National Association for Plant Breeding
PUBLIC SECTOR PLANT BREEDING IMPACT AWARD 2024

MICHAEL GORE
Cornell University
Ithaca NY

The 2024 recipient of the National Association for Plant Breeding Early Career Scientist Award is Dr. Michael Gore, Cornell University, Ithaca, NY. Gore is Professor of molecular breeding and genetics for nutritional quality, holds the Liberty Hyde Bailey Professorship, and serves as the Section Head of Plant Breeding and Genetics in the School of Integrative Plant Science at Cornell University. Additionally, he is a faculty fellow at both the Cornell Atkinson Center for Sustainability and the Cornell Institute for Food Systems.

As his nomination package states: "Dr. Gore's contributions in pioneering research, technological innovation, education and leadership have had an extraordinary impact in the field of plant breeding. I can think of few as deserving and surely none in the first 15 years of their independent careers for this award. Awards like these are important not just to recognize our colleagues, but for the colleagues who receive them to represent our discipline. Dr. Gore received the Early Career Award of NAPB and since then he has gone on to become Fellow of AAAS and CSSA. The NAPB Public Sector Plant Breeding Impact Award recognizes hime as a mature world leader among plant breeders enhancing the recognition of our discipline."

Gore earned his BS and MS degrees from Virginia Tech and completed his PhD at Cornell University. Before joining Cornell University as a faculty member, he worked as a Research Geneticist with the USDA-ARS at the Arid-Land Agricultural Research Center in Maricopa, Arizona.

In his research, Gore has actively contributed to global crop improvement initiatives aimed at enhancing human well-being while prioritizing environmental sustainability by addressing resource overuse. By fostering collaboration with experts worldwide, the postdocs, students, and visiting scholars under his mentorship have extended the impact of their work beyond Cornell, benefitting global agriculture.

Gore is renowned for his distinguished contributions to the field of genetics and genomics, particularly in characterizing genetic diversity and identifying genes and alleles for enhancing crop nutritional quality. He has pioneered the use of field-based, high-throughput phenotyping to understand the genetic basis of complex crop traits. Currently, Gore is advancing the analysis of complex trait variation in crops by integrating machine learning and phenomics approaches. He is also combining synthetic biology with quantitative genetics to accelerate genetic discoveries and improvements in crops.

As one of his colleagues notes: "Dr. Gore's work is central to how the discipline of plant breeding is discussed and taught with broad implications for both the academy, industry, and government. His research is cutting edge, his students populate the academy, and he is looked to for novel ways of improving food security. While his work on genome-wide association models in maize has been his most cited, his work on method development in both phenomics in particular his groups work on developing user friendly R-packages has really made breeding working more accessible to regions with fewer resources. I cannot think of a better recipient of the award, Dr. Gore exemplifies the best of both research and education across the world."

In addition to teaching at Cornell University, Gore has co-taught courses worldwide through the Tucson Plant Breeding Institute, having taught hundreds of students over the past decade. He currently serves as the Editor of The Plant Phenome Journal and has previously served on the Editorial Boards of Genetics, Crop Science, and Theoretical and Applied Genetics. He also chaired the Plant Breeding Coordinating Committee. Gore is a Fellow of both the American Association for the Advancement of Science and the Crop Science Society of America.

In conclusion, as another colleague observes: "Dr. Gore's overall personality and character are remarkable attributes that contribute to his ability to be a successful member of a productive community, both at the university and international level. He is exceptionally easy to get along with, which enables him to connect, communicate, and collaborate with numerous colleagues. Dr. Gore's ability to collaborate with others to achieve a greater good is evidence he will continue to make a significant impact in the world-wide crop science community."

Dr. Michael Gore, Cornell University, the 2024 recipient of the Public Sector Plant Breeding Impact Award of the National Association for Plant Breeding, phenotypes cotton plants to identify optimally performing genotypes at the Maricopa Agricultural Center in Maricopa, Arizona.