

# WORKSHOP AGENDA

## 2017 PAAE Summer Conference

July 11, 2014

### Tuesday, July 11

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10:00 – 1:00 pm

Pre Service & Co-op Teacher Workshop

[Location]

John Ewing/ Daniel Foster

*Expectations of Student Teaching Experience*

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### Wednesday, July 12

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**Workshop A**  
**10:45 – 12:00 pm**

**Aquaculture/Aquaponics**

[Location]

**Alanna Kelly** <[alanna@intagsystems.com](mailto:alanna@intagsystems.com)>

*Integrated Agriculture Systems (INTAG) has worked with schools across the mid Atlantic by providing them with aquaponic systems and curriculum. The systems and curriculum are designed to support innovative education tracks in Science, Technology, Engineering and Mathematics (STEM) and include engineering modulators for water flow, chemistry, botany, accelerating grow cycles, harvesting techniques, food safety, and wholesale distribution of the products. Paul Nickerson, VP of Applied Sciences at INTAG, and Crystal Huff, Agricultural Specialist at INTAG, will be presenting how educators can utilize different size aquaponic systems in the classrooms and use curriculum to give students, k-12 and beyond, an inquiry-based experience.*

**Food Science - Fermentation/Preservation**

**Phil Haussener - Cedar Crest School District**

[phaussener@clsd.k12.pa.us](mailto:phaussener@clsd.k12.pa.us)

*Fermentation/Preservation: This workshop will focus on practical applications of fermentation and preservation for teaching food science in agricultural science classes. Attendee's will review basic food science strategies and then participate in a Root Beer laboratory investigation.*

**Utilizing a Small Animal Lab and Vet Skills**

**Tiffany Turrentine - W. B. Saul HS,**  
**[tmturrentine@philasd.org](mailto:tmturrentine@philasd.org)**

*Tour Saul's small animal lab and learn how to handle and restrain small animals as required by the state and national Vet Science CDE.*

**Green Roof Construction & Maintenance -**  
**Philadelphia Hort Society**

*This workshop will focus on how to start and maintain a green roof project. It will examine the process for selecting, planting and maintaining your garden.*

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### **Using 3D Printing in the Classroom**

**Adam Serfass - Conrad Weiser High School,  
a\_serfass@conradweiser.org**

*Plastic and Biological 3D printing are the wave of the future. Learn how 3D printing can be integrated into your curriculum for science and technology education.*

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## **Thursday, July 13**

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**Workshop B  
9:00 – 10:15 AM**

### **PASCO Workshop - using probes in labs**

*Great for teachers interested in preparing students for science fair, experimental design, and data collection and analysis. PASCO will introduce conference attendees to their variety of probes, sensors and tools for collecting and analyzing data in agricultural and environmental applications.*

### **FDA Imports and Trade**

**Kim Campbell, Investigator, Food and Drug  
Administration**

### **Philadelphia Investigations Branch - Imports**

*Do you know how ag commodities come into the US? Have you ever wondered about the FDA's role in controlling invasive species and disease at our ports? In this workshop, participants will learn from an FDA import inspector about regulated products, the import process, the inspection process, and career opportunities within the FDA.*

### **Pesticide Education Updates**

**Kelly Lowery - kdo5011@psu.edu**

*This workshop will focus on content and resources for teaching pests and pesticide safety in your classroom. Our Pesticide 101 curriculum is finally complete – come learn about available online training modules, PowerPoint presentations, worksheets, and hands-on demonstrations. Hear updates on management and control for several invasive species. Pennsylvania pesticide recertification credits will be available for this session.*

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## **Ag Biz Basics**

### **Raechel Sattazahn, Ag Choice Farm Credit**

*Ag Biz Basics is a hands-on eLearning program designed not only to prepare your students for meetings with their lender, but also to position their agricultural business for success. In a nutshell, this is a fast-paced program that allows you to establish written goals and get your financial business documentation in order including a projected cash flow statement, updated balance sheet, and a cash income statement. Along the way, you will be introduced to a few key financial ratios that can provide guidance concerning financial performance.*

*Ag Biz Basics includes four eLearning modules with multiple choice tests.*

- *Module 1: Side by Side with your Lender*
- *Module 2: Do You Cash Flow? Cash Flow Planning*
- *Module 3: What are You Worth Financially? Balance Sheet*
- *Module 4: Did You Make a Profit? Income Statement*

## **New Teacher Workshop – Tips for Surviving and Thriving!**

**Krista Pontius, [kpontius@greenwoodsd.org](mailto:kpontius@greenwoodsd.org)**

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**Workshop C**  
**10:45 – 12:00 PM**

## **Wildlife Forensics**

[Location]

**Dan Lynch – PA Game Commission, [dalynch@pa.gov](mailto:dalynch@pa.gov)**

*Wildlife Forensics: This wildlife forensic workshop will focus on techniques and activities that participants can use to bring wildlife crime solving into a classroom or program setting. Crime scene television shows are at an all-time high and using science and clues to solve crimes is a great way to get students involved in both the sciences and the environment. Determining time of death, identification of animal species, tracking and collecting evidence are all topics that will be explored. Participants should expect to be involved in hands on activities both indoors and outside. Rain gear and comfortable walking shoes are a must.*

## **Grassland Evaluation Contest**

**Genny Christ [gchrist@co.cambria.pa.us](mailto:gchrist@co.cambria.pa.us)**

**Cambria County Conservation District**

*The Grassland Evaluation Contest is an experiential education opportunity for PA high school students enrolled in FFA. Contest programs focus on the value and benefits of pasture management,*

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*wildlife, livestock grazing and soil health. Teachers will participate in an educational workshop and then a mini contest.*

### **Electricity 201**

**Charlie Graydus - Octorara High School,  
cgraydus@octorara.org**

*Learn how to safely wire advanced circuits, like 220V range outlets, 3 & 4 Way switches, or electrical panels on 6 ft. model walls. Take home a plan for making your own wiring walls.*

### **FMC**

*Learn how FMC uses current technology to advance the use of herbicides and pesticides. Participants will learn about the research that has gone into testing and finding new herbicides and pesticides.*

### **Diversity**

**Tiffany Turrentine, W.B. Saul H.S. ,  
tmturrentine@philasd.org**

*Learn how to deal with changing and evolving diversity in your classroom. This workshop will utilize activities to help teachers better manage diversity and inclusion in their class.*

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**Workshop D  
2:00 – 3:30 PM**

### **Vet Science CDE Skills**

**Joan Farwell- Technical College HS, joanf@cciu.org**

*Reinforce your knowledge of your math skill utilized in the State and National Vet Science CDE.*

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## **Teaching High School Microbiology: Concepts Laboratory**

**Donna Kelly DVM, MASCP, DACPV**

**Head of Microbiology**

**Pennsylvania Animal Diagnostic Laboratory – New Bolton Center**

*This workshop will be a combination of lecture and hands-on techniques to support the curriculum in the introductory level environmental and food microbiology laboratories. Safety, plate counts, dilutions, staining and biochemical techniques are among the topics that will be covered.*

## **Dairy Leaders of Tomorrow**

**Mary Foote - Center for Dairy Excellence -  
mfoote@centerfordairyexcellence.org**

*Having already impacted over 55,000 students nationwide, Dairy Leaders of Tomorrow and Discover Dairy have paved the way in web-based agricultural learning at NO COST to students or educators. These engaging, interactive and cross-curricular programs were developed under the advisement of certified agricultural educators as well as industry professionals and are used in many classrooms to enhance existing curriculum or as a stand-alone unit of instruction. Bring your laptop or tablet as the Dairy Education Programs Manager for the Center for Dairy Excellence leads you through the registration process for these programs, showcases each course and lesson, and then discuss different ways that hundreds of teachers have already used these programs in their classroom.*

## **Hardscaping**

**Gregory Smith - Middle Bucks Institute of Technology,  
gwsmith@mbit.org**

*Explore how to design and teach a hardscaping unit, for example how to lay out a patio.*

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## Chesapeake Bay Foundation

**Amy Green**

*Teachers will build a filter to learn how to decrease runoff pollution into the Bay. We will model and use the activity to discuss ways for you to engage students in STEM when discussing excess nutrients and sediments in our rivers and streams. Teachers will also make their own wildflower seed pods to take with them.*

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## Friday, July 14

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**Workshop E**  
**9:00 – 10:30 AM**

[Location]

### **Stroud Water Research Center**

**Tara Muenz**

*Spend the morning learning about two environmental science learning opportunities for your students. Stroud Water Research Education outreach staff will introduce you to WikiWatershed and Leaf Pack water quality monitoring programs. Spend some time playing with aquatic insects and learning how to analyze watershed properties thru a digital platform..*

### **Manure Management Plans**

**Deb & Kevin Seibert -**  
**seibertd@manheimcentral.org**

*Manheim Central, Lancaster Co. Conservation Dist.  
Youth livestock producers are facing the same challenges that commercial livestock producers do. They need quality assurance training, and must develop nutrient management plans*

### **Life Support...Teaching for 20+**

**Krista Pontius, kpontius@greenwoodsd.org**

*20 years of teaching can lead to burnout...keep the spark alive! Find new ways to energize your classroom and your program.*

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