

**2008 BioQUEST Workshop
Problem Solving in Biology:
Data, Tools and Resources from Plant Science**



Saturday, June 14th

- 10:00 AM** (Optional) Tour of the Herbarium at the Missouri Botanical Gardens (MBG)
MBG Staff
Claire Hemingway, Botanical Society of America
- Noon** Lunch MBG
- 1:00 PM** **Welcome & Introductions CBEC Classrooms**
John R. Jungck, BioQUEST Curriculum Consortium
- BSA Education & Outreach**
Claire Hemingway, Botanical Society of America
- Workshop Overview & Curriculum Reform in Undergraduate Biology**
Ethel Stanley, BioQUEST, Beloit College & Sam Donovan, University of Pittsburgh
- Phase I - During this two day phase, we will collaboratively explore data, tools, and resources in contemporary plant biology. Based on these experiences, groups of participants will develop their own project to present on Tuesday morning.*
- 2:00-4:00 PM** **Problem Solving in Biology, Session A**
- Group 1: GIS in Research and Education**
Leaders: Bob Coulter, Missouri Botanical Gardens
Ethel Stanley, BioQUEST Beloit College
- Group 2: Dessication Tolerance Problem Space: Evolution of Resurrection Plants**
Leaders: Kristin Jenkins, NESCent
Sam Donovan, University of Pittsburgh
- 4:15 – 5:00 PM** Refreshments
- 5:00 PM** Dinner
- 6:00 PM** **Plant Biology of Cassava/ Education Outreach**
Keynote Speaker: Barbara Schaal, Washington University
- 8:00 PM** Return to the Hotel



Sunday, June 15th

- 7:00 AM** Breakfast **On your own at the hotel**
Please checkout and bring luggage to MBG shuttle
- 8:15 AM** Shuttle to MBG
- 9:00–11:00 AM** **Problem Solving in Biology, Session B**
- Group 1: Plant Genomics:**
Leaders: Kenneth M. Olsen, Washington University
John R. Jungck, Beloit College
- Group 2: GIS in Research and Education**
Leaders: Bob Coulter, Missouri Botanical Gardens
Ethel Stanley, BioQUEST, Beloit College
- 12:00-2:00 PM** **Lunch - MBG: Extra time for those wishing to walk the MBG**
- 2:00-4:00 PM** **Problem Solving in Biology, Session B**
- Group 1: Strategies for Exploring Growth Data**
Leaders: Yaffa Grossman, Beloit College
Tony Weisstein, Truman State University
- Group 2: Plant Genomics**
Leaders: Kenneth M. Olsen, Washington University
John R. Jungck, Beloit College
- 4:15 – 6:15 PM** **Travel to Southeast Missouri State University. Shuttle available to participants.**
(Snacks onboard the shuttle; travel snacks for drivers)
- 6:15 – 6:45 PM** **Check into your dorm room**
- 6:45 PM** **Dinner - UC Party Room**
- 7:30-9:00 PM** **Phase I Project Work Session - UC 205 + CSI**



Monday, June 16th

- 8:00 – 9:00 AM Breakfast University Center Food Court (UC)**
(Be sure that you have your food tickets)
- 9:00-10:00AM Introduction to the University Center, Kent Library and University Resources - Ballroom**
Dean Chris McGowan, College of Science and Mathematics
Margaret Waterman, Godwin Center, Southeast Missouri State University
April Huffman, Godwin Center, Southeast Missouri State University
- 10:00-10:30 AM Break - Party Room UC**
- 10:30-12:00 OER Commons: Web-based Collaboration, Multidisciplinary Resources Missouriiana Room**
Cynthia James and Mark Basnage, Institute for the Study of Knowledge Management in Education
Sam Donovan, University of Pittsburgh
- 12:00-1:00 PM Lunch - Partyroom**
- 1:00-3:30 Phase I Project Work Session - UC meeting rooms and 205, CSI, etc.**
- 3:30 -4:00 Break - Indian Room or 205**
- 4:00 – 5:00 Introducing Case Based Learning with Plant Science - UC Missouriiana Room**
Eric Ribbens, Western Illinois University
Margaret Waterman, Southeast MO State University,
Ethel Stanley, BioQUEST, Beloit College
- 5:30 PM Dinner - UC Party Room**
- 7:00 – 9:00 PM Additional Work Time - UC 205 and CSI**
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Tuesday, June 17th

8:00 AM Breakfast - UC

9:00-10:15AM Phase I Project Poster Presentation: Problem Solving in Biology Using Tools Data and Resources from Plant Science. UC Party Room

10:15-10:30 Break

10:30-Noon Introduction to Phase II - UC Missouriiana Room

Phase II - During the second phase of the workshop, we take on the role of adopters, adapters and reviewers to extend the utility of existing materials and tools to our own classrooms.

Overview of group project and materials development and expanded individual introductions

Noon-1:00 PM Lunch - UC Party Room

1:30-4:00 PM Introduction to the BioQUEST Library VII OnLine - Little Theatre, Kent Library
Bee Visit, Peach, LateBlight, Developmental Selection, Visual Datasets (Oh Phlox, Dendrogrammaceae), Environmental Decision Making: Prairie Simulation, Forest Simulation, Biosphere II simulation, 3D Fractal-Tree, Molecular Genetics Explorer, Evolve, Genetics Construction Kit.

4:00 – 6:00 Time on your own

6:00 PM Dinner - UC Party Room

7:30 – 10:00 PM Group formation and resource exploration time for Phase II Project - UC 205 and CSI



Wednesday, June 18th

- 8:00 AM** **Breakfast - UC**
- 9:00–10:30AM** **Group project and materials development work - UC205, CSI, public spaces, Missouriiana**
Sign up to meet with Curriculum Project staff
- 10:00 – 10:30** **Break - Indian Room**
- 10:30–Noon** **Introduction to ESTEEM Tools - Missouriiana Room**
Tony Weisstein, Truman State University
John Jungck, Beloit College
- 12:00-1:30 PM** **Lunch - UC Party Room**
- 2:00–5:00 PM** **Group formation and resource exploration - UC 205, CSI, public spaces and Missouriiana**
Sign up to meet with Curriculum Project staff
- 5:30 PM** **Dinner - UC Party Room**
- 6:30-8:00 PM** **Annual Learning Materials 4-H Show -UC Party Room**
Participants share curricular materials
- 8:00-10:00 PM** **Work Time -UC 205 and CSI**
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Thursday, June 19th

8:00 AM Breakfast - UC

9:00-11:00 AM Group project work time - UC 205, CSI, public spaces and Missouriiana Room

11:00-Noon BSA and the PlantingScience Project - Missouriiana Room
Claire Hemingway, Botanical Society of America

Noon-1:00 PM Lunch - UC Party Room

1:00-5:30 PM Group project work time- UC 205, CSI, public spaces and Missouriiana Room

6:00 PM River Campus Picnic

7:00 – 10:00 Work Time - UC 205, CSI



Friday, June 20th

- 8:00 AM** **Breakfast - UC**
- 8:30-12:00 PM** **Group project work time - UC 205, CSI, public spaces and Missouriiana Room**
- 12:00-1:00 PM** **Lunch -UC Party Room**
- 1:15-3:15 PM** **Group presentations, Session #1 - UC Ballroom**
- 3:15--3:45 PM** **Break -UC 205**
- 3:45-5:45 PM** **Group presentations, Session #2 - UC Ballroom**
- 6:00 PM** **Dinner on your own**
- 7:00 PM** **Tunes at Twilight, Common Pleas Courthouse Lawn, Old Town Cape**
- 7:00-9:00 PM** **Work time - UC 205, CSI**
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Saturday June 21st

8:00 AM Breakfast - UC

9:00-10:00 PM Dorm checkout Evaluation - UC Missouriana Room

10:00-12:00 Group presentations, Session #3 - UC Ballroom

12:00-1:00 PM Lunch - UC Party Room

Shuttle departs for Lambert St. Louis Airport at 1 PM from Vandeven Hall.
