

Grab a cup of coffee and a bagel and join us for Saturday Morning Science—a series of onehour 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

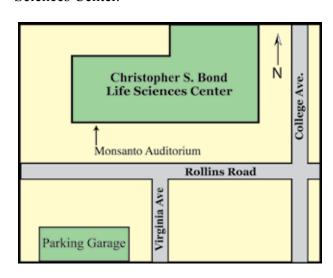
Organizers

Bruce McClure Wouter Montfrooij Marc Johnson

### 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.

#### Thanks to Our Sponsors!





MONSANTO



MU OFFICE OF RESEARCH



## Schedule At-A-Glance

- 30 Jan. Life in the Treetops: Forest Canopy Research & Outreach
- 6 Feb. How Game Theory Explains Stupid Behavior
- 13 Feb. A Brief History of Energy
- 20 Feb. Help! Where Am I?
- 27 Feb. Do We Really Need To Sleep?
- 6 Mar. CO, Capture & Global Warming
- 13 Mar. No Saturday Morning Science
- 20 Mar. Forests & Greenhouse Gases: A Science Primer
- 27 Mar. No Saturday Morning Science
- 3 Apr. No Saturday Morning Science
- 10 Apr. Hidden Worlds: How Microscopy Shows Us How Cells Work
- 17 Apr. Deep-Sea Hydrothermal Vents: New Technologies, New Discoveries
- 24 Apr. How Many Things Can You Keep In Mind?
- 1 May How To Power A Dust Mite



# WINTER2010 SCHEDULE

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

Monsanto Auditorium Bond Life Sciences Center Corner of Rollins Rd. & College Ave.



Saturdays 10:30-11:30 a.m. Monsanto Auditorium Corner of Rollins & College



30 January
Life in the Treetops:
Forest Canopy
Research & Outreach

*Nalini Nadkarni*The Evergreen State College

Working directly in the forest canopy has taught us much about its rich biodiversity and unique ecological roles. Nadkarni communicates these lessons to scientists and public audiences such as faith-based communities, artists, and prisoners.



6 February
How Game Theory
Explains Stupid
Behavior

Zac Ernst

When markets collapse and people who should cooperate turn on each other instead, rational people are acting stupidly. This talk will explain how game theorists study some of our most irrational and stupid behavior.



13 February A Brief History of Energy

Carlos Wexler

What is energy? Where does it come from? How does society use energy, and what are the consequences? Wexler will describe how energy and society coevolved, and how new energy sources solved old problems but created new ones.



20 February Help! Where Am I?

Jim Keller

People are really good at giving and interpreting sometimes vague and incomplete descriptions of spatial and temporal events. Can robots/computers join in that type of conversation? Fuzzy logic and image processing can get us talking.



27 February Do We Really Need To Sleep?

Mahesh Thakkar

Do we really need to spend a third of our time sleeping? Why do we dream? These and many other questions about sleep can keep you awake. So let us get together to talk about sleep.



6 March CO<sub>2</sub> Capture & Global Warming

Rainer Glaser

This talk will describe atmospheric CO<sub>2</sub> levels and ways that are being discussed to stem the increase. Plants have been grabbing CO<sub>2</sub> from the air for millennia. Can we borrow their approach to bring down atmospheric CO<sub>2</sub> levels?



20 March
Forests & Greenhouse
Gases: A Science
Primer

Stephen Pallardy

How do earth's forests both add to and remove greenhouse gases like  $CO_2$  from the atmosphere? How do scientists measure  $CO_2$  flux of an entire forest? Can forests play a role in ameliorating greenhouse gas emissions?



10 April
Hidden Worlds: How
Microscopy Shows Us
How Cells Work

Tom Phillips

Come see how technological advances in microscopy have revolutionized our ability to capture amazingly beautiful images that provide insight into how both individual cells and groups of different types of cells carry out their functions.



17 April
Deep-Sea Hydrothermal
Vents: New Technologies,
New Discoveries

William Seyfried Jr.
University of Minnesota

New technologies in submersible science have greatly enhanced our understanding of the origin and evolution of deep-sea hydrothermal vents. Seyfried will share some new developments and applications in this challenging area of ocean science research.



24 April
How Many Things
Can You Keep
In Mind?

Nelson Cowan

You need to keep in mind multiple things at once to solve problems, or to plan your day's activities. Cowan will describe what psychological experiments and brain research tell us about humans' ability to keep things in mind.



1 May How To Power A Dust Mite

David Robertson

MU scientists are creating the world's smallest battery using radioactive decay.