a bridge between the scientific community and the general public to foster public education, engagement and interest in science. She creates innovative programming for diverse audiences in collaboration with those audiences to support appreciation and enjoyment of science. Her professional interests also include program development, curriculum development, intentional evaluation and assessment, and innovative educational and mentoring strategies. Her most recent work focuses on training scientists to conduct high quality public outreach.

Rabiah Mayas (panelist)
Director, Science and Integrated Strategies, Museum of Science and Industry
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Rabiah Mayas, Ph.D. is the Director of Science and Integrated Strategies in the Center for the Advancement of Science Education (CASE) at the Museum of Science and Industry, Chicago. In this capacity, Rabiah's primary role is to oversee several initiatives that span multiple departments and program areas: conduct program and exhibit evaluation and research, develop public programming for youth and adults, design new and/or interdisciplinary learning experiences, and facilitate integration of STEM professionals in museum programs. She also directs the programs and operations of the Museum's state-of-the-art Fab Lab, a digital fabrication laboratory for youth-driven design- and engineering-based innovation. Prior to assuming her current position in 2009, Rabiah was the Science Director of Science Chicago, a year-long campaign spearheaded by the Museum that highlighted science and technology achievements, increased access to science learning experiences, and promoted dialogue about the importance of science and technology. Rabiah earned a Ph.D. in Biochemistry and Molecular Biology at The University of Chicago in 2007.

Chinonye "Chi-Chi" Nnakwe
Director of Graduate Diversity Recruitment, Office of the Provost, University of Chicago
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Chinonye "Chi-Chi" Nnakwe, Ph. D. is the Director of Graduate Diversity Recruitment in the Office of the Provost at the University of Chicago. In her position, she collaborates with faculty, students and administrators in all divisions and professional schools to create, enhance, revise and execute strategies for recruiting students from underrepresented groups. In addition to her outreach work, Dr. Nnakwe conducts research that addresses educational disparities among underrepresented groups in higher education. Dr. Nnakwe received her B. Sc. in Biochemistry with Distinction in the Curriculum from the University of Illinois at Urbana-Champaign and her Ph. D. in Pathology from the University of Chicago.

Kai Orton
*Research Assistant Professor***,** *School of Education and Social Policy, Northwestern University*
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Kai Orton is a Research Assistant Professor at Northwestern University School of Education and Social Policy. She received her PhD in molecular biology from Northwestern University. Kai recently joined the Computational Thinking in STEM research team associated with the Office of STEM Education Partnerships. She is passionate about education outreach and science literacy. Her research expertise is grounded in complex problem solving that takes advantage of a mutli-disciplinary approach, utilizing molecular biology, computational genomics and proteomics techniques.

Amy Pratt
Associate Director, Office of STEM Education Partnerships, Northwestern University
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Amy D. Pratt received her PhD in geography from West Virginia University. She is the Associate Director of the Office of STEM Education Partnerships (OSEP) at Northwestern University where she works to develop partnerships, programs, and funding opportunities to advance OSEP's mission and improve STEM education in Illinois. Amy joined OSEP in December of 2011,

bringing 10 years of experience with non-profits both nationally and internationally to the team. Amy's program areas of expertise include education, public health, community development, and the environment and she has extensive experience in building partnerships between community groups, non-profits, government agencies, public schools, universities, foundations, and corporations.

Laura Trouille (panelist)
CIERA Fellow, Northwestern University
Astronomer, Adler Planetarium
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I grew up in the Chicago area and got my first taste for astronomy through school field trips to the Adler Planetarium. It's a dream come true to now be an astronomer at the Adler and at Northwestern University. I was a physics major at Dartmouth College and attended the University of Wisconsin - Madison to earn my Ph.D. in astronomy. While obtaining my Ph.D., I also took coursework in pedagogy and did an internship in education research through UW's Center for the Integration of Research, Teaching, and Learning (CIRTL). My astronomy research is on black holes; understanding how massive black holes affect how their host galaxies evolve over billions of year timescales. My education research is on developing and evaluating computational thinking and modeling curricular materials for the high school classroom. I also mentor students in research, teach astronomy, give public talks, and run teacher training workshops. I am passionate about helping the next generation of women and minorities access education and careers in math, science, and technology and work with the American Astronomical Society Committee on the Status of Women in Astronomy in these efforts.

Mark Vondracek (panelist)
Physics Teacher and Research Advisor, Evanston Township High School
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Mark Vondracek received his Ph.D. in experimental high energy physics from the University of Illinois at Urbana-Champaign in November, 1994, and then went into teaching high school in the Chicago Public Schools, in January of 1995. He earned his teacher certification from DePaul University in 1995, and then began teaching advanced physics at Evanston Township High School in 1998. Still at ETHS, he teaches AP physics and serves as a research advisor and coach of numerous academic teams, and is also involved in numerous projects with groups at Northwestern University.

Maggie Waldron
Program Director, FUSE, Office of STEM Education Partnerships, Northwestern University
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Maggie Waldron is the director of FUSE, a new kind of interest-driven learning experience designed to engage pre-teens and teens in science, technology, engineering, arts/design and math (STEAM). A project of the Office of STEM Education Partnerships (OSEP) at Northwestern University, FUSE supports hanging out, messing around, and geeking out while fostering the development of important 21st century skills including adaptive problem solving, creativity, self-directed learning, persistence, and grit. At OSEP, Maggie develops research-based science curricula for grades 6-12 and leads professional development workshops for teachers. Prior to OSEP, Maggie worked at Palmer Station, in Antarctica, on a long-term research project studying the impacts of climate change on the Western Antarctic Peninsula.

Laura Whyte
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After completing her PhD in Astrophysics in 2004, Laura trained as a high school teacher and taught math, physics and astronomy for 3 years. She then spent a few very pleasant years at home with her two children, working part-time doing web development and teaching distance learning students. before joining the Adler Planetarium Citizen Science department as an educator and web developer. Now Director of the Citizen Science department, Laura feels privileged to have a role that utilizes many of skills she has picked up over the last decade, to do a job that few people would have predicted the existence of when she started out.