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

Don’t worry, 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, and all ages are welcome. Saturday Morning Science is free and open to the public.

Refreshments will be served before the talks, so come early. Seating is limited to 250.

Why TWO Talks?
Some talks are divided into two parts to give more background. The talks are not the same—come every week!

Questions/Comments/Suggestions
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Bruce McClure 884-5716
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For directions and parking information, visit: http://map.missouri.edu

Schedule At A Glance

10 Sep. Linking Genes and Proteins
(Chair demonstration follows talk)
17 Sep. The “Truth” about Global Warming
24 Sep. Carbon Cycling in Soils
1 Oct. Can Plants Move?
(Note: Held in Ellis Auditorium)
15 Oct. The Origin of Mind, Part 1
22 Oct. The Origin of Mind, Part 2
29 Oct. Ernst Mayr: The Species King, Part 1
5 Nov. Ernst Mayr: The Species King, Part 2
(Note: Held in Ellis Auditorium)
12 Nov. Why Are Plants So Picky about Their Mates? Part 1
19 Nov. Why Are Plants So Picky about Their Mates? Part 2
26 Nov. Thanksgiving Break
3 Dec. Bioremediation by Bacteria
10 Dec. Muscle Regeneration
24 September

Carbon Cycling in Soils

Peter Motavelli
Soil and Atmospheric Sciences

How do biological cycles affect atmospheric gases? This talk will explore the biological side of global warming and explain how processes in the soil and plants around us are important.

10 September

Linking Genes and Proteins

Shari Freyermuth
Bruce McClure
Biochemistry

How do we know which gene or protein is defective in a genetic disease? This talk will focus on making connections between traits like genetic diseases and the genes and proteins responsible for them. NEW for SMS: This talk will be followed by a short laboratory (limited to 24 participants).

1 October

Can Plants Move?

Mannie Liscum
Biology

We’ve all seen sunflowers track the sun. How do they do it? Animals move away from danger and toward food. Plants have to stay put, but they can still orient themselves to optimize their access to nutrition (i.e., light, water). This talk will describe the signals and responses plants use to move.

8 October

Fuel Cells and the Future of Energy

Galen Suppes
Mechanical & Aerospace Engineering

What is a fuel cell? How is it different from a battery? This talk will explain how fuel cells work and why they may play a role in future energy production.

15 & 22 October

The Origin of Mind

David Geary
Psychological Sciences

The brain is the subject of research across a variety of disciplines. Part 1 will examine how a modern synthesis of neuroscience, evolutionary biology, and psychology informs our current understanding of the mind. Part 2 examines modern research on “intelligence” and “thinking.”

17 September

The “Truth” About Global Warming

Steve Keller
Chemistry

What is the difference between the “greenhouse effect” and “global warming”? This talk will explore how minor components of the atmosphere can lead to global temperature changes. We will also discuss the use of scientific evidence in public policy discussions.

29 October & 5 November

Ernst Mayr: The Species King

Jim Carrel
Biology

How can different species have evolved from a single ancestor? These two talks will focus on Ernst Mayr (1904-2004) and the contributions of his work to evolutionary biology. We will also examine how insights from population biology, genetics, and evolutionary theory have changed our view of how species change.

12 & 19 November

Why Are Plants so Picky about Their Mates?

Tim Holtsford
Biology

Choosing a mate is just as important for plants as it is for animals. How plants choose their mates and what happens when they make a poor choice will be the focus Part 1 of this talk. In Part 2, we will look at how plant mating systems affect population genetics and biodiversity.

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10 December

Muscle Regeneration

Dawn Cornelison
Biology

What is muscular dystrophy? What happens to dystrophic muscles? Why does the disease get worse as patients age? What kind of things are being tried to cure it? This talk will introduce the molecular defects underlying Duchenne’s muscular dystrophy and the cells and processes muscle uses to heal itself when it is diseased or damaged.

3 December

Bioremediation by Bacteria

Judy Wall
Biochemistry

Bacteria live in a range of environments, including oil wells, rusty pipes, and toxic waste dumps. This talk will describe how bacteria can live in these environments, as well as some of the ways we can harness this ability to help with environmental problems.