

\*\*This is a 2008 RT listserv message. Remember, if you want to respond to an individual, do not use the "Reply" button. Instead, use the "Forward" button and cut-and-paste the individual's email address in the "To" field.\*\*

=====  
**2008 RT NEWS 42 – March 13, 2009**  
=====

1. Deadlines
2. RT Program News
3. Resources
4. Opportunities
5. Listserv Info

### 1. DEADLINES

- **Tuesday, Apr 21:** WISE Assignment #7

### 2. RT PROGRAM NEWS

#### A. EB PREPARATIONS:

- **What do I need to bring to EB?** See last week's RT News.42 (March 5<sup>th</sup>) at:

<http://www.the-aps.org/education/2008rts/pdfs/APS%202008%20RT%20News.41.pdf>

- **What else do I need to prepare for now?** Review RT News.38 (February 13<sup>th</sup>):

<http://www.the-aps.org/education/2008rts/pdfs/APS%202008%20RT%20News.38.pdf>

#### **At-a-Glance EB 2009 Schedule (REQUIRED attendance):**

**Sat, April 18:** RT Orientation Session (3:30pm, snacks) and Opening Reception (5:30-8pm, reception food...good enough for dinner!)

**Sun, April 19:** PhUn Week Training Session (9am-11am, continental breakfast)

**Mon, April 20:** Teacher-Student Workshop (8am-4pm, morning beverages, boxed lunches, snacks)

**Tue, April 21:** Frontiers Awards Luncheon with your Research Host (12-2pm, lunch)

*If you have any **OTHER** questions or concerns related to EB 2009 at this point, please cc email Brooke ([bbruthers@the-aps.org](mailto:bbruthers@the-aps.org)) and Mel ([mjimson@the-aps.org](mailto:mjimson@the-aps.org)).*

**B. Are you having a SCIENCE FAIR this spring?** If so, invite your Research Host to participate as a judge! We have an award packet (one per science fair) for the student with the best physiology-related project. The award packet includes an APS t-shirt and a certificate. See program details at:

<http://www.the-aps.org/education/sciencefair/> or contact Scarletta: [swhitsett@the-aps.org](mailto:swhitsett@the-aps.org).

### 3. RESOURCES

**From the APS Podcast, Lifelines: Episode 19: The Genetics of Exercise:** Have you ever had an experience like this: You and a friend start jogging together. Neither of you have been exercising much, but after a few days, your friend is easily striding along as you wheeze, gasp and hold onto your aching side. Do not feel bad about your performance; it may be your genes. Scientists have identified about 200 genes that play a role in our body's ability to become fitter, referred to as "adaptation to exercise". In this episode, we talk to Mark Olfert of the University of California at San Diego and Claude Bouchard of the Pennington Biomedical Research Center. They have organized a symposium on the genetics of adaptation to exercise, to take place at the [Experimental Biology](#) conference in New Orleans in April. They will give us a flavor for the research in this field by telling us a bit about their own work. (Begins at 3:51)

In the **Buzz in Physiology** (Begins at 1:21) University of Illinois researchers are developing a program to train people to avoid falls. This research could be particularly valuable for the elderly, for whom falling can be an especially dangerous proposition. Read the press release [here](#), or the study [here](#). And a study from the University College London Medical School sheds light on why patients with cirrhosis may have a more regular heart rhythm than is normal, and why they develop hepatic encephalopathy, a neurological

disorder. The body's inflammatory response may be the common thread behind the development of these conditions. Click [here](#) for the study and [here](#) for the press release.

### ***For the Classroom...***

**- Submit questions for scientists funded by the National Institute of General Medical Sciences (NIGMS) at the National Institutes of Health:**

[http://publications.nigms.nih.gov/findings/feb09/askscientist\\_form.asp](http://publications.nigms.nih.gov/findings/feb09/askscientist_form.asp)

Readers have the opportunity to submit a question to evolutionary biologists featured in the Feb 2009 all-evolution issue: <http://publications.nigms.nih.gov/findings/index.htm>. It's easy—ask your students to read the stories on Joe Thornton and Sarah Tishkoff, then send us a question about their research, education, or anything else. This may make a great classroom learning activity or homework assignment. You can access the online Q&A forum at the link above. Please have students submit questions **by April 6, 2009**. We'll send 5 to 10 questions each to Thornton and Tishkoff. Then, in early May you can look for their answers on the NIGMS' [Findings Online!](#)

**- From COPUS, the Coalition on the Public Understanding of Science, March newsletter the *COPUS Clarion*:**

### ***Year of Science Downloads for March:***

- Poster of the "Process of Science Flowchart" from the Understanding Science Web site --print and hang in your laboratory, classroom, library, museum, back of the stall door, anywhere!

[http://www.yearofscience2009.org/about/us\\_poster\\_vert\\_1\\_13.pdf](http://www.yearofscience2009.org/about/us_poster_vert_1_13.pdf)

- One page informational handout about this month's theme "Physics and Technology." Print your own YoS message on the blank side!

[http://www.yearofscience2009.org/themes\\_physics\\_technology/YoS09MarchOnePage.pdf](http://www.yearofscience2009.org/themes_physics_technology/YoS09MarchOnePage.pdf)

### ***Highlighted features from the Year of Science:***

- Meet MICHAEL LUCIBELLA and SABINE HOSSENFELDER, our March bloggers, and comment upon their thoughts on CELEBRATING PHYSICS AND TECHNOLOGY!!

[http://www.yearofscience2009.org/themes\\_physics\\_technology/celebrate/](http://www.yearofscience2009.org/themes_physics_technology/celebrate/)

- Learn the science of rolling objects with experiments and skill games.

[http://www.yearofscience2009.org/themes\\_physics\\_technology/general/physics-experiment.html](http://www.yearofscience2009.org/themes_physics_technology/general/physics-experiment.html)

- Meet our NEW fab five physicists and ask them questions about what it is like to be a scientist!

[http://www.yearofscience2009.org/themes\\_physics\\_technology/meet-scientists/](http://www.yearofscience2009.org/themes_physics_technology/meet-scientists/)

- Responses to the questions asked of last month's scientists are now live! Read them here:

[http://www.yearofscience2009.org/themes\\_evolution/meet-scientists/](http://www.yearofscience2009.org/themes_evolution/meet-scientists/)

### ***Plus, ongoing features and activities:***

- Submit your ideas on Why Science Matters to you!

<http://whyscience.co.uk/2008/12/welcome-to-readers-from-the-year-of-science-website.php>

- Submit info about how your organization is celebrating YoS09. Follow us on Twitter to see what others are doing! <http://twitter.com/YoS2009>

- Take Flat Stanley on a Year of Science adventure

<http://www.flatstanley.com/yearofscience2009/intro.htm>

### ***Special Events...***

**-NEW! An NSTA/NSDL WEBINAR, Wednesday, May 13**

**Studying the Human Physiological Limits of Exploring Mars**

[http://learningcenter.nsta.org/products/symposia\\_seminars/NSDL3/Webseminar8.aspx](http://learningcenter.nsta.org/products/symposia_seminars/NSDL3/Webseminar8.aspx)

Plans are now being formalized for the spacecraft designs that will ultimately take humans to the planet Mars in the next 25 years. Join presenter Dr. James Pawelczyk, Associate Professor of Physiology & Kinesiology for the College of Health and Human Development at Pennsylvania State University and an established NASA life scientist and former payload specialist astronaut. He will answer the question of

whether or not human biology will limit our ability to travel through the solar system. This seminar is for educators of grades 7-10. Register today!

**- 2009 Brain Awareness Week: March 16-22**

You might want to have a neuroscientist visit your class or schedule a brain fair for your school. You can find a neuroscientist for your class at the Society for Neuroscience Web site at: <http://www.sfn.org/baw/>

**- National DNA Day 2009, April 25: <http://www.ashg.org/education/dnaday2009.shtml>**

**4th Annual National DNA Day Essay Contest, Deadline: March 16, 2009**

**2009 Essay Questions:** (1) Some traits come in two varieties (for example, Mendel's round and wrinkled peas with the green and yellow colors). Do all traits for all species come in only two varieties? Justify your answer by explaining the relationship between genes and traits.

(2) What is (are) the cause(s) of human health and disease? Explain your answer using one or more specific examples.

#### **4. OPPORTUNITIES**

##### ***For Teachers ...***

**- NEW! NABT Biology Educator Leadership Scholarship (BELS), Deadline: April 6**

<http://www.nabt.org/websites/institution/index.php?p=492>

Applications are now being accepted for the new NABT Biology Educator Leadership Scholarship (BELS). The BELS program was established to encourage and support teachers who want to further their education in the life sciences or life science education. Any NABT member who has less than five years classroom experience and is currently enrolled (or plans on enrolling) in graduate studies at a Masters or Doctoral level is eligible.

**- 2009 AAAS Leadership in Science Education Prize, Deadline: April 24**

[http://www.aaas.org/aboutaaas/awards/hs\\_scied\\_leadership/hs\\_scied\\_leadership.shtml](http://www.aaas.org/aboutaaas/awards/hs_scied_leadership/hs_scied_leadership.shtml)

Help spread the word about an outstanding science teacher in your school or district. AAAS is now accepting nominations for the 2009 AAAS Leadership in Science Education Prize for High School Teachers. This \$1,000 prize honors a high school science teacher who has contributed to the AAAS goal of advancing science education by developing an innovative and effective strategy, activity, or program. In addition, the winner will be invited to attend and make a brief presentation at the annual Shanghai International Forum on Science Literacy of Pre-college Students as a guest of the Shanghai Association for Science and Technology.

**- High School Teachers and Students Invited to Apply for Lemelson-MIT InventTeam Awards  
Deadline: April 24: <http://web.mit.edu/invent/>**

- Created by the Lemelson-Massachusetts Institute of Technology Program, the InventTeam initiative gives high school students an opportunity to cultivate their creativity and experience invention. InventTeams are comprised of high school students, teachers, and mentors who invent technological solutions to real-world problems. InventTeam students rely on inquiry and hands-on problem solving as they apply lessons from science, technology, engineering, and math to develop invention prototypes. InventTeam projects span many fields, from assistive devices to environmental technologies and consumer goods. Applicants are encouraged to consider the needs of the world's poorest people (those earning \$2 or less per day) when considering ideas.

**- The 21<sup>st</sup> Century Classroom, Deadline: May 1**

<http://cdwg.discoveryeducation.com/1208/> - Think about how The 21st Century Classroom - interactive whiteboard, notebook computers, wireless cart, projector, printer and document camera - could extend your teaching power. Enter once per day for your chance to win one of five Grand Prize packages including a 21st Century Classroom and a \$5000 digital media grant from Discovery Education. Plus, over 25 additional technology prizes!

## 5. LISTSERV INFORMATION

- We hope you will use the 2008 RT listserv to share resources and ideas and to ask questions of your fellow RTs. Please take a minute to review the information about how this listserv works at the 2008 RT website: <http://www.the-aps.org/education/2008rts/listserv.shtml>. Also listed on this page are your fellow RTs' email addresses, as well as each of these APS RT News in pdf form.

**As always, feel free to directly contact Mel ([mlimson@the-aps.org](mailto:mlimson@the-aps.org)) in the APS Education Office with questions, suggestions or concerns.**