



Secondary Science Bytes

A newsletter for secondary teachers of science

December 22, 2006



Honeywell Educators at Space Academy program

The Honeywell Educators at Space Academy program provides 40 hours of intensive classroom, laboratory and training time, focusing on space science and space exploration. During the program, you'll participate in astronaut-style training and simulations, along with activities designed to promote life-long learning in a classroom setting. All lessons and activities are correlated to National Science and Math Standards and are ready to use in the classroom.

The Honeywell scholarships cover the following costs:

- Tuition for the 5-day Space Academy program at U.S. Space Camp in Alabama
- Roundtrip airfare
- Meals and double occupancy accommodations
- Workbooks and program materials for participating teachers

To apply for a Honeywell Hometown Solutions scholarship, please fill out the [online application](#) or [download the application](#) in PDF format and return it by **Wednesday, January 3, 2007**.

Carole McKee, an ASD science teacher attended the Academy last year and **highly recommends** the program. Please contact her via email if you have specific questions about the program. Additional information on Space Academy can be found at www.spacecamp.com/spacecamp/educators/honeywell

Howard Hughes Medical Institute Holiday Lecture Series

The 2006 Holiday Lectures on Science
POTENT BIOLOGY: Stem Cells, Cloning, and Regeneration
 Douglas A. Melton, Ph.D.
 Nadia Rosenthal, Ph.D.
 Webcast 2006 Live:
 November 30 and December 1 10:00 a.m. ET and PT
 On demand: After December 4

An on-demand webcast of the 2006 Holiday Lectures on Science is now available at www.hhmi.org/biointeractive/lectures.

Do stem cells really hold the key to understanding and curing many diseases?

What's the connection between embryonic development and tissue regeneration?

[Doug Melton](#) and [Nadia Rosenthal](#) are leaders in stem cell research, working primarily with mouse and human tissue. They will discuss where embryonic and

adult stem cells come from and the biology of how they supply the cells the body needs.

Stem cells are fundamental to biology. In the course of embryonic development, stem cells generate all the specialized cells that populate body tissues like muscle, the nervous system, and blood. In adults, reserves of stem cells repair and regenerate tissues damaged by disease and wounding. Because of the potential of stem cells to generate fresh, healthy cells, there is a huge interest in cultivating them to treat various diseases. This year's Holiday Lectures will explore exciting progress toward the goal of harnessing stem cells to treat diabetes, nerve damage, and heart disease.

[Click here to view lecture summaries](#) of the 2006 Holiday Lectures.

Requires just 2 hours of teacher prep for an exciting classroom activity!

- Hands-on graphing, charting, mapping, presentation, and peer review activities for students
- Easy assessment tools for teachers

EDSS materials include

- Giant, full-color classroom poster
- CD for your computer, loaded with turtle information and easy-to-print handouts
- Short, simple, comprehensive teacher's guide

[Click to Register and Receive EDSS](#)
FREE!



Want to celebrate Earth Day and motivate students to higher levels of science achievement?

EDSS challenges students to think critically about important environmental issues.

EDSS is an exciting classroom activity that focuses on data analysis, mapping and graphing, explanation, and oral presentation. It includes powerful assessment tools designed to measure student achievement across multiple applied math and science benchmarks. Most importantly, it is designed to inspire interest and encourage engagement by challenging students to understand and explain the status of critically endangered sea turtles.

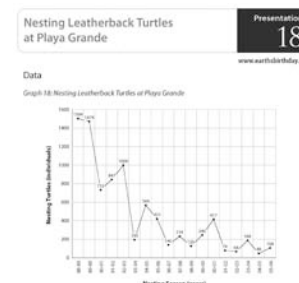


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[Click to Register and Receive EDSS](#)

Earth Day Science Symposium 2007: Endangered Sea Turtles

Exploring Current Research on Some of the World's Most Endangered Species
A FREE 7-day enrichment activity for middle-school classrooms



[Endangered Orangutans EDSS is also available. Learn about the orangutans of Borneo with real-life science data!](#)
FREE



The EDSS mini-unit requires 7 class sessions, including simple graph and data analysis, oral reports, class discussion, and assessment. All activities meet local and national standards for inquiry-based science education.



Earthwatch is a diverse community of scientists, educators, students, businesspeople, and resolute explorers who work together to get the fullest benefit from scientific expeditions.



In addition to 150 dedicated staff in the United States, England, Australia, and Japan, Earthwatch supports more than 130 scientists each year and builds networks of hundreds of students and teachers.

The Earthwatch community also includes 20,000 global members, 4,000 eager volunteers each year, 50 collaborating conservation organizations, and 50 corporate partners, all of who work together to make a difference. Below you will find out more about our leadership, employment opportunities, and contact information.

<http://www.earthwatch.org/site/pp.asp?c=dsJSK6PFJnH&b=386477>

Educator Opportunities

Welcome, educators! We hope you will find these resources useful in your teaching and learning. All of these are free and available for you to use for educational purposes.

<http://www.earthwatch.org/site/pp.asp?c=dsJSK6PFJnH&b=392459>

[Fellowships & Alternative Expedition Funding](#)

Learn about funding opportunities for educators to participate in Earthwatch expeditions.

[Curriculum Ideas and Lesson Plans](#)

Educator fellows and other past team members on Earthwatch expeditions have been creative and productive!

[Three students. Ten months. One mission.](#)

Uncover the truth about the future of life on earth. Arsen, Jamie and Tyler are three American high school students who spent a year working on Earthwatch Institute research projects around the globe. Look for our feature-length adventure documentary coming in spring of 2006.

The [Earthbound3 website](#) hosts journals, photographs and mini-movies from Arsen, Jamie and Tyler's adventures. The [Earthbound3 Challenge](#) asked groups of adults and students to make a plan to take conservation action at home, implement that program, and fill us in on the group's progress. See which teams made the most impact in their community.

The producers of Al Gore's "An Inconvenient Truth" are going to be giving away free DVDs of this documentary. Please pass along the information to all who might

be able to participate.

There will be a teaching guide that will also be free.



The first 50,000 teachers who apply are eligible. There is a limit of one DVD per teacher. All entries must be received by **January 18, 2007**. Details at:

<http://participate.net/educators/DVD/giveaway>