

### **UConn 4-H STEM Day** COLLEGE OF AGRICULTURE CSI:STORRS HEALTH AND NATURAL Saturday, April 23, 9:00-2:30 University of Connecticut, Storrs Campus, Chemistry Building **Registration Form** Conference is open to youth ages 13-18

RESOURCES

EXTENSION

Please return registration form by Friday, April 8 to Nancy Wilhelm, 1376 Storrs Road, Unit 4134, Storrs, CT 06269-4134. Include \$20 registration fee for each 4-H participant, non 4-H members pay \$25. Make checks payable to UConn. Adults participating in workshops and lunch must also register and pay the registration fee. If you wish to pay with a credit card, please visit https://s.uconn.edu/4hstemday. If you have any questions, please contact Nancy Wilhelm at 860-486-4127 nancy.wilhelm@uconn.edu or Pamela Gray, 860-373-0357 pamela.gray@uconn.edu. Registration fee is non-refundable.

Name				
Street				
Town			Zip	
lephone Date of Birth				
Participant Email Address	Parent Email Address			
T-Shirt Size (please check one):SML _	XL	XXL	4-H Member _	Non 4-H Member
4-H Volunteers are needed the day of the conference toI am a registered 4-H Volunteer	o escort y I would	outh to worksl I like to help o	hops and serve as v ut on the day of the	workshop monitors. e conference
All teens must have a signed UConn 4-H Code of Conduct. to event. If a parent or guardian will not be accompanying a you submit a 4-H member/volunteer health form and pick up- they must keep the health form for each participating you parent or guardian. A box lunch is provided. Lunch is included in the registration <u>UConn 4-H Code of Conduct Form</u> <u>Health Form</u>	Forms mains forms mains forms mains in the particip off for the second s	y be mailed, em ant to UConn 4 orm with their r possession. Th <u>ck-up/Drop-off F</u>	ailed to pamela.gray 4-H CSI:STORRS, the egistration. If anoth he health form must	'@uconn.edu or brought youth participant must ner adult is chaperoning, be signed by the youth's
Cho TurkeyRoast Beef Will bring my own If you have any special dietary needs, or if special accommod special accommodations should be submitted at least two w	ose your l Tuna n lunch (n dations are reeks prior	unch Ham o refrigeration needed, please to the event.	nVegan n available) indicate in writing b	Wrap elow. Requests for

**SPACE IS LIMITED!** Workshop Schedule/Sign-ups will be upon arrival. Street parking is available, and Parking Garage.

## 2021 UConn 4-H STEM Day CSI:STORRS

## Workshop Descriptions and Schedule (sign-up for workshops upon arrival)

9:00 am – Registration, CHM Building, Room A120
9:15 am – Announcements
9:30-10:30 Workshop 1
10:35-11:35 Workshop 2
11:40-12:10 lunch, CHM Building, Room A120
12:15-1:15 Workshop 3
1:20-2:20 Workshop 4
2:20-2:30 closing, CHM Building, Room A120

#### Workshops:

**Polymerase Chain Reaction and Gel Electrophoresis**: You are a CSI agent collecting DNA evidence at the scene of a crime. You carefully collect evidence from the crime scene to bring back to the lab. You remember you have DNA samples from the victim and three suspects back in the evidence locker. What do you do next? Gel Electrophoresis is a common technique used by forensic scientists to compare DNA from the scene of the crime and DNA collected from possible perpetrators. When paired with other techniques such as Restriction Fragment Length Polymorphism (RFLP) or Polymerase Chain Reaction (PCR), it is a powerful investigative tool and has brought many people to justice. In this demo, we will be harnessing the power of PCR and Gel Electrophoresis to determine who is to blame for a ruthless crime. (Presenter- Alexandra Porczak)

**Animal Cruelty:** Animal cruelty is a gateway crime linked to other antisocial behaviors and criminal violence. Statistically people who hurt animals are far more likely to show similar behavior towards people or participate in other crimes. When we investigate crimes against animals, one of the most important things we must do is decide if the evidence came from a human or from an animal. In this workshop participants will examine hairs and blood to see if they came from a human or from an animal. (Presenter- Dr. Virginia Maxwell)

Using a 3D Printer: A key is found at a crime scene. Use a 3D printer to create a replica. Participants will learn about 3D printers and how they are used. (Presenter- Caleb Heydon)

**Crime Scene Investigation:** Investigating a crime scene is the most important part of Forensic Science. If we can't find evidence at the crime scene, we have nothing to examine in the laboratory. Looking for evidence is often a case of noticing what is at the crime scene that should not be there, or what should be there but is missing or moved. We use the evidence we find to make important linkages in the case, such as linking a suspect or victim to a place, or to each other. In this workshop, participants will use physical evidence to corroborate a suspect's story that they were not at a crime scene, and have an alibi, or show that they were there and are lying. (Presenter- Dr. Virginia Maxwell) **Solving Arson Crimes:** How can you tell if a fire is an accident or set on purpose? Look for the clues and solve the mystery. (Presenter- UConn Fire Department Arson Squad)

**Tools of the Trade:** Police have a variety of methods and tools to help them solve crimes. K-9 officers with their canine partners share a special bond and these dogs assist in crime-fighting in ways humans can't. Find out more about K-9 police units and the importance of teamwork in this workshop. (Presenter- UConn Police)



# Follow the Evidence.