



ILLINOIS STATE MUSEUM

EXPLORE.LEARN.DISCOVER.



Lab Rats

SATURDAY, JANUARY 29, 2011 • 1-3PM

See amazing science demonstrations and
learn exciting skills in a hands-on workshop

Free for students in grades 6-8
Registration required by January 24 (see reverse)

For more information, call (217) 782-5993

This program is generously funded by Carrol C. Hall, long-time Springfield
High School teacher and co-founder of Horace Mann Insurance Company.



Registration

Online: To register electronically, bit.ly/chall11

By Mail: Send this form to Illinois State Museum, Attn: Elizabeth Bazan, 502 S. Spring St., Springfield, IL 62706-5000

Information

Name	Grade	School
Parent Name	Daytime Phone	
Address	Emergency Phone	
City	State	Zip

Activity Sessions

You will be able to participate in one, 90 minute hands-on workshop of your choice. Please rank your top four workshops 1-4 with one being the highest. Sessions will be assigned on a first-come, first-served basis.

- _____ **The Mysterious Nature of Light:** Without light, there is no sight. Learn exactly what light is, why color is only an illusion, and how scientists use star light to discover what stars are made of from millions of miles away. In this workshop, you will use an old CD to create a hand-held spectrograph that will disassemble any light into its component colors to reveal secrets of its source.
Project: Hand-held spectrograph
- _____ **Optical Illusions-3D:** Seeing should not always be believing. Discover simple optical illusions that fool you every day and construct your own "dragon" that appears to stare at you no matter where you go.
Project: The Gardner Dragon
- _____ **Turn Your Cell phone into a Video Microscope:** By attaching a small magnifier to a spare plastic cell phone protector you can create your own digital video microscope. You'll learn how to use your new microscope to discover amazing things that are too small for the naked eye and create remarkable videos. Participants will need to bring a cell phone with a protective cover.
Project: Digital microscope
- _____ **Explore the Stuff of Life:** DNA is the remarkable molecule that contains the blueprint of all living things. You will learn about DNA and how to extract it from living cells for study at home using chemicals found in your kitchen.
Project: DNA extraction kit
- _____ **101 Magic Tricks in 90 Minutes Flat!:** Doing science is all about not fooling yourself. The best way to learn about the importance of the scientific method is to discover just how easy it is to be fooled and to fool others. In this workshop, Dr. Shawn will reveal simple ways to do remarkable magic: Mind reading, rope tricks, and the easiest method to find a selected card.
- _____ **Copper to Gold and Molecules as Art--A Hot Introduction to Cool Chemistry:** In this workshop, you will make copper pennies appear to change into "silver" and even "gold" right before your eyes using a fun "tweak" of chemistry. You will also learn a colorful method that enables scientists to pluck particular molecules from a mixture and use it to create a unique work of art.
Project: "Silver" and "Gold" pennies and an original chromatography artwork