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Summary of the International Conference on Arabidopsis Research 2011, June 22-25, 2011

Final Scientific and Technical Report for the period June 15, 2011 to June 14, 2012

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Blake C. Meyers

University of Delaware
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This project provided participant support for the gathering of plant biologists at the International Conferences on Arabidopsis Research (ICAR) in 2011. *Arabidopsis thaliana*, the reference flowering plant, has been intensely studied over the last 20 years and has proven to be an ideal model for studying nearly all aspects of plant biology. The success of this research field has been greatly facilitated by the openness and collegiality of the community fostered through multiple international forums including the ICAR. Advances in basic and applied plant biology are featured at the meeting, which is the primary gathering point for this strongly integrated international community. The ICAR convenes plant researchers, allows discussion and dissemination of the latest research in plant biology, and facilitates dialog among those that may be separated by geography, career stage, and culture. This project focused on facilitating access by early career scientists that have reduced access to attend major meetings.

The scientific program in 2011 included a large number of excellent platform and concurrent sessions that featured talks by established speakers and early-career researchers. Topics spanned the breadth and depth of plant biology from the molecular to the systems level, up to the ecological level, and included basic and applied research. There were 40 invited speakers, and 50 selected from abstracts, that presented the latest plant research in two keynote lectures and six plenary and 10 concurrent sessions. In addition, there were 42 additional presentations in 8 workshop sessions, which were proposed and organized by members of the community. The 510 posters and 90 platform talks presented in areas including Biotic and Abiotic Stress, Hormone Signaling, Translational Biology, Biochemistry and Metabolism, Cell Walls and the Cuticle, Epigenetics/Small RNAs, New Technologies, Circadian Regulation, Natural Variation, and Plant Development, among other topics.

Specific impacts of this project include: partial support for 8 early career scientist attendees (4 female/ 4 male; 3 graduate students/ 5 postdoctoral scholar) and partial support for 2 early-career invited postdoctoral scholar speakers (1 female/ 1 male) and 6 additional (3 female/ 3 male) invited speakers who presented current research in the meeting's platform symposia. All recipients of project funds were required to present their research through a poster or oral presentation. Thus, the project enabled and incentivized early career researchers to participate more fully in the international conference. This approach strengthens science in the US by providing useful opportunities for awardees to present their research to peers in their scientific field and experience interacting with the scientific community, giving science presentations, discussing their research, and responding to criticism and questions.

The results of the meeting were broadly disseminated to the public via the online, resource, The Arabidopsis Information Resource (TAIR). The programs or abstracts of the past 15 ICARs are featured on this website (http://www.arabidopsis.org/news/abstracts.jsp). Additional important outreach efforts facilitated at ICAR were meetings of several organizing bodies of international collaborators including: the North American Arabidopsis Steering Committee (NAASC), the Multinational Arabidopsis Steering Committee (MASC), the International Arabidopsis Informatics Consortium (IAIC), and the Arabidopsis Biological Resource Center (ABRC). Each of these community groups has a website for additional dissemination of its efforts.

The success of the Arabidopsis research field, and by extension, plant biology, has been greatly facilitated by the openness and collegiality of the community fostered through multiple international forums including the ICAR. A key factor in the synergistic interactions among Arabidopsis research labs has been the opportunity to meet and share research with colleagues from around the world. The ICAR has proven to be an extremely effective venue for this purpose, particularly for exposing young scientists to the field and for encouraging interactions between younger and more established researchers. According to TAIR, there about 20,000 Arabidopsis researchers in 7,900 laboratories worldwide. ICARs have grown to represent one of the premier venues for international exchange of the latest advances in plant biology and serve as nucleation sites for higher level strategic planning for the global Arabidopsis community.