

## **Ann Marie Thro Friends Award 2024**

### **Dr. Rita Mumm, Professor Emerita, University of Illinois**

*By Henry A. Cordoba-Novoa*



"Plant breeders are problem-solvers. It is our responsibility to empower the next generation of professionals worldwide."

A trailblazer in utilizing technological innovations and genomics-assisted approaches to optimize the development of improved cultivars, Dr. Rita Mumm has contributed to agricultural food system advancements through the seed industry, academia, and international development, and supported plant breeders worldwide.

Mumm's current roles are mainly focused on preparing the next generation of crop improvement scientists, especially in Africa, to meet the world's demands for nutritious food.

"Not everyone has been in contact with agriculture and food production, especially if you grew up in a city." As a mom who enjoyed gardening, Rita became curious and began exploring the available seeds and resources for both her garden and her family's daily meals. That same curiosity resulted in an exciting career in agriculture from where we can learn some lessons today.

**What do you think have been the main challenges and opportunities when empowering the next generation of plant breeders?**

There are different challenges in training and empowering the next generation of breeders. It is necessary to attract talented minds to the profession. This should be seen by young people as a desirable career option if they are to aspire to it in developed and developing countries.

Preparing motivated individuals is not only about a strong technical background but also about soft skills. These presentation and relational abilities allow young scientists to progress in their careers towards major goals, essential to meet the urgent challenges of feeding and nourishing the world.

Professional development programs to fuel early-career plant breeders must be kept as a priority to creatively deploy new advancements in crop improvement. Continuing education is essential as science is advancing so quickly, but access to information may be challenging



in countries where the seed industry is in its infancy. Maintaining a sense of ownership and showing how valuable is everyone's work allows teams to thrive and be successful.

### **What do you think production systems will look like in the next decades?**

As technology and science progress, new tools are tested and validated in major crops, that can be later transferred to other crops. Underutilized species in different cultures will greatly benefit from an expanding toolbox of genomic and phenomic resources. As an example, teff and finger millet, important for some African regions may have newly developed varieties that are not only resilient but better producers. Expanding technologies will not only allow to increase the amount of available food but also the diversity we may have all year round. As consumers are more aware of the benefits of less common products, product pipelines will adapt to meet those new consuming habits.

### **What inspires you the most these days?**

Plant breeders are problem-solvers in dynamic environments involving multiple stakeholders. I am inspired by motivated, passionate, talented, creative people who put science to work on behalf of People and the Planet. My colleagues and my students inspire me every day! And working in a team-based environment is pure fun!