



# WHITMAN COLLEGE SCIENCE OUTREACH



## Whitman College Science Outreach Newsletter Fall 2012

### Editor:

Mary Burt  
Science Outreach Coordinator  
burtmb@whitman.edu  
509-522-4441

### Publisher:

Whitman College  
345 Boyer Ave.  
Walla Walla, WA 99362  
www.whitman.edu

Fall 2012 Newsletter

## Science Educator Workshops: Year Three

The 2011-2012 school year was the final year of HHMI-sponsored workshops for middle school science teachers, and it was clear that teachers were taking advantage of the opportunity for local, standards-based professional development.

The first Saturday workshop of the year was lead by assistant professor of biology **Tim Parker** and focused on the evolutionary relationship



Local science educators and Whitman presenters gather for the 2012 HHMI Summer Institute.

between local pine trees, birds, squirrels and fire. Teachers discovered how different species of pine cones have adapted in response to environmental pressures.

The second workshop of the year was a collaboration between faculty in physics, biology and geology. Titled “Luminous Applications of Light and Lenses”, the workshop began with professor of physics **Mark Beck** conducting an overview of light and optics and how microscopes work. This was followed by an opportunity for teachers to get hands-on experience using both the scanning electron microscope and confocal microscope recently acquired by Whitman College with associate professors of biology **Chris Wallace** and **Ginger Withers**, associate professor of geology **Kirsten Nicolaysen**, and research specialist **Nancy Forsthoefel**.

—continued on page 2



Sue Shulz, science teacher at Garrison Middle School, designed an investigation on the effects of colored light on photosynthesis.

—continued from page 1

During lunch, teachers were able to explore microscopy set-ups for the classroom with **Michelle Shafer**, BBMB lab technician, and to practice using the digital handheld microscopes purchased for use in their classrooms.

The final short workshop of the year was based on a teacher request for a workshop that answers all of the “strange” questions students ask about the universe. Although busy with her first year here at Whitman, assistant professor of physics **Moira Gresham** amazed us with an overview of cosmology and what we do (and do not) know about our universe.

The 2012 week-long Summer Institute, titled “Our Green World: The Biology of Producers,” featured professors of biology **Heidi Dobson** and **Dan Vernon**, research specialist **Nancy Forsthoefel**, and associate professor of BBMB **Jim Russo**. The focus for these professional development opportunities has been to introduce new research that appeals to the “scientist” in all of us while also including classroom applications that support local curriculum and state learning targets.

Although the funding for this series has ended, the outreach program is exploring other ways to continue to offer learning opportunities for local science educators.



Nancy Forsthoefel leads area middle school teachers in a lab exploring plant tropisms as part of the 2012 HHMI Summer Institute.

## Supporting Science at Blue Ridge

It all started with an email from **Kristen Garcia**, science teacher at Blue Ridge Elementary, asking if any scientists would be willing to come visit her classes. When the science department at Whitman found out about the efforts teachers and the administration had undertaken to support science learning at the school, they were excited to help and Mrs. Garcia's classes were inundated with visitors.

The visits began with assistant professor of astronomy **Nathaniel Paust** discussing his work as an astronomer, followed by assistant professor of chemistry **Mark Juhasz** and science outreach coordinator **Mary Burt** making liquid nitrogen ice cream with the third and fourth graders. Professor of physics **Kurt Hoffman** brought activities to explore the principles of physics, and geology students **Zach Schierl** and **Andrew Patel** brought respite from spring testing with lots of rocks and minerals.

Many thanks for the warm welcome from Mrs. Garcia and her third and fourth grade scientists!

## Upcoming Science Fair for Area Students

March 9, 2013 Cordiner Hall Foyer, Whitman College

This past May, Whitman College sponsored its first science fair for area middle school students. A small cohort of students presented their projects to Whitman judges **Andrea Dobson**, **Marion Gotz**, **Tim Machonkin**, **Dalia Rokhsana** and **Rachna Sinnott**. The winning project was an investigation by **Washington Virtual Academy** student **Taiko Cantil** focused on a comparison of spoilage between home-cooked food and food from a fast-food restaurant chain. Thank you to **Darin Durand**, science teacher at **Sager Middle School** in College Place, for his support in having the greatest number of student participants.

This year, with generous support from a grant from the George T. Welch Trust, we will be able to extend the science fair to include students in grades 6-12.

Guidelines and registration forms will be posted on our website later this fall. There is funding available to help offset the cost of materials for student projects, and Whitman students and staff have volunteered to mentor students as they develop their science projects. For more information about either of those programs or for general questions about the science fair, please contact Mary Burt, science outreach coordinator, at [burtmb@whitman.edu](mailto:burtmb@whitman.edu)

As the science fair grows, we are also looking for additional community sponsors. If your business or organization would like to be involved in supporting the annual science fair, please contact us.

## “Whitman Reads” at the Walla Walla Public Library

“Whitman Reads,” a weekly summer enrichment program for kids at the Walla Walla Public Library, has concluded a successful season thanks to the support of Whitman staff and faculty. The program featured stories, science projects and other fun activities led by staff and faculty volunteers. According to **Liz George**, Walla Walla Public Library’s young people’s librarian:

*“Whitman Reads is a great opportunity to share the wealth of knowledge and talent at Whitman College with young people in our community. The library is pleased to have hosted the Whitman Reads series this summer and hopes to build on this new program, hosting more events in the future.”*

Faculty and staff from a variety of departments on campus were presenters: Professor **Elyse Semerdjian** gave a lesson in Arabic; biology technicians **Michelle Shafer** and **Martha Holt** brought microscopes and a variety of specimens; events coordinator **Mara Sorkin** read a story called “Bread and Jam for Frances” and helped kids make their own snack; **Jennifer Mouat**, director of the language learning center, shared some favorite folktales; **Mary Burt** demonstrated how to make liquid nitrogen ice cream; lecturer **Hitomi Johnson** read two stories set in Japan during WWII and taught the children how to use chopsticks; professor **Kate Jackson** included her book “Katie of the Sonoran Desert”; and community service coordinator **Abby Juhasz** presented some favorite poems. Whitman student **Eleanor Ellis** '13, who served as an intern at the library this summer, coordinated the program.



Michelle Shafer introduces kids to microscopy during a “Whitman Reads” summer session.

# A Year in Review: 2011-2012

Outreach in the science department at Whitman College was well established before a formal program was developed in 2009. However, faculty, staff and students in the department have been busier than ever in their efforts to share science resources with the community. A few highlights from the 2011-2012 school year include:

- Associate professor of astronomy and general studies **Andrea Dobson** and her students led lessons in our planetarium for third grade classes from **Green Park Elementary**, **Sharpstein Elementary** and **Berney Elementary** along with numerous community groups throughout the year for a total of 55 shows during the course of the school year.
- Professor of physics **Kurt Hoffman** and his students led physics activities at the annual Science Celebration at Green Park. Chemistry lecturer **Deb Simon** and assistant professor of chemistry **Dalia Rokhsana** and their students also led hands-on chemistry activities for attendees.
- Associate professor of geology **Kirsten Nicolaysen** made several visits to **Berney Elementary** dressed as her alter-ego, “Dr. Rock,” while teaching lessons in geology and solids, liquids, and gases.
- **Mary Burt**, science outreach coordinator, visited the fifth grade classroom of **Becky Shroeder** at **Meadow Brook Intermediate** to lead lessons in scientific variables and making liquid nitrogen ice cream.
- This year also marked the third year of the WSSC (Whitman Students in Science Classrooms) program. Whitman student volunteers **Elena Aragon**, **Neve Baker**, **Shannon Blair**, **Carly Busch**, **Allison Goode**, **Hannah Lewis** and **Michelle Sutherland** spent 200 hours in science classrooms at **Pioneer Middle School**, **Assumption Elementary School** and **Saint Basil’s Academy** over the course of the year. WSSC volunteers were able to support lab activities, work with absent students to get caught up in coursework, help with curriculum development and mentor students for the science fair.

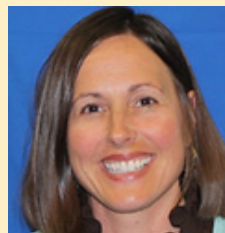
## Outreach Staff at Whitman College

Outreach programs at Whitman College are growing! We have two new part-time staff members who have joined us this year with the goal of improving connections and sharing resources with the schools and community.

**Susan Prudente** is the new outreach coordinator in the Student Engagement Center. She will be heading programs such as the America Reads and America Counts tutoring programs with local schools and guiding other student-led outreach activities, such as College Coaches and Whitman Teaches the Movement. Susan can be reached at [prudensk@whitman.edu](mailto:prudensk@whitman.edu)

**Abby Juhasz** is the interim community service coordinator, also based in the Student Engagement Center. Her role will be to facilitate outreach activities within our local community, such as experiential learning programs for Whitman students. Abby can be reached at [juhasza@whitman.edu](mailto:juhasza@whitman.edu)

**Mary Burt** will continue as the science outreach coordinator, based in the science department at Whitman College. She will be the primary contact for science-related activities for the schools and community. Mary can be reached at [burtmb@whitman.edu](mailto:burtmb@whitman.edu)



Susan Prudente,  
Outreach  
Coordinator  
(SEC)



Abby Juhasz,  
Interim  
Community  
Service  
Coordinator  
(SEC)



Mary Burt,  
Science  
Outreach  
Coordinator

Visit science outreach at:

[www.whitman.edu/content/bbmb/hhmi-grant/outreach](http://www.whitman.edu/content/bbmb/hhmi-grant/outreach)