

Monday, March 8, 2010			
	Track A: Grades K-4	Track B: Life Science Grades 5-12	Track C: General Science Grades 5 - 12
Session 1	Measurement & the Scientific Method - Use the scientific method and a variety of beakers, balances, and graduated cylinders to collect data and solve problems	Rainbow DNA Electrophoresis - The classic crime scene lab has been modified to use food coloring instead of DNA. The skills taught and lab experience is the same, but at a fraction of the cost	GIS (Geographic Information System) –This activity integrates hardware, software, and data for capturing, managing, analyzing, and displaying visually the information in the form of a map
Session 2	Lab Showcase - A number of our newer elementary labs will be available for teachers to experiment with	Mitosis with the Digital Microscopes - Use the digital microscopes to examine onion root tips and identify the various stages of mitosis	Introduction to Spectrophotometry & Nanotechnology - Spectral Curves of Colloidal Gold: Learn how to use the spectrophotometer and observe a chemical change as nanogold reacts with Na ⁺ ions
Session 3	Small to BIG (From the Sea) - Introduce your students to the incredible world of microscopic "things" in this activity using Brock Magiscopes	Hair Analysis - Students use their observation and critical thinking skills to develop a procedure for identifying hairs collected from a crime scene	Generating Acid Rain & Acid Dissociation Constant, Ka - Use the Vernier LabPros and computers to analyze the primary acids that compose acid rain and dissociation constant of an acid
Session 4	What Lies Beneath & The Inside Story - Participants will use the Anatomy Aprons skeleton models to explore the struture and function of the human body	Limitations on Cell Size & Diffusion Through Membranes - Use the Vernier LabPros and computers to determine the importance of surface area to volume ratios and variables that effect diffusion	Alpha, Beta, Gamma & Radiation: Spontaneous and Random - Use the Vernier LabPros and computers to study radiation