

Detailed program

The Biology of CAM plants April 9-13, 2018 The Desert Botanical Garden, Dorrance Center Phoenix, AZ

Monday, April 9

7:00 am - 9:00 am	Arrival, Registration and Breakfast (Catered at DBG)
9:00 am – 9:15 am	Ken Schutz (DBG Executive Director), Welcome to the Desert Botanical Garden
9:15 am – 9:30 am	Program Chair (TBD), Meeting overview
9:30 am – 10:15 am	Keynote address I: Klaus Winter, Smithsonian Tropical Research Institute, Panama
10:15 am – 10:30 am	Break

Session 1: CAM in Agroecosystems: Session organizer(s) and discussion leader(s): **Sarah Davis**
Session details: This session will summarize current and future work to enhance nutrient- and water-use efficiency and productivity in CAM crops used for bio-energy and food resources.

10:30 am – 11:00 am	Robert VanBuren, Michigan State University
11:00 am – 11:30 am	Samantha Hartzell*, Princeton University
11:30 am – 12:00 pm	Sarah Davis, Ohio University

12:00 pm – 2:00 pm	Lunch (Catered at DBG)
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Session 2: Evolution and Ecological Adaptation: Session organizer(s) and discussion leader(s):
Lucas Majure

Session details: This session will focus on integrative adaptive evolution of CAM and stem / leaf succulence. Specific topics will cover functional trait correlations, phylogenetic relationships among species, and genome size of giant cacti among other topics.

2:00 pm – 2:30 pm	Christopher Mendoza*, Oak Ridge National Laboratory
2:30 pm – 3:00 pm	Tania Hernández-Hernández, CINVESTAV, México
3:00 pm – 3:30 pm	Robert Moseley*, University of Tennessee
3:30 pm – 4:00 pm	Erika Edwards, Yale University

4:00 pm – 4:30 pm	Break and poster prep
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4:30 pm – 6:30 pm	Poster session, happy hour and lite snacks
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6:30 pm – 9:00 pm	Dinner at the DBG with musical entertainment
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Tuesday, April 10

7:00 am – 8:00 am Breakfast (Catered at DBG)

Session 2 continued

8:00 am – 8:30 am **Lillian Hancock, James Cook University, Australia**
 8:30 am – 9:00 am **Giacomo Mozzi, University of Padova, Italy**
 9:00 am – 9:30 am **Christopher Brooks, Mississippi State University**
 9:30 am – 10:00 am **Lucas Majure, Desert Botanical Garden**

10:00 am – 10:30 am Break

10:30 am – 11:00 am **Karolina Heyduk, University of Georgia**
 11:00 am – 11:30 am **June Simpson, CINVESTAV, México**
 11:30 am – 12:00 pm **Antonio Rigueiro-Mesejo, Heinrich Heine University, Germany**

12:00 pm – 12:30 pm Town hall style session discussion lead by session organizer

12:30 pm – 2:00 pm Lunch (Catered at DBG)

2:00 pm – 5:00 pm Breakout session 1: The four thematic groups will form and meet at various DBG locations to begin work on review papers.

Wednesday, April 11

7:00 am – 8:00 am Breakfast (Catered at DBG)

Session 3: Functional Genomics: modeling CAM from genes to biome: Session organizer(s) and discussion leader(s): **John C Cushman**

Session details: This session will explore gene regulatory network models from transcriptomic /genomic data, through modeling metabolism over the diel CAM cycle to modeling of growth and productivity at a crop canopy and through to productivity on a regional level.

8:00 am – 8:30 am **Xiaohan Yang, Oak Ridge National Laboratory**
 8:30 am – 9:00 am **Paul E Abraham, Oak Ridge National Laboratory**
 9:00 am – 9:30 am **Susanna Boxall, University of Liverpool, United Kingdom**
 9:30 am – 10:00 am **Sungdon Lim, University of Nevada, Reno**

10:00 am – 10:30 am Break

10:30 am – 11:00 am **James Hartwell, University of Liverpool, United Kingdom**
 11:00 am – 11:30 am **Lee J Sweetlove, University of Oxford, United Kingdom**
 11:30 am – 12:00 pm **Louisa Dever, University of Liverpool, United Kingdom**
 12:00 pm – 12:30 pm **John C Cushman, University of Nevada, Reno**

12:30 pm – 2:00 pm	Lunch (Catered at DBG)
2:00 pm – 2:30 pm	Town hall style session discussion lead by session organizer
2:00 pm – 2:45 pm	Keynote address II: Anne M Borland, Newcastle University, United Kingdom
3:15 pm – 5:00 pm	Free time to explore the DBG, and breakout groups to meet

Thursday, April 12

7:00 am – 8:00 am	Breakfast (Catered at DBG)
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Session 5: Macrosystems CAM Biology and Ecophysiological Systems: Session organizer(s) and discussion leader(s): **David G Williams**

Session details: this session will address the ecological roles CAM species play at regional to continental scales, the fate and vulnerability of CAM species, and CAM-dominated communities and ecosystems under future global change, and the phylogeographic patterns of CAM evolution and diversification, and how it may inform us about the future.

8:00 am – 8:30 am	Joseph Holtum, James Cook University, Australia
8:30 am – 9:00 am	Evelien van Tongerlo, Wageningen University and Research, The Netherlands
9:00 am – 9:30 am	Katia Silvera, University of California, Riverside
9:30 am – 10:00 am	Johan Ceusters, KU Leuven, Campus Geel, Belgium
10:00 am – 10:30 am	Break
10:30 am – 11:00 am	Alberto Búrquez, UNAM Hermosillo, México
11:00 am – 11:30 am	Renata Callegari Ferrari*, University of São Paulo, Brazil
11:30 am – 12:00 pm	Alistair Leverett, University of New Castle, United Kingdom
12:00 am – 12:30 pm	Kevin R Hultine, Desert Botanical Garden
12:30 pm – 2:00 pm	Lunch (Catered at DBG)
2:00 pm – 2:30 pm	Town hall style session discussion lead by session organizer
2:30 pm – 4:30 pm	Breakout session II
4:30 pm – 5:30 pm	Reports to whole group on synthesis paper outlines

Friday, April 13

The final day of the conference will be dedicated to a field trip to the McDowell Sonoran Preserve (mcdowellsonoran.org) located 50 km North of the DBG. The field trip will be led by organizing committee members, and expert naturalists of the Sonoran Desert, Alberto Búrquez, and Raul Puente.

Poster presentations

Enriquena Bustamante, UNAM, Hermosillo, México
Nathalie Ceusters, KU Leuven, Campus Geel, Belgium
Shannon Fehlberg, Desert Botanical Garden
Travis M Garcia*, University of Nevada, Reno
Ian S Gilman*, Yale University
Ana Zangirolame Gonçalves, University of São Paulo, Brazil
Lonnie J Guralnick, Roger Williams University
John Huber, University of Arizona / Desert Botanical Garden
Natalia Hurtado*, New Castle University, United Kingdom
Natalia Hurtado* (2nd poster), New Castle University, United Kingdom
Sophia Kelly*, Roger Williams University
Helenice Mercier, University of São Paulo, Brazil
Nicholas Nechayev*, University of Nevada, Reno
Héctor Ortiz*, Brigham Young University
Kumudu N Rathnayake*, University of South Dakota
Andrew Salywon, Desert Botanical Garden
Marty Wojciechowski, Arizona State University

*Denotes student presenter