Connecticut 4-H Adventures in STEM  
Saturday, November 7, 2015  
University of Connecticut, Storrs Campus  
Registration Form  
Conference is open to youth ages 12-18

Please return registration form and code of conduct by Friday, October 23, 2015 to Nancy Wilhelm, State 4-H Office, 1376 Storrs Road, Storrs, CT 06269-4134. Include $20 registration fee for each 4-H participant, non 4-H members pay $25. Make checks payable to UConn. If you have any questions, please contact Nancy Wilhelm at 860-486-4127 or nancy.wilhelm@uconn.edu.

Name__________________________

Street__________________________

Town__________________________State______________Zip____________

Telephone__________________________Date of Birth__________________________

Participant Email Address__________________________Parent Email Address__________________________

T-Shirt Size (please circle one):  Adult     S    M    L    XL    XXL  _____4-H Member _____Non 4-H Member

Adults are welcome to accompany youth for the day. If you are an attending adult please remember that this is a youth oriented program. Parents are asked to observe rather than actively participate in workshops. Attending adults must also register and pay the registration fee which covers conference supplies and food for the day. If a parent or guardian will not be accompanying a youth participant to 4-H Adventures in STEM, the youth participant must submit a 4-H member/volunteer health form at registration that day. If another adult is chaperoning, they must keep the health form for each participating youth in their possession. The health form must be signed by the youth’s parent or guardian. Health forms are available at www.4-H.uconn.edu under forms.

Lunch will be provided in a University Dining Hall which offers a wide variety of choices. Meal tickets will be provided at registration. Lunch is included in the registration fee. Make sure to have breakfast before arriving for the program as there will not be opportunities to eat before lunch at 12:00 p.m.

List below your 1st and 2nd choices for workshops you would like to attend

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<th>SESSION A</th>
<th>SESSION B</th>
<th>SESSION C</th>
<th>SESSION D</th>
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<td>1st Choice</td>
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See attached sheet for workshop descriptions

If you have any special dietary needs, or if special accommodations are needed, please indicate in writing below. Requests for special accommodations should be submitted at least two weeks prior to the event.
CONNECTICUT 4-H PROGRAM
CODE OF CONDUCT AGREEMENT

As a youth participating in a 4-H program, I agree to the following code of conduct and I will:

- Participate fully in the 4-H program.
- Be responsible for my own behavior and uphold high standards for the group.
- Use language and manners that are respectful and appropriate for a 4-H activity.
- Support and abide by the adult advisors’ leadership.
- Follow all scheduled times for program or club events.
- Display a positive attitude and good sportsmanship.
- Respect others.
- Act as a cooperative team member.
- Not use alcoholic beverages, illegal drugs, fireworks or tobacco while participating in any 4-H activity.
- Not carry or use any weapons.
- Not leave the assigned area without permission from the adult chaperone or leader.
- If involved with 4-H project animals, I understand they are shown at my risk.

I, _________________________________________ have read and understand the Code of Conduct and promise to follow the code as stated. I agree to abide by the Connecticut 4-H Program Code of Conduct as stated above. I understand that some of the activities in which I may choose to be involved may have inherent risks associated with them. I accept responsibility for my own actions and shall indemnify the 4-H organization and its volunteers against legal or other proceedings in regard thereto.

Youth Signature ________________________________ Date ________________

Parent/Guardian Statement

I have read the above Code of Conduct. I realize that I am personally responsible for my son/daughter/ward’s behavior while he/she is at any sanctioned 4-H Event or Program. I expect that if he/she breaks the Code of Conduct or becomes disruptive and the adult leaders find it necessary to dismiss him/her, that I am responsible for his/her transportation home. In the event my son/daughter/ward is detained by any legal authority, I expressly give my permission for a 4-H chaperone to remain with my son/daughter/ward until I can be present. I agree to use my best efforts to arrive as soon as possible upon being notified of such detainment. I understand that some activities and events may have inherent risks to my child by participating, and that 4-H project animals are shown at the risk of the 4-H member. Any damages to persons or property are the legal and financial responsibility of the 4-H member and their family. I shall indemnify the 4-H organization and its volunteers against legal or other proceedings in regard thereto.

I will allow the use of any photos/audio/video taken of my child/ward to be used in future promotional activities for the University of Connecticut 4-H program. Checking no to this option does not exclude anyone from membership or participation in any Connecticut 4-H programs

☐ By checking this box, I do not give permission for my child/ward’s photo/audio/video to be taken and/or used

4-H members age 18 and over may check photo permission without parent signature.

Parent/Guardian Signature ________________________________ Date ________________
8:30-9:00 am – Registration, W. B. Young Building, Room 100

9:00 am - Announcements

Session A (9:30-10:30 am)

**Lego Story Starter** – Make your very own digital comic strip with Lego building blocks. You will be the author, illustrator, director and producer of your very own story. Working in small groups participants will have the opportunity to use the Lego Story Starter app for iPad and special Lego building blocks to create a unique work of art. Share your creativity and learn a new skill in the process.

**Introduction to Chemistry for Kids** – A fun introduction to the various types of chemistry, the kinds of things you can do with a degree in Chemistry and the scope of the field. Participants must sign up for this workshop in both Sessions A and B.

**Cows, Chromosomes & Chips** – We will provide a brief presentation about the cow genome and chromosomes. We will also present information about a genetic test called the DNA microarray on which hundreds of cow-specific traits can be determined in one experiment. DNA microarrays are often called “chips” because they are the size of and are in many aspects similar to computer chips. Participants will analyze Chromosome and Chip data to identify the best cow for their 4-H competition or determine if a wrangler has rustled a cow from their family farm.

**Drink Milk? The Role of Marketing in Milk Consumption** – Participants will use computer design software to create an infographic intended to rejuvenate the appeal of milk to children. During the workshop participants will also learn about the milk industry, the health benefits of drinking milk, and successful marketing strategies.

**Financial Road Trip (2-hour workshop)** - Join us for a road trip along life’s financial highway. Where are you going? Are you ready for the journey? While planning your trip, you will make financial decisions using math skills and technology along the way. Will you make it to your destination? Participants must sign up for this workshop in both Sessions A and B.

**Hydroponics: Growing Food without Soil** – Hydroponics is a growing system in which plants are grown in a nutrient solution (water + fertilizers) without soil. Growing plants hydroponically requires understanding the plants’ needs (plant growing cycle, nutrients, oxygen, etc.) and the technology available to supply those needs. In this workshop, we will merge plant science with engineering to establish a hydroponic system to grow edible crops. Participants will learn basic concepts of root health and management options and will establish a hydroponic system.

SESSION B (10:45-11:45 AM)

**Designing Electrical Circuits** – Learn how electrical circuits work during a hands-on workshop about voltage, current and other circuit components. Using a digital multimeter to record circuit values and using concepts from math and physics to compute what is going on in the circuit, students will be able to design an electrical circuit involving lights, motors and buzzers to perform a task and see how we can engineer devices to harness the power of electricity and solve both simple and complex problems.

**Drink Milk? The Role of Marketing in Milk Consumption** – See workshop description in Session A

**Hydroponics: Growing Food without Soil** – See workshop description in Session A

**Cows, Chromosomes & Chips** – See workshop description in Session A.
Financial Road Trip Continued - This is a 2-hour workshop. Participants must sign up for both A & B sessions of this workshop.

Introduction to Chemistry for Kids Continued - This is a 2-hour workshop. Participants must sign up for both A & B sessions of this workshop.

Lunch (12:00 – 12:45 pm) – Northwest Dining Hall

Session C (1:00-2:00 pm)

Designing Electrical Circuits – See workshop description in Session B.

Safe Drinking Water For CT – Students will learn about groundwater contamination by naturally and non-naturally occurring pollutants in Connecticut using the Iowa Groundwater Model.

Microbes! The Vast Diversity all Around and Inside of Us – Most of the diversity on Earth is microbial (bacteria, archaea, single celled eukaryotes, and fungi). When people think about microbes they usually think of disease or food spoilage, but we’ve been harnessing microbes to transform our world for thousands of years (bread and cheese are only possible through the work of microbes). Recent advances in DNA sequencing technology has allowed us to peer into the microbial world much closer than ever before. Come visit a DNA sequencing facility that helps researchers across UConn examine the microbes that live in their systems.

Motion Commotion - Learn how scientists test vehicle safety through this exciting hands-on experiment exploring the relationship between speed and stopping distances. Become a real crash test researcher investigating reaction time and safety. This experiment will give you a front row seat to the dangers of distracted driving and other real world applications.

Cows, Chromosomes & Chips – See workshop description in Session A.

Drink Milk? The Role of Marketing in Milk Consumption – See workshop description in Session A.

Session D (2:15-3:15 pm)

Drink Milk? The Role of Marketing in Milk Consumption – See workshop description in Session A.

Safe Drinking Water For CT – See workshop description in Session C.

Lego Story Starter – See workshop description in Session A.

Cows, Chromosomes & Chips Continued – See workshop description in Session A.

Microbes! The Vast Diversity all Around and Inside of Us – See workshop description in Session C.

Motion Commotion – See workshop description in Session C.