ICGI Overall Chair Candidate

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I am the cotton breeder and geneticist at NCSU, Raleigh, North Carolina, USA. My research focuses on developing genetic and genomic resources in cotton; identification of superior alleles and genetic loci for cotton traits based on linkage and genome wide analyses, and their use in breeding with the assistance of DNA based marker tools; developing breeding methodologies for cotton genetic improvement; and elucidation of molecular genetic basis of cotton traits including leaf shape, fiber and seed quality, flowering time, biotic and abiotic stress tolerance genes. I have been serving and actively supporting scientific professional organizations including the Crop Science Society of America (CSSA), National Association of Plant Breeders (NAPB) and International Cotton Genome Initiative (ICGI). I have organized scientific sessions at CSSA and Plant and Animal Genome (PAG) annual conferences, chaired the Genomics, Molecular Genetics & Biotechnology division of CSSA-ASA conferences in 2021, and served as co-organizer of the ICGI conference in Raleigh in 2012. If elected to serve as ICGI Chair, I will work to foster and strengthen international collaborations among cotton researchers. Further, with the availability of high-quality genome sequences of various *Gossypium* species and advancements in high-throughput phenotyping, I believe the cotton research community could focus on the following key areas: 1) Enhancing global collaboration among cotton researchers, 2) systematically characterizing the publicly available germplasm and genetic mapping resources, 3) Applying genomic and phenomic data to breeding and cultivar development; 3) Conducting pan-genome analyses for trait discovery and associated genomic information for cotton improvement; 4) Leveraging genomic data and new genomic tools to better understand the genetics, gene networks, and evolution of *Gossypium* species, and 5) Developing advanced gene-editing and transformation tools to manipulate genes controlling critical cotton traits. As ICGI Chair, I will advocate for research in these areas and work to accelerate scientific progress in cotton genetics and breeding.