Early Career Members

Standing on the Shoulders of (Industry) Giants: Part 3

by Christopher Boomsma

“If I have seen a little further, it is by standing on the shoulders of giants.”

—Sir Isaac Newton, 1676

This month’s Early Career Members article is the third and final installment of the “Standing on the Shoulders of (Industry) Giants” series of articles in which I interview some of the private-sector “giants” working in areas connected to ASA, CSSA, and SSSA. I spoke with Dr. Marc Albertsen of DuPont Pioneer in the inaugural interview (April 2013 edition) and with Dr. Paul Fixen of the International Plant Nutrition Institute (IPNI) in the subsequent article (July 2013 edition). If you did not get a chance to read the transcripts of these interviews along with my introductory comments posted at the beginning of each article, please take a few minutes to do so. A quick read will provide you with context for this article and enable you to learn from the intellect and wisdom of these men.

The interviewee for this final piece in the series is Dr. Rita Hogan Mumm, Associate Professor Emerita at the University of Illinois at Urbana–Champaign and Principal at GeneMax Services. Dr. Mumm is an excellent fit for this interview series given her knowledge, work experiences, accomplishments, and leadership roles in both the public and private sectors. Yet given her gender, Dr. Mumm also has the ability to speak on some of the unique professional and personal challenges facing early career women that are working in fields of science historically dominated by men while trying to balance personal and professional responsibilities. In the interview that follows, Dr. Mumm answers the five core questions posed to this series’ first two interviewees. I have added a sixth unique question, which addresses some of the challenges facing women working in the agronomic, crop, and/or soil sciences. This question provides an avenue for Dr. Mumm to give advice specifically for female readers.

I hope that you enjoy this final article and feel that the three-part series accomplished its primary objectives of (i) highlighting private-sector employment opportunities and potential industry career tracks, (ii) showing how private-sector employees can work with public-sector colleagues and the Societies in addressing key scientific challenges, and (iii) enabling industry “giants” to share key insights and “lessons learned” with early career members. As always, feel free to contact the interviewees or me if you have any questions. Best wishes with your careers whether they be in the private or public sector!

Interview with Rita Hogan Mumm, Ph.D., University of Illinois at Urbana–Champaign and GeneMax Services; ritamumm@illinois.edu

Boomsma: To introduce readers to you and your accomplishments, can you please describe your education, work current employer and position?

Mumm: I completed a Ph.D. program with John Dudley in maize genetics at the University of Illinois and went to work for DEKALB Genetics Corporation in 1993. It was an exciting time for biotechnology in the crop improvement arena: transgenic trait development was in its infancy, and the potential of molecular markers in plant breeding being explored. I managed the product development program and led efforts to design and implement a testing system for trait efficacy evaluation, event selection, and agronomic performance. It was exciting to see four value-added traits commercialized, one each year from 1995 through 1998. I later led a team in establishing a high-throughput molecular marker system, aimed at providing this technology as a powerful tool for the breeder in the development of corn hybrids with key performance characteristics and positioning DEKALB as an industry leader in implementing genomic information in seed product development. I went on to lead efforts to establish transgenic product development programs in cotton, wheat, rice, and some specialty crops for Syngenta Biotechnology. I founded the consulting firm GeneMax Services to more widely support use of biotechnology in seed product development. In more recent years, I have shifted into education in academia, leading the establishment of the Illinois Plant Breeding Center at the University of Illinois at Urbana–Champaign (UIUC) to help meet the acute need for more and better trained crop improvement professionals, creating new graduate-level courses in plant breeding, and providing education and consulting to professionals in the private sector.