

ICGI Comparative Genomics & Bioinformatics Workgroup Co-Chair Candidate

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I am an active young ICGI member with professional interests in utilizing bioinformatics to enhance cotton breeding programs. I initially joined ICGI and the cotton research community while completing my Ph.D. research nearly a decade ago focused on cotton under Dr. David Stelly at Texas A&M University. I was a leading member of the international team that developed the highly successful CottonSNP63K array, which has been utilized world-wide for efficient characterization of germplasm resources and identification of economically important genes. I have worked to integrate a search and deposit function for array data in CottonGen for easier access to the cotton community and am interested in developing more user-friendly tools for cotton breeders and researchers. I have also been involved in several past and current high-quality genome reference sequence development efforts.

I am a Bioinformatician with the USDA-ARS Genomics and Bioinformatics Research Unit located in Raleigh, NC at North Carolina State University. My research will continue to emphasize cotton bioinformatics, resource development and integration of genomics and bioinformatics tools for enhancing cotton breeding and utilization of currently available germplasm resources. I have strong collaborations with cotton researchers and breeders around the United States and Internationally. I've consistently participated in the International and Plant and Animal Genome Conference meetings since 2010. My goal is to share with the ICGI leadership the perspectives of a younger scientist and help advance ICGI in the international cotton and plant science research communities. Being involved with several bioinformatics groups around the world working on cotton will allow me to integrate multiple research groups through the Comparative Genomics and Bioinformatics Research Group of ICGI in the hopes of building a more collaborative international research community to better the global improvement, disease resistance, and sustainability of cotton. I also envision strengthening the participation of students in ICGI.