



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

Don't worry, 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. No science background is required, and all ages are welcome.

Saturday Morning Science is free and open to the public. Bagels, donuts, coffee, and juice will be served before the talks, so come early. Doors open at 10:15. Seating is limited to 250.

Saturdays

10:30 a.m. – 11:30 a.m.

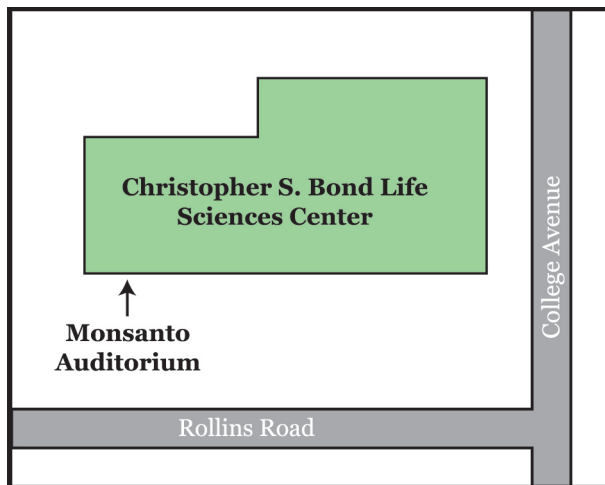
Monsanto Auditorium

Christopher S. Bond Life Sciences Center

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Monsanto Auditorium
Christopher S. Bond Life Sciences Center

(corner of College Ave. and Rollins)

*Come early for refreshments.
 Talks start promptly at 10:30.
 Refreshments sponsored by
 MU's Office of Research.*



For directions and parking information, visit:
<http://map.missouri.edu>

Questions, Comments, Suggestions

satscience@missouri.edu

www.physics.missouri.edu/satscience.html

Organizers

Bruce McClure
 Wouter Montfroiij
 Marc Johnson

Brochure by: Melody Kroll



Schedule At-A-Glance

- 2 Sep. Deep Time: Measuring the Age of the Universe
- 9 Sep. Biofuels: Will Microbes Be the Producers?
- 16 Sep. Stem Cells: Technology, Promise, and Concerns
- 23 Sep. Canadian Fur Trappers and Flu Pandemics
- 30 Sep. Advanced Materials for the 21st Century
- 7 Oct. Facts from Feces: DNA from Dung in Population Biology
- 14 Oct. Science, Scientists, and Science Journalism
- 21 Oct. Insulating Your Nerves: Myelin and Multiple Sclerosis
- 28 Oct. Canine Genomics: What Good Is a Pointer that Can't Point?
- 4 Nov. From Gene to Therapy: Marching Toward Cures
- 11 Nov. Biomaterials: Why Do Good Materials Go Bad?
- 18 Nov. & 25 Nov. Break
- 2 Dec. Extreme Environments: Key to Life's Origins
- 9 Dec. Synthetic Biology and the Origin of Life



2006 **FALL**
SCHEDULE

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2 September
Deep Time: Measuring the Age of the Universe

Alan Whittington

How do scientists measure a rock's age? How do we know the Earth is 4.55 billion years old? What does the Earth's age imply about the place of humanity in the Earth system?



9 September
Biofuels: Will Microbes Be the Producers?

Judy Wall

Fossil fuels are being exhausted, and their use critically impacts our environment. Sustainable sources of energy must be developed. Will microbes be part of the solution?



16 September
Stem Cells: Technology, Promise, & Concerns

Mike Roberts

What are embryonic and adult stem cells? How do they function? Where do they come from, and what are their uses and limitations? These questions will be addressed along with some concerns raised by the use of stem cells.



23 September
Canadian Fur Trappers & Flu Pandemics

Lisa Sattenspiel

Ever wonder how scientists decide where an epidemic will spread? How could your behavior help to spread diseases? And, what could Canadian fur trappers have to do with all this?



30 September
Advanced Materials for the 21st Century

Steve Keller

Modern materials are improved only through an understanding of the interrelationship between synthesis, structure, and properties. Learn how next generation materials may be developed.



7 October
Facts from Feces: DNA from Dung in Population Biology

Lori Eggert

How can we manage species that are too dangerous or secretive to observe directly? Come learn about what studies using non-invasively collected samples tell us about elusive species.



14 October
Science, Scientists, & Science Journalism

Claudia Dreifus

Science is hard, and scientists are best avoided, right? Come and listen to the experiences of the *New York Times* science writer who has interviewed scores of scientists and written about their work.



21 October
Insulating Your Nerves: Myelin to MS

Michael Garcia

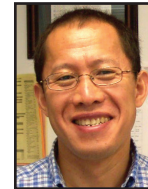
Much like copper wires, nerves are insulated to increase the speed at which they work. Learn how loss of this insulation results in debilitating neurological diseases like multiple sclerosis and Charcot-Marie-tooth disease.



28 October
Canine Genomics: What Good Is a Pointer That Can't Point?

Dennis O'Brien

For thousands of years, a common environment has shaped the interaction between genes and disease in humans and their canine companions. How will new knowledge of this interaction lead to healthier dogs and people?



4 November
From Gene to Therapy: Marching Toward Cures

Dongsheng Duan

Replacing or repairing defective genes using gene therapy holds the power of curing diseases. But, the road to successful gene therapy is not smooth. How close are we to developing gene therapies?



11 November
Biomaterials: Why Do Good Materials Go Bad?

Sheila Grant

Materials have been used as implants in people for over 50 years, even though they are not completely biocompatible. This talk will discuss biomaterials, their applications, and why the good go "bad."



2 December
Extreme Environments: Key to Life's Origins

Mitch Schulte

From hot springs on the sea floor to acid mine drainage, microorganisms thrive in many environments once considered uninhabitable. How do they do it? What can they tell us about how life on Earth began?



9 December
Synthetic Biology & the Origin of Life

Don Burke

Evolution's tremendous powers of invention continue to propel new technologies. Learn how studies of life's origins lead to advances in nanotechnology and biomedicine using aptamers and ribozymes.

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Sponsored By:
MU Office of Research
Division of Biochemistry
Christopher S. Bond Life Sciences Center
Department of Physics and Astronomy
Department of Molecular Microbiology and Immunology