



Saturday Morning



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.

Saturday Morning Science is free and open to the public. No science background is required. All ages are welcome.

Bagels, donuts, coffee, and juice are served before the talks, so come early. Talks start at 10:30. Doors open and refreshments are available about a half-hour beforehand. Seating is limited to 250.

Questions, Comments, Suggestions

satscience@missouri.edu
<http://satscience.missouri.edu>

Thanks to Our Sponsors!



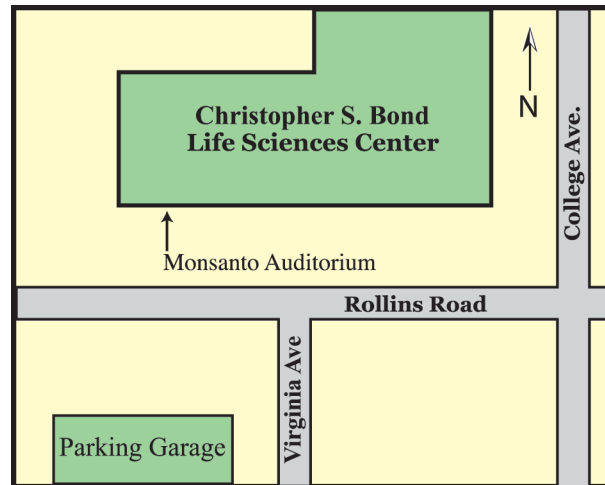
MU Office of Research



Saturdays
10:30 a.m. – 11:30 a.m.
Monsanto Auditorium
Corner of Rollins Rd. & College Ave.

For 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.



SMS is largely a volunteer effort. Our sponsors provide funding for refreshments, advertising, and occasional external speakers. If you would like to make a tax-deductible contribution to Saturday Morning Science, please contact us at satscience@missouri.edu.

2012 Organizing Committee

D. Cornelison,
Marc Johnson, Bruce McClure, Melody Kroll,
Abagael Cornelison, Cynthia Scheiner,
Martin Appold, Rob Duncan, Candi Galen,
Mark Milanick, Doug Randall, Mike Roberts,
David Robertson, Marjorie Skubic,
Margaret Tollerton, Wouter Montfrooij



Saturday Morning



Schedule At-A-Glance

- 8-Sep 3D Computer Imaging in Science and Medicine
- 15-Sep Doppler on Wheels
- 22-Sep It's Only a Flesh Wound: Regeneration Through the Ages
- 29-Sep Excessive Sitting and Physical Inactivity: Triggers for Obesity, Diabetes, and Early Death
- 6-Oct Detecting the Undetectable: Biophotonics for the 21st Century
- 13-Oct The Supercomputer in Your Pocket
- 20-Oct I'll See You and Raise You One: The Evolving War Between Plants and Bacterial Pathogens
- 27-Oct Homecoming-No SMS
- 3-Nov The Science of Climate and Climate Change
- 10-Nov Food-borne Illness: Is It Getting Worse?
- 17-Nov Thanksgiving Break-No SMS
- 24-Nov Thanksgiving Break-No SMS
- 1-Dec Your Bone Cells Are Watching You



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FALL 2012 SCHEDULE

Saturdays
10:30 a.m. – 11:30 a.m.

Monsanto Auditorium
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Corner of Rollins Rd. & College Ave.



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SCIENCE

FALL 2012 SCHEDULE

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**Saturdays
10:30 – 11:30 a.m.**

**Monsanto Auditorium
Bond Life Sciences Center
MU Campus**



**8 September
3D Computer
Imaging in Science
and Medicine**

**Ye Duan
Computer Science**

Movies and games are fun, but 3D graphics are also essential in modern science and medicine. We'll show how real-life things--from brains to living rooms--are captured and analyzed in 3D.



**15 September
Doppler on Wheels**

**Neil Fox
Atmospheric Science**

Weather radar does more than make colorful and informative images for TV weather. Come and see the Doppler on Wheels rolling laboratory with its RADAR and other instruments that observe severe weather of all sorts for research.



**22 September
It's Only a Flesh
Wound: Regeneration
Through the Ages**

**D Cornelison
Biological Sciences**

Since at least the time of the Greeks, we've been wondering why and how some animals can grow back lost parts, and some can't. This talk will give a historical perspective of regeneration research from ancient times to the present day.



**29 September
Excessive Sitting and
Physical Inactivity:
Triggers for Obesity,
Diabetes, Early Death**

**John Thyfault
Nutrition & Exercise Phys.**

Accumulating evidence suggests that sitting and excessive physical inactivity are direct causes of obesity and type 2 diabetes. How has the modern sedentary lifestyle affected our health, as individuals and as a society, and what can we do to change course?



**6 October
Detecting the
Undetectable:
Biophotonics for the
21st Century**

**Heather Hunt
Biological Engineering**

This talk explores the development and use of optical technology for detecting bacteria, viruses, organic pollutants, toxins, etc., at increasingly lower levels by ever more complex sensor platforms.



**13 October
The Supercomputer in
Your Pocket**

**Kannappan Palaniappan
Computer Science**

Twenty years ago your smartphone would have been one of the fastest, most powerful computers in the world. Find out how computing power has advanced so rapidly, and where it might go from here.



**20 October
I'll See You and Raise
You One: The Evolving
War Between Plants &
Bacterial Pathogens**

**Scott Peck
Biochemistry**

All around us, plants and microbes are in a biological "arms race," constantly adapting to each other's offensive and defensive strategies. Learn how plants and their pathogens are co-evolving to win the war and how it affects us.



**3 November
The Science of Climate
and Climate Change**

**Tony Lupo
Atmospheric Science**

During the summer of 2012, a record drought impacted the central United States. What was the role of climate change in this event? What are the issues surrounding climate and climate change?



**10 November
Food-borne Illness:
Is It Getting Worse?**

**George Stewart
Vet Pathobiology**

Food-borne pathogens such as E. coli, Salmonella, and Listeria are frequently in the news. Is our food safe today? From mad cows to cantaloupes to cable news, I will discuss perceptions versus reality of food safety.



**1 December
Your Bone Cells Are
Watching You**

**Lynda Bonewald
UMKC School of Dentistry,
Dept of Oral Biology**

This talk will look at how bone cells work with other organs, like muscle and kidney, to contribute to overall health. But if they see you are inactive.... what happens then?