

Grab a cup of coffee and a bagel and join us for **Saturday Morning Science**—a series of one-hour science talks.

These are not your typical science lectures. Expect to be entertained, to see demonstrations, to learn a lot, and—best of all—to want to come back for more. No science background is required. All ages are welcome.

**Saturday Morning Science** is free and open to the public. Bagels, donuts, coffee, and juice are served before the talks, so come early. Talks start at 10:30. Doors open and refreshments are available half hour before the talks. Seating is limited to 250.

# Thanks to Our Sponsors!

University Bookstore

MU Office of Research

Saturdays 10:30 a.m. to 11:30 a.m. Monsanto Auditorium Christopher S. Bond Life Sciences Center



For additional directions, visit: http://map.missouri.edu

Free visitor parking is allowed in the Virginia Avenue Parking Garage (Levels 1, 2, and 3) on the weekends. Entrance to the parking garage is off Virginia Avenue, south of the Bond Life Sciences Center.

> Questions, Comments, Suggestions satscience@missouri.edu http://satscience.missouri.edu

> > Organizers Wouter Montfrooij Marc Johnson Bruce McClure



# Schedule At-A-Glance

- 6 Sep. Your Stem Cells and You
- 13 Sep. Geology and History: Where Did Our Mountains Come From?
- 20 Sep. Crouching Tiger Beetles, Hidden Dragonflies: Reflections on How Insects Use Color
- 27 Sep. Eat Your Greens! How Do Dietary Anti-Oxidants Combat Oxidative Stress?
- 4 Oct. The American Black Bear in Missouri
- 11 Oct. Tissue Engineering: The Key to Eternal Life
- 18 Oct. Nematodes: The Good, the Bad, and the Ugly
- 25 Oct. Plastic Power
- 1 Nov. Global Warming: Attribution, Who Is Really to Blame?
- 8 Nov. Darwin's Neglected Idea: How Does Evolution Prune the Family Tree?
- 15 Nov. Why Plants Need 20/20 Vision: Insights from Vision-Impaired Plants
- 22 Nov. Thanksgiving Break
- 29 Nov. Thanksgiving Break
- 6 Dec. New Light
- 13 Dec. Skulls Are Made For Chewing



# **SCHEDULE**

Saturdays 10:30 a.m. to 11:30 a.m. Monsanto Auditorium Christopher S. Bond Life Sciences Center





6 September Your Stem Cells and You

#### D. Cornelison

What makes a stem cell a stem cell? Are there different kinds? What jobs do they do for you, all the time? How are they being used in medicine, now and in the future? What are the risks and benefits of stem cell therapies?

# 13 September

Geology and History: Where Did **Our Mountains Come From?** 

Suzan van der Lee Northwestern

This talk will explore the geological history of mountains and mountain-building in the U.S.



# 20 September

Crouching Tiger Beetles, Hidden **Dragonflies: Reflections on How** Insects Use Color

Tom Schultz **Denison University** 

Insects are dazzling jewels of the natural world. This talk will explore how and why insects create their spectacular colors.



# 27 September

Eat Your Greens! How Do Dietary Anti-Oxidants **Combat Oxidative Stress?** 

Mark Hannink

Why are fruits and vegetables good for you? Greens are a rich source of anti-oxidants and help cells combat oxidative stress. This talk will summarize how dietary anti-oxidants help fight off the damaging effects of free radicals.



4 October The American Black Bear in Missouri

# Lori Eggert

Bear populations seem to be increasing in southern Missouri, but the origin of these bears is unknown. This talk will discuss how DNA evidence can be used to investigate the source of Missouri's bears and to provide information for their long-term conservation.



**Tissue Engineering:** The Key to Eternal Life

# **Gabor Forgacs**

In the not too distant future, you will just walk into a specialized clinic, shed your dysfunctional kidney or liver, and walk out with a made-tomeasure new one. Fiction? Maybe so, but maybe not.



Nematodes: The Good. The Bad. and The Ugly



Nematodes are among the most abundant and ubiquitous animals on earth. Many are beneficial; however, others cause billions of dollars in crop damage and pose major risks to humans and animals. Come learn about nematodes and how they may be impacting you.



Plastic Power

This talk has nothing to do with the buying power of your credit card, but imagine you could use your flexible plastic friend as your television, computer, or solar power source. We'll talk about plastic electronics, emphasizing plastic solar cells.



1 November Global Warming: Attribution, Who Is Really to Blame?

# **Tony Lupo**

This talk will explain the make-up of climate and the current state of climate science. We'll also discuss arguments for and against anthropogenic causes of climate change as well as what can be and should be done to prevent it.



8 November Darwin's Neglected Idea: How **Does Evolution Prune the Family** Tree? **Chris Pires** 

Although Charles Darwin is best known for his theory of natural selection, he was also central in developing the idea of common ancestry. This talk will explore basic principles of tree thinking, from the tips of the branches to the roots of life.



15 November Why Plants Need 20/20 Vision: **Insights from Vision-Impaired** Plants

### Mannie Liscum

Nearly all aspects of a plant's life cycle are influenced by light, so plants can't afford poor vision. This talk will examine consequences of visual impairment in plants and how science may be able to "treat" some of these "disorders."



Henry White

Highly energy efficient LED-lighting cannot be used in the home. A new MU invention is about to change all that and much more, from medical applications to radar.



13 December **Skulls Are Made For Chewing** 

Matthew Ravosa

Skulls give shape to important organs for sensing the environment and collecting food. Skulls of living animals can help us understand the feeding behavior of fossil animals. Come and learn about what skulls can tell us about animal evolution and adaptation.