

Engaging Secondary Teachers in CALS Research for Agricultural Literacy

June 20-24, 2022

Hotel for Lodging: The Inn at Virginia Tech

901 Prices Fork Rd

Blacksburg, VA 24601

Conference Location: VT Campus Laboratories & Meeting Spaces @ The Inn

Monday, June 20, 2022

- 12:00 PM **Registration** – The Drillfield Conference Room @ The Inn (second floor)
Snacks & Hot Beverages will be available
- 12:30 PM **Welcome/Introductions/Icebreaker**
*** Refreshment Break items available all day in the Upper Quad*
- 1:00 PM **Using Systems Thinking to Address Complex Real-World Problems** (Westfall-Rudd)
Systems thinking within the FEW Nexus will be used as a unifying framework for our Immersive On-campus Experience for Teachers. Real-world FANH challenges, such as food security, are inherently complex and interdisciplinary; most could be called “wicked problems” because there is a “mismatch between how real-world systems work and how we think they work”.
- 1:30 PM **Working Lunch** – Preston’s at The Inn
- 2:00 PM **Instructional strategies for addressing complex real-world problems** (cont.)
- 5:00 PM Break
- 7:00 PM **Dinner with group** – off campus

Tuesday, June 21, 2022

- 8:30 AM **Breakfast Buffet** @ Preston’s Restaurant in the Hotel
- 9:00 AM Travel to Latham Hall
- 9:15 AM **DNA extraction lab: Collecting environmental samples** (Haak)
From DNA extraction to full sequence using desktop (handheld) sequencer from Oxford Nanopore Technology
- 12:30 PM **Lunch**
- 1:00 PM **Analyzing next generation sequencing data** (Haak)
- 4:00 PM Travel back to hotel
*** Refreshment Break items available all day in the Upper Quad*
- 4:30 PM **Reflection** in the Drillfield Room @ The Inn (Westfall-Rudd)
- 7:00 PM **Dinner with group** off campus



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Wednesday, June 22, 2022

- 8:30 AM **Breakfast Buffet** @ Preston's Restaurant in the Hotel
- 9:00 AM Travel to HAAB
- 9:15 AM **Chemistry and physics of gummy bears** (Barone)
Virginia Tech researchers will work with secondary school teachers to identify the latest trends in gummy and the effect they have on processing and final texture and flavor.
- 12:30 PM **Lunch**
- 1:00 PM **Chemistry and physics of gummy bears** (Barone)
- 4:00 PM Travel back to hotel
- ** Refreshment Break items available all day in the Upper Quad @ The Inn*
- 4:30 PM **Working Dinner & Reflection** in the 1872 Salon in Preston's Restaurant (Scherer)
- 7:00 PM Travel to Glenvar HS to visit a Science Department that has an apiary, school garden, greenhouse, student run business, and outdoor classroom.
Sci Dept Head, Charlie Filer is our Host

Thursday, June 23, 2022

- 8:30 AM **Breakfast Buffet** @ Preston's Restaurant in the Hotel
- 9:00 AM Travel to lab
- 9:30 AM **Food Science & the Senses** (Herbert)
Active demonstrations using PROP strips (supertaster test), jellybean test (nose pinch), grapefruit juice + salt (sensory interactions), perhaps the chocolate bar audio match demo. Other demonstrations will include the production and preservation of berry jam. Lesson plans will be available for all demonstrations.
- 12:30 PM **Lunch**
- 1:00 PM **Sea Urchin Embryology Lab** (Ealy)
Sea urchins are a commonly used model for fertilization and early embryological events.
- 4:00 PM **Travel back to hotel**
- ** Refreshment Break items available all day in the Upper Quad @ The Inn*
- 4:30 PM **Reflection** in the Drillfield Conference Room @ The Inn (Scherer)
- 7:00 PM Dinner with group off campus

Friday, June 24, 2022

- 8:30 AM **Breakfast Buffet** @ Preston's Restaurant in the Hotel
- ** Refreshment Break items available all day in the Upper Quad @ The Inn*
- 9:00 AM **Leadership Development** - Drillfield Conference Room (Rick Rudd)
We will focus on skills to lead teams, communicate, solve problems, make decisions and think critically. This particular component of the program will enhance the overall focus on systems thinking to address complex problems in agriculture and in life.
- 12:30 PM **Lunch** in Preston's - Conference Wrap-Up and Departure



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