

# **TEACHER WORKSHOP**

**July 10-11, 2008 (Nashville)**

**July 14-15, 2008 (Memphis)**

## **AGENDA**

### **DAY 1**

- 8:30 am Registration
- 9:00 am Opening Remarks (Pete Nelson – BioDimensions)
- About the Project
  - Walk through Agenda for 2 days
  - Introduce the Dean at TSU/Principal at MASE
- Welcome by Tennessee State University Dean, School of Agricultural Sciences (Nashville) and Tommie Henderson, Principal, Memphis Academy of Science & Engineering (Memphis)
- 9:15 am Lecture: “Teaching Basic Biotechnology Concepts”  
(Dr. A. Naseer Aziz, Agricultural Science, Tennessee State University)
- 9:45 am Break
- 10:00 am Experiment: “Hands-On DNA Extraction Using Strawberries”  
(Dr. A. Naseer Aziz, Agricultural Science, Tennessee State University)
- 11:00 am Lecture: “Paper DNA Fingerprinting”  
(Dr. A. Naseer Aziz, Agricultural Science, Tennessee State University)
- 12:00 pm Lunch
- 1:00 pm Lecture: “Water 101- Occurrence, Movement and Quality”  
(Dr. Samuel Dennis, Agricultural Science, Tennessee State University)
- 1:30 pm Experiment: “Water Sampling and Analysis”  
(Dr. Samuel Dennis, Agricultural Science, Tennessee State University)
- 2:30 pm Break
- 3:00 pm Renewable Energy Education Opportunities  
– Tools, resources & programs to teach renewable energy in a classroom  
(Ramona Nelson, TN Dept of Economic and Community Development -  
Energy Policy Office)  
(Clean Cities Coalition, U.S. Department of Energy)
- 4:00 pm Campus Tour – Memphis Academy of Science & Engineering (Memphis workshop) and Tennessee State University (Nashville workshop)
- 5:30 pm Banquet Dinner sponsored by Monsanto Company at local restaurant

## DAY 2

- 8:30 am Lecture: “Career Opportunities in the Emerging Bioeconomy”  
(Pete Nelson, BioDimensions)
- 9:00 am Experiment: Bioplastics – Cornstarch and Biodegradation  
(Michael Gong, BioDimensions)
- 10:00 am Break
- 10: 15 am Experiment: Small Scale Biodiesel Production  
(Michael Masters, Memphis Academy of Science & Engineering)
- 11:15 am Ag in the Classroom (Chris Fleming) – an overview of the program and  
resources available to teachers to learn about agriculture and its relationship  
to the environment
- 12:15 pm Lunch
- 1:15 pm Wrap Up Workshops
- Career Examples – 1 to 2 people share
  - How to reposition
  - Pipeline to TSU
  - Guided Discussion
    - How AgBio is perceived in their classrooms?
    - Is it clear what the career opportunities are?
    - What is needed from teachers?
- 3:30 pm Conclusion