Thinking Outside the Box: Career Options for Science PhDs (Oct 12, 2010)
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Have you considered alternative careers in science such as science policy, science writing, consulting, and technology transfer? Have you ever wondered what else you can do with your PhD degree?

FelCom’s Career Development Seminar, “Thinking Outside the Box,” featured four talented speakers from very diverse career areas. Below is a summary of each panelist’s presentation.

A Regional Account Manager with Illumina, Dr. Rob Genuario’s career began in academia and led to different sales positions at various biotech companies, culminating in his current position at Illumina. He shared several observations about working in industry, including the following: networking and interacting with sales representatives who visit labs is a great opportunity to learn how to use the instrumentation a company produces; an industry sales position may be a good fit for those who like fast-paced, dynamic environments; and that revenue-generation truly is a priority in industry, as publicly-traded companies have to answer to shareholders. He also noted that Illumina is currently hiring, especially in emerging markets overseas. Visit their career Web site to find out more.

Dr. Qian Li, a senior chemist at McCormick Spice, was a postdoctoral fellow at the NIH before entering McCormick’s research and development unit. This unit covers product development in relation to health effects. For example, they work to determine whether there are cancer antigens in certain food products. They also focus on how to improve health benefits by increasing the antioxidant component of food products and reducing sodium and calories. She highlighted how biomedical or biological sciences backgrounds could be used in the food industry in a variety of ways, such as by using taste receptor biology to determine seasoning and flavors for products like chips.

Dr. Mehdi Moini, a research scientist at Museum Conservation Institute, also began his career in academia. While in graduate school, he focused on Mass Spectrometry and Proteomics because he realized that working with new instrumentation and techniques would be more likely to help him find a job. He encouraged others to do the same, by keeping up with market trends and making use of training opportunities that help develop diverse skills. The Museum Conservation Institute is home to 19 museums and galleries and nine research centers, many of which feature international collaborations. Scientists at the Institute conduct organic and protein analysis, date protein compounds, and develop portable instrumentation that varies from x-rays to infrared rays used to analyze compounds at the locations where they are found. He urged those interested in this work to contact scientists at the Smithsonian Research Institutes regarding a detail or internship, which could lead to further career opportunities. More information regarding
the available fellowship opportunities can be found on the Smithsonian Museum Conservation Institute’s Web site. Deadlines are in January of each year, and foreign nationals are eligible. Permanent positions with the Smithsonian and other federal government institutes (restricted to US citizens) can be found on the USAJOBS website.

Finally, Dr. Robert Fleischer, Center Head at the Center for Conservation and Evolutionary Genetics at the National Zoological Park division of the Smithsonian Institution, gave an overview of his center. Their work includes population evolutionary genetics, genetics of endangered plants and animals, and work on ancient DNA from fossils and dirt samples. Researchers use molecular, genomic and bioinformatic scientific research techniques to help sustain endangered species and prevent their extinction. This is done through genetic analyses that determine compatibility of breeding, what species an animal is a part of, and diagnosis of life threatening diseases for animals in the wild. For the research projects at the Smithsonian Dr. Fleischer stressed the importance of having a number of good quality publications as well as the ability to collaborate and maintain grant funding. Pre- and Postdoctoral fellowships and some Trust positions are available and open to all citizenship backgrounds.

There are many ways that a PhD in the sciences can be used. When considering a career, start thinking outside the box!