

Meeting: C₄ + CAM Plant Biology 2013, August 6-9, Champaign, IL

This project funded the C₄ and CAM (crassulacean acid metabolism) Plant Biology 2013 symposium, held at the University of Illinois at Urbana-Champaign, IL, on August 6-9, 2013. The symposium brought together a diverse group of scientists to discuss the evolution, ecology, functional biology, genomics and biotechnological engineering of C₄ and CAM plants. These two groups of plants possess evolutionary modifications to their photosynthetic machinery that improve their performance in hot and dry conditions. Maize and pineapple are classic examples of C₄ and CAM plants, respectively. The meeting discussed how lessons learned from these groups of plants can be harnessed to improve crop production of biofuel feedstocks in an era of global climate change. The interdisciplinary nature of the meeting meant that the delegation members typically do not collectively attend any one scientific society meeting. As a result, the symposium was a unique opportunity for knowledge transfer, initiation of new collaborations, and recruitment and exposure of early career scientists.

The symposium attracted substantially more participants (176) than originally expected (125). Attempts to attract a diverse pool of participants were successful. Gender balance was almost 50:50 with 78 female delegates and 98 male delegates. Early-career scientists, including undergraduates, graduate students, post-docs and assistant professors, formed the majority of the participants (115). Participants came from 17 countries including under-represented geographic regions of South America, Central America, and South East Asia (Australia, Belgium, Brazil, Canada, China, Germany, India, Italy, Japan, Panama, Philippines, Portugal, Russia, Singapore, Turkey, UK and USA).

Attempts to attract a high quality and diverse set of speakers were also successful. 38 participants were invited or selected to give oral presentations. These speakers came from 9 countries (Australia, Brazil, Canada, China, Germany, Panama, Philippines, UK, USA) and included 17 female scientists and 21 early-career scientists.

A website was established to disseminate information from the meeting more widely (<http://conferences.igb.illinois.edu/c4cam/welcome>), including an archive of video recordings of oral presentations and abstracts of the 69 posters presented at the meeting. Additional dissemination was achieved through the use of the #C4CAM hashtag on twitter. This brought awareness of the meeting to a broader community e.g. the UK Consulate in Chicago. It also provided a platform for new interactions between delegates at the meeting who “followed” one another on twitter, allowing them to establish links that were maintained after they returned home from the meeting.

A special issue of Journal of Experimental Botany that will highlight work presented at the meeting is in press. It features 37 papers including 10 review papers and 27 original research articles.