

## Because Dreams Need Doing

Presented by the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine, and the National Research Council. Presentation times are subject to change. Please check the Festival web site for the most up-to-date schedule.

### Saturday, October 23

- 10:00 a.m. The Mouse that Roared with Roian Egnor**  
*What do animals or humans say to each other that offers insight into their minds? Join Roian Egnor and hear about her study of mouse vocalizations and social behavior as a route to understanding information processing in the nervous system. Courtesy of Howard Hughes Medical Institute, Janelia Farm Research Campus.*
- 10:30 a.m. Reverse Engineer Your Brain with Louis Scheffer**  
*What do computer chips tell us about how our brain works? Find out how Louis Scheffer's research is using electrical engineering techniques and computer chips design to understand the construction, development, and operation of the nervous system. Courtesy of Howard Hughes Medical Institute, Janelia Farm Research Campus.*
- 11:00 a.m. Nobel Purpose: Joe Palca Interviews John Mather (Nobel Prize Physics, 2006)**  
*Meet a Nobel Prize winner and hear his story in an interview with NPR science reporter Joe Palca. John Mather was awarded the Nobel Prize for his research into the infancy of the Universe. He gained an understanding of the origin of galaxies and stars by using measurements made with the help of the COBE satellite launched by NASA in 1989.*
- 11:30 a.m. The Scoop on *Crime Scene Investigation*: Separating Fact from Fiction With Marvin Schechter and Special Guest from *CSI Miami***  
*Is forensic science really as powerful as they show on TV? Go behind the scenes of *CSI Miami* with a writer from the show and then compare what happens on TV to what happens in the courtroom as Marvin Schechter explains how science is used to free defendants who have been wrongly convicted.*
- 12:15 p.m. Be a Bone Detective with Diane France**  
*Find out how scientists use bones to reconstruct mysterious circumstances and solve crimes. Diane France, a real-life "bone detective," has pioneered many of the techniques used by forensic anthropologists today. You will get some hands-on experience using bones from fried chicken pieces and see for yourself how bones tell a story.*
- 1:00 p.m. Nobel Purpose: Joe Palca Interviews Nobel Prize Winner (to be announced)**
- 2:00 p.m. The Engineering behind Disney's Magic with Lanny Smoot**  
*Imagineers are the creative force behind major Disney projects. They use creativity, storytelling, and engineering to surround guests in immersive experiences. See one of Disney's top Imagineers, Lanny Smoot, give a behind-the-scenes look into what makes this possible.*
- 2:30 p.m. Bon Appétit: Better Eating through Chemistry**  
*Going out to eat can be fun, especially when the people in the kitchen get creative with science. Using techniques from what's known as "molecular gastronomy," many chefs are creating new and interesting tastes and textures as a result of food chemistry. Come see what goodies we're cooking up and learn more about the science of food.*
- 3:00 p.m. Be a Bone Detective with Diane France**  
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- 4:00 p.m. A: It's a Jeopardy-Playing Supercomputer. Q: What is IBM's "Watson?" Can You Beat It?!**  
*Computers can do more and more, but are they getting smarter? Take on IBM's newest supercomputer—Watson—in a game of Jeopardy and see for yourself. Under development for three years, IBM plans for Watson to be the world's most advanced question-answering machine.*

## Sunday, October 24

- 10:00 a.m. Disney's TRON: Legacy Captured Live on Stage**  
*Using a "Moven" motion capture suit is one of Hollywood's newest techniques for advanced special effects sequences and computer-enhanced scenes. See the suit demonstrated live on stage by experts from Vicon and learn how movie makers use engineering to go from being technicians to magicians.*
- 11:00 a.m. Nobel Purpose: Joe Palca Interviews Vinton Cerf (Draper Prize, 2001)**  
*Meet a Draper prize winner and hear his story in an interview with NPR science reporter Joe Palca. Vinton Cerf received the Draper Prize for development of the internet. Cerf led the engineering of MCI Mail, the first commercial email service to be connected to the Internet. Now he is responsible for identifying new technologies to support advanced Internet products and services from Google.*
- 11:30 a.m. The Scoop on *Crime Scene Investigation*: Separating Fact from Fiction With Marvin Schechter and Special Guest from *CSI Miami***  
*Is forensic science as powerful as they show on TV? Go behind the scenes of CSI Miami with a writer from the show and then compare what happens on TV to what happens in the courtroom as Marvin Schechter explains how science is used to free defendants who have been wrongly convicted.*
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- 1:00 p.m. Nobel Purpose: Joe Palca Interviews Peter Agre (Nobel Prize Chemistry, 2003)**  
*Meet a Nobel Prize winner and hear his story in an interview with NPR science reporter Joe Palca. Peter Agre received the Nobel Prize for his discoveries of how salt (ions) and water are transported out of and into the cells of the body. His discoveries led to an understanding of how the kidneys recover water and how the electrical signals in nerve cells are generated at the molecular level thus providing insight into many diseases.*
- 2:00 p.m. What's the Buzz: The Status of Pollinators in North America with May Berenbaum**  
*Since 2006, our nation's honey bees have been mysteriously disappearing. Why should you care? Find out why bees and other pollinators matter to our food supply and our natural ecosystems as entomologist May Berenbaum explains the history of "colony collapse disorder"—the sudden population crash of honey bees.*
- 2:30 p.m. A: It's a Jeopardy-Playing Supercomputer. Q: What is IBM's "Watson?" Can You Beat It?!**  
*Computers can do more and more, but are they getting smarter? Take on IBM's newest supercomputer—Watson—in a game of Jeopardy and see for yourself. Under development for three years, IBM plans for Watson to be the world's most advanced question-answering machine.*
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