

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 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!



MONSANTO

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 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.

2013 Organizing Committee

Bruce McClure, Marc Johnson, D. Cornelison, Martin Appold, Rob Duncan, Candi Galen, Mark Milanick, Doug Randall, Mike Roberts, David Robertson, Marjorie Skubic, Margaret Tollerton

With help from: Abagael Cornelison, Johanna Kramer, Melody Kroll, Cynthia Scheiner



Schedule At-A-Glance

- 26 Jan Humans: The Ultimate Niche Constructors
- 2 Feb What Makes A Place Sacred?
- 9 Feb What Can Fish Tell Us About Hearing?
- 16 Feb Who Are The Most Efficient Miners On Earth? Plants!
- 23 Feb Mom Was Right: Breakfast Is The Most Important Meal
- 2 Mar We Come From The Future: Origins of Creativity
- 9 Mar What Can Be Learned In A Frozen Wilderness?
- 16 Mar Life Sciences & Society Symposium Location: Jesse Auditorium http://lssc.missouri.edu
- 23 Mar Spring Break -- NO SMS
- 30 Mar Spring Break -- NO SMS
 - 6 Apr Do Bacteria Age?
- 13 Apr Spiders: Are They Everywhere?
- 20 Apr Remodeling STEM Education
- 27 Apr Follow Your Curiosity: How The Brain Learns
- 4 May A Dry Topic: How Plants Adapt to Drought



Spring 2013 Schedule

Saturdays 10:30 a.m. – 11:30 a.m.

Monsanto Auditorium Bond Life Sciences Center

Corner of Rollins Rd. & College Ave.



Spring 2013 SCHEDULE

satscience.missouri.edu

Saturdays 10:30 - 11:30 a.m.

Monsanto Auditorium Bond Life Sciences Center MU Campus



26 January **Humans: The Ultimate** Niche Constructors

Mike O'Brien Anthropology

Using examples from Neolithic groups, we'll explore how humans create niches and how our activities produce significant ecological changes, including alterations of human gene pools.



2 February What Makes A Place Sacred?



This talk explores the creation of sacred space by Jews and Christians in the ancient world. The religious significance may be obvious, but what are the social and political effects of creating such space?



Deafness is one of the most widespread sensory disabilities in the world. Unlike humans, fish regenerate cells involved in hearing. Can we use this knowledge to jump start this process in ourselves?



Miners on Earth? Plants!

David Mendoza-Cozatl Plant Sciences

When Carl Sagan said "we're made of star stuff," he wasn't kidding. We'll talk about how plants mine elements, originally made at the core of dying stars, and why these elements are so essential for life.







Skipping breakfast is a common yet unhealthy habit. In this talk, we'll look at evidence that shows eating a protein-rich breakfast improves appetite control, food intake regulation, & body weight management.



2 March We Come From The Future: **Origins Of Creativity**

Barbara Kerr University of Kansas

Talents, temperament, tolerance, and training all come together to produce creativity. This talk will give an inside look at how these elements come together in today's generation of young innovators.



9 March What Can Be Learned In A **Frozen Wilderness?**

Douglas Randall Biochemistry

Learn about the amazing science being done by the National Science Foundation's Antarctic program. From penguins and fossils to neutrinos and microbes, there is science at the South Pole!



16 March -- JESSE AUDITORIUM Life Sciences & Society **Symposium: Claiming Kin**

Charmaine Royal Charmaine Royal Duke University

What can we learn from the genomic ancestry testing now offered directly to consumers? We'll discuss the potential influence of genetic information on notions of ancestry, ethnicity, race, and kinship. More at: lssp.missouri.edu



6 April **Do Bacteria Age?**

Pamela Brown **Biological Sciences**

Bacteria have fascinating life cycles that lead to the rejuvenation of younger cells. Come see how bacteria age and learn how this process provides a long-term benefit to the population.



Are They Everywhere?

Jim Carrel **Biological Sciences**

Despite their widespread abundance, spiders are little known and often misunderstood. I will present current information -- along with neat pictures -- about these eight-legged, elegant creatures.



Remodeling STEM Education

David Hestenes Arizona State University

Can we achieve the radical reform in science and math education needed to prepare citizens for the challenges of the emerging knowledge-based global economy?



27 April **Follow Your Curiosity: How** the Brain Learns

Jeri Janowsky **Oregon Health & Science Univ.**

Science programs engage kids, give them hands-on experience solving real-world problems, and show them possible careers. This talk will connect these goals to the neuroscience of learning.



4 May **A Dry Topic: How Plants** Adapt to Drought

Bob Sharp & Mel Oliver Plant Sciences & USDA

Missouri endured an epic drought last summer. Learn how drought affects crops, how some plants adapt to exceptionally dry conditions, and the "roots" to the future of drought-resistant crops.

