### **AP Biology Summer Institute Agenda:**

### **DAY 1: Understanding AP Biology**

- Understanding the New AP Biology Curriculum
  - o Course Framework, Unit Guides, Topic Pages
- Planning Your Course
- · Content and Skills Teaching For Understanding
- Science Practices Teaching for Transfer
- Scaffolding and Spiraling the Science Practices
- Investigations:
  - Transpiration
  - Hardy Weinberg Modeling
  - o Exploring Mendelian Genetics

## **DAY 2: Planning and Teaching AP Biology**

- The BILL: Biology Interactive Learning Log
- Instructional Approaches in AP Biology
- Scaffolding and Spiraling Concepts in AP Biology
- Planning Your Course
- Science Practices:
  - Statistics and Data Analysis
  - Visualizing Information
- Investigations:
  - Enzyme Catalysis with Yeast Spheres
  - Diffusion and Osmosis
  - o BLAST

# **DAY 3: Planning and Teaching AP Biology**

- Science Practices:
  - o Representing and Describing Data
  - Question and Method
  - Statistics and Data Analysis
  - Argumentation
- Investigation Write Ups
- Investigations:
  - o DNA Restriction Analysis
  - Transformation
- Planning Your Course
- Using Scientific Arguments to Make Connections

## **DAY 4: Assessing Progress and Understandings**

- Science Practices: Concept Application
- Investigations:
  - Cellular Respiration
  - o Signal Transduction of Taste
  - Animal Behavior
- ShoeBox Investigations: Photosynthesis
- Assessments:
  - o AP Exam Structure
  - o Formative vs Summative
  - Assessing Student Responses
- AP Course Audit and Curricular Requirements
- AP Teacher Community and Resources