

VTeen 4-H Science Pathways Café



Save the Dates!

University of Vermont, Davis Center, Mansfield Dining Room, 5-7 pm FREE pizza and drinks Open to all youth in grades 7-12; **registration required** Registration will be available at www.uvm.edu/extension/youth/announcements "Like" us @www.facebook.com/VTeen4HScienceCafe

FALL 2018

September 22: The Science of Stress

Learn about clinical psychology and current research on the intersection between behavior, stress and the autonomic nervous system (heart rate, blood pressure), HPA-axis (cortisol), and some epigenetic indicators of physical health. In layman's terms—what happens to your body when you are stressed out! Presenter: Allie Sullivan, UVM PhD Student in Clinical and Developmental Psychology

October 20: What's Buzzing in Entomology?

UNIVERSITY OF VERMONT

Love bugs? So do we! Come learn about the roles insects play in society, the environment, and emerging technologies. In this cafe we will introduce some of the many fields within entomology and take a closer look at our current research on agricultural pests.

Presenters: Yolanda Chen, PhD and Graduate Students Andrea Swan & Elisabeth Hodgdon, UVM Insect Agroecology and Evolution Lab

November 10: Location Matters: The Power of GIS and Maps in Decision-Making

If you've ever used Google Maps for directions, you know the importance of location! A Geographic Information System (GIS) is an important tool for mapping and analyzing real-world problems. GIS helps us to visualize data on a map in order to detect patterns and relationships we might not see by looking at a spreadsheet or a chart. In this cafe, students will learn about the basics of spatial analysis, including the science of geography, the art of cartography, and how location helps us to make smarter decisions.

Presenter: Jennifer Santoro, PhD Student, UVM Rubenstein School of Environment and Natural Resources

Cafes are more than just listening to a presentation. All cafes include **hands-on activities** related to the topic.

- MORE ON THE BACK! -

What is a Teen Science Café? It is a free, fun way for teens to explore science, engineering and technology with local scientists, engineers and technology experts. Teens participate in informal discussions and hands-on activities to learn about different topics. And, there is always free food! Planned and run by teens for teens.

Questions? Contact lauren.traister@uvm.edu www.uvm.edu/extension/youth

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WINTER 2019

February 2: How Energy Storage Works & Why It Matters

Clean, renewable energy sources are needed to help create a sustainable society. They must displace our current dependence on oil, natural gas and uranium. But to be dependable, we need to create storage solutions so we can harness and store wind and solar energy until needed. Discover the fascinating scientific discipline of electrical engineering, learn about the fundamentals of energy transfer, and explore how energy is stored and used in a variety of applications.

Presenters: Members of the UVM Alternative Energy Racing Organization

SPRING 2019

March 30: All in the Genes

Each of us has a blueprint for making a complete human being in each one of our cells. That information is called your genome. Your genome makes you unique, drives much of your appearance as well as your health risks. Come and learn how we are using genome information in health care, and learn how just one letter change in someone's genome can cause disease.

Presenter: Debra Leonard, MD, PhD, Professor & Chair of Pathology and Laboratory Medicine, UVM Larner College of Medicine

May 4: Cancer Treatment Discovery! Form Fits Function

This café will be an interactive journey highlighting targeted cancer treatment development. By using organ specimens and virtual histologic images, participants will be challenged to recognize morphologic differences in tumors and will use their own discoveries as the spring board for developing unique ideas for new cancer treatments. Real examples of recent cancer treatment discoveries will be used to enhance the students' self-discovery.

Presenter: Rebecca Wilcox, MD, Associate Professor of Pathology and Laboratory Medicine; Director, GI/Liver Pathology; Vice Chair of Pathology Education Department, UVM Larner College of Medicine



We listened to your feedback.... NEW THIS YEAR !!

Some of the café presenters will offer a follow up lab to go **more in-depth** on their topic. These will be offered only to teens who have participated in the café. There will be a first-come, first-served sign up after the initial café and will have limited spots available.



www.uvm.edu/extension/youth

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