

An Afternoon of Cutting Edge Research

How local early career PhDs teach the general public about using scientific evidence to make discoveries and inform decisions

The STEP mission is to engage a diverse pool of postdoctoral fellows at the University of Washington and affiliate institutions in a closely mentored apprenticeship to learn how to teach scientifically with inclusive, demonstrably effective, student-centered pedagogies.

Executive Director Dr. Rebecca Price, along with Dr. Salwa Al-Noori and Dr. Eva Ma, selected a group of STEP fellows to work with Pacific Science Center to design activities that they present to the museum's public. We are pleased to share these activities with you.

http://depts.washington.edu/stepuw/

Friday, June 22, 2018 Discovery Hall Room 162 University of Washington Bothell **Science on the fly** with Dr. Alexandre Neves - Fred Hutchinson Cancer Research Institute

Have fun learning the life cycle of fruit flies, connecting visible traits with genes, and also how flies can teach us about brain development and disease. They're more that just a nuisance in our compost bins!

Molly the Macrophage with Dr. Amy Stone - Center for Innate Immunity and Immune Disease, University of Washington Help Molly the Macrophage figure out what to do with the pieces of debris she found while patrolling the body.

DNA Building Blocks with Dr. Elizabeth Kwan

Genome Sciences, University of Washington

Our cells keep their instructions in DNA molecules. Help copy a new set of genetic information to pass on to a new cell. Learn how mistakes can change appearance, function, and health.

Gene Hacking: Changing DNA with CRISPR with Dr. Eva Ma School of Science, Technology, Engineering, and Mathematics, University of Washington Bothell

How can changes in DNA help scientists study how cells work? What is gene editing and how is it done? Come help us "fix" a gene and learn about the gene-editing technology CRISPR that is revolutionizing biology.

Let's design a medicine with Dr. Parisa Hosseinzadeh Department of Biochemistry and Institute for Protein Design, University of Washington

Come learn about how medicine works and design your own medicine to fight diseases

How Cells Keep Clean and Recycle with Dr. Ruth Thomas Genome Sciences, University of Washington Exploring the ways the cell takes care of broken proteins by fixing them or recycling them.

Superbug: The Origin Story with Dr. Sarah Morgan

Microbiology, University of Washington

Explore how bacterial growth and mutation can protect the bacteria from antibiotics. Learn about how antibiotics can be used effectively to fight infections.

Play with Parasites with Dr. Suzanne McDermott

Center for Infectious Disease Research

Have fun learning about the life of deadly sleeping sickness parasites. Come play with parasites and mold their amazing ability to make big life changes!

Pump It Up: Matters of the Heart with Dr. Will Driscoll

Fred Hutchinson Cancer Research Institute What happens to your heart after a heart attack? Come play with glitter sticks and balloons to learn how blood clots can damage your heart.

What is your spinal cord good for? with Dr. Zin Khaing

Neurological Surgery, University of Washington Learn how the spinal cord works to communicate sensory and motor information. Interact with a snap-circuit spinal cord model and build your very own neurons.

Talk to a Brain Cell with Dr. Atom Lesiak

Psychiatry and Behavioral Sciences, University of Washington Seattle Have fun learning the language of the brain. Interact with a model brain cell to learn how brain cells communicate and change. See how brain cell activity and shape are affected by disease.

Fighting the camouflage artist : Plasmodium with Dr. Vasudah

Sundaravaradan

BioQuest Program Director, Center for Infectious Disease Research This hands on game about malaria helps you learn the malaria life cycle and how to fight the parasite.



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