

### **Effective Science Communication - Mr. Douglas Dollemore**

Participants will learn how to translate their work into compelling and readily understandable everyday language that will engage the public and help them appreciate science. In addition, this course will help practicing scientists build the skills and techniques necessary to better communicate their scientific interests, research and current projects to other scientists not familiar with the details of the workshop participant's field. The workshop features several group exercises that help drive home its practical applications. This course is designed for scientists at all education and experience levels. After this workshop, participants who speak with the public will likely encounter far fewer glazed-over eyes and hear the phrase, "It's all Greek to me," far less often!

### **Public Service & Policy Careers in Science & Engineering**

#### **Dr. Meredith M. Drosback**

Students in science and engineering today have a wide variety of career options from which to choose, in and outside of academia, and across the public and private sectors. Careers in public service — even for a limited period — are a unique opportunity for scientists, engineers, and technologists to use their expertise and technical skills to address critical issues at the local, national, and global levels. In this presentation, I will share the story of my career path over the last decade, from an academic research scientist to science policy advisor at the White House Office of Science and Technology Policy. I will discuss some of the decisions and challenges I faced, and lessons I have learned along the way.

### **Engineering Polymers from Secondhand Materials**

#### **Dr. Jeannette Garcia**

Of the ~32 million tons of plastic solid waste produced annually in the US, less than 10% of it is recycled. Technological challenges remain a primary limiting factor for plastics recycling as melt-and-remolding processes required during mechanical recycling produce polymers with diminished thermal and mechanical properties. Therefore, a need for the re-purposing of polymer waste and alternate recycling technologies has arisen. This talk will focus on the use of waste polymers as monomer feedstock for the synthesis of value-added materials and design of materials for recyclability.

# **Beyond Academia**

## **Scientific Career Pathways**

October 18, 2017 - Michigan League

### **Featuring Presentations By:**

Mr. Douglas Dollemore

Dr. Meredith Drosback

Dr. Oleg Gang

Dr. Jeannette M. Garcia

Dr. Crystal G. Morrison

Dr. Jennifer M. Rego

### **Sponsored By:**



<b>1:00-1:45</b>	<b>Life as an Industrial Polymer Scientist at IBM</b> Dr. Jeannette M. Garcia  Henderson Room, 3rd Floor	<b>Science &amp; Life in the National Labs</b> Dr. Oleg Gang  Koessler Room, 3rd Floor
<b>1:45-2:00</b>	Break	
<b>2:00-2:45</b>	<b>Taking Control of Your Personal Brand</b> Crystal G. Morrison  Henderson Room, 3rd Floor	<b>Innovations at the U.S. Army Natick Soldier Center</b> Dr. Jennifer M. Rego  Koessler Room, 3rd Floor
<b>2:45-3:00</b>	Break	
<b>3:00-3:45</b>	<b>Effective Science Communication</b> Mr. Douglas Dollemore  Henderson Room, 3rd Floor	<b>Public Service &amp; Policy Careers</b> Dr. Meredith M. Drosback  Koessler Room, 3rd Floor
<b>3:45-4:00</b>	Break	
<b>4:00-4:45</b>	<b>Career Discussion Panel</b> Dr. Meredith M. Drosback, Dr. Oleg Gang, Dr. Crystal G. Morrison, Dr. Jennifer M. Rego  Hussey Room, 2nd Floor	
<b>4:45-5:00</b>	Break	
<b>5:00-5:45</b>	<b>Engineering Polymers from Secondhand Materials</b> Dr. Jeannette Garcia  Hussey Room, 2nd Floor	
<b>6:30-8:30</b>	<b>Networking Dinner</b>  Zingerman's Greyline - 100 North Ashley Street	

### Science & Life in the National Labs - Dr. Oleg Gang

US National Laboratories are large players in enabling world leading characterization facilities across the majority of scientific fields, in seeding new scientific directions and in training the next generation of scientists. I will discuss ongoing initiatives, new and established facilities and several scientific projects in national labs. I will also talk about the differences and similarities between university and national lab environments, different labs, a symbiosis of research projects and method developments, and career path options in a lab.

### Life as an Industrial Polymer Scientist at IBM Research Dr. Jeannette M. Garcia

IBM has a rich history in polymer science research that has evolved over several decades. Although polymers have been studied at IBM principally for use in microelectronics and semiconductors, exciting polymer research has emerged that has impacted “adjacent space” technologies. I will offer my perspective on being an industrial polymer chemist working in this very unique lab environment today.

### Taking Control of Your Personal Brand - Dr. Crystal G. Morrison

Branding is an image created in someone’s mind based on both tangible and intangible characteristics of a product or service that make it unique. Products that are branded are often chosen over similar products because they somehow have a perceived value of being ‘better’. The reality is that branding is not just about products. In this presentation, we will talk about branding, the importance of personal brand and how to define and cultivate your personal brand. We will also talk about creating a valued elevator pitch as part of your brand identity.

### Innovations at the U.S. Army Natick Soldier Research, Development, and Engineering Center - Dr. Jennifer M. Rego

The U.S. Army Natick Soldier Research, Development and Engineering Center (NSRDEC) focuses on providing the Army with innovative science and technology solutions to optimize the performance of our Soldiers. The team at NSRDEC provides a wide range of capabilities to the Soldier including field feeding and life support systems, clothing, precision airdrop systems, and ballistic, chemical and laser-protection systems. An overview of the research and development efforts at the NSRDEC will be provided. In addition, I will discuss my own career path, experiences at the NSRDEC and opportunities for how you too may begin a career in Soldier-centric research.