

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

> **Organizers** Bruce McClure 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!





MU Office of Research



- 11 Sep. Newest fossil evidence of human origins
- 18 Sep. What does it take to pick up a molecule?
- 25 Sep. Alternative energy sources: microbial contributions, real and imagined!
- 2 Oct. Can we coax algae into making hydrogen for fuel?
- 9 Oct. What can MRI tell us about autism and other brain disorders?
- 16 Oct. Are we just meat machines or something more?
- 23 Oct. Why you should exercise, and what happens when you don't
- 30 Oct. The science of brewing
- 6 Nov. Why are some fats good for you when others are not?
- 13 Nov. Dinosaurs exposed! Advanced 3D imaging sheds new light on their lives
- 20 Nov. No SMS. Thanksgiving break
- 27 Nov. No SMS. Thanksgiving break
- 4 Dec. Environmental pollutants: where do they come from and where do they go?
- 11 Dec. Current advances in the science of autism research



# FALL2010 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** 



### 11 September **Newest Fossil Evidence Of** Human Origins

### Carol Ward

Where did we come from? Thanks to a wealth of new data, paleoanthropologists have a better answer to this question than ever before. We will look at new and exciting fossils and what they tell us about the our forbearers.



### 18 September What Does It Take To **Pick Up A Molecule?**

**Gavin King** 

Scientists have long dreamed about seeing and manipulating individual atoms and molecules. This talk will give a "behind the scenes" view of the technology that now makes these types of investigations possible.



25 September **Alternative Energy Sources: Microbial Contributions, Real** and Imagined!

Judy Wall

The need for sustainable energy sources is a global priority. Potential supplies are finite, and their conversion into usable fuels offers many challenges and opportunities. What are the promises and problems of the new technologies?



# Teresa Thiel

U. of Missouri-St. Louis

Organisms normally work to conserve energy; however, we can use genetic engineering techniques to coax some photosynthetic microbes to convert solar energy into useful products. This talk will focus on the production of hydrogen gas by microalgae.



9 October What Can MRI Tell Us About **Autism and Other Brain Disorders**?

Shawn Christ

MRI is a safe, non-invasive tool for assessing brain structure and activity. This talk will focus on how MRI is being used to better understand the effects of treatment in children with autism and other development disorders.



#### 16 October Are We Just Meat Machines Or **Something More?**

### Andrew Melnyk

The past 150 years of science give reason to think that everything in the world--from viruses to stars--is made of matter. Are conscious minds an exception? Probably not; they just appear to be.



### Why You Should Exercise, And What Happens When You Don't

### Frank Booth

23 October

Lack of physical activity speeds biological aging! What suits vou better? Being physically active 30 minutes a day, or being dead 1440 minutes per day?



### John Cannon

The brewer controls character of beer (taste, aroma, color, and mouthfeel) through the judicious application of scientific principles. Learn how brewing beer oozes with aspects of biochemistry, microbiology, and physics to create a refreshing beverage.



6 November Why Are Some Fats Good For You When Others Are Not?

### Kevin Fritsche

Dietary fats, rich in omega-3s, are good for you. Did you know that there are more than one kind of omega-3 fatty acid? Find out which omega-3 is best and why.



13 November **Dinosaurs Exposed! Advanced 3D Imaging Sheds New Light On Their Lives** 

Larry Witmer **Ohio University** 

The latest advances in high-tech imaging and 3D computer modeling allows us to peer inside the heads of dinosaurs, shedding new light on the sensory capabilities, brains, and behaviors of dinosaurs.



4 December **Environmental Pollutants:** Where Do They Come From, Where Do They Go? Keith Goyne

Pollutants released into the environment can impact human and ecosystem health. Pollutant types, sources, and fate in the environment will be presented. Veterinary antibiotics will be discussed to provide a focused example.



### 11 December **Current Advances In The Science Of Autism** Research

**MU & Thompson Center Researchers** 

Learn what investigators at the University of Missouri and the Thompson Center are doing to better understand the causes of autism and how interventions help in an interdisciplinary manner.

