Education

Highlights from PhUn Week 2008

About 200 APS physiologists volunteered their expertise and time in reaching out to more than 7,300 students last November during Physiology Understanding Week 2008, the Society's member-based annual outreach program to K-12 classrooms (www. PhUnWeek.org). APS members partnered with more than 70 teachers and science educators from across North America to develop engaging presentations and interactive demonstrations for students at all grade levels in 44 PhUn Week events. All events with the primary APS member and lead teacher coordinators are listed in Table 1, but note that there are many more dedicated volunteers with each event site not listed on the table. The following PhUn Week events are a sample of the outreach efforts that took place in November 2008.

For the second consecutive year, the Boston Children's Museum kicked off PhUn Week 2008 under the leadership of APS member Andrea Gwosdow, research or health-related volunteers from the Boston area, and museum staff. Families were engaged in listening to their heart beat, finding their pulse, understanding the knee jerk reflex, examining x-ray films, and experiencing the museum's KidPower Health Exhibit. Additionally, VWR Education generously loaned anatomical skeleton models for demonstration.



Jessica Clark uses Powerlab LabTutor to engage a group of students in monitoring their pulse. Equipment and software loaned by ADInstruments.

Also for the second consecutive year, ADInstruments, Inc. loaned PowerLab equipment to Jessica Clark (Washington Univ. School of Medicine, St. Louis, MO) for her PhUn Week events in her hometown of Albuquerque, NM.

Bina Joe (Univ. of Toledo College of Medicine) coordinated a classroom visit with a team of physiologists, followed by a campus visit coinciding with the Ohio Physiological Society Meeting 2008. At the meeting, a panel of six physiologists led question and answer discussions with approximately 80 high school students.

Heddwen Brooks and Zoe Cohen (Univ. of Arizona, Tucson) coordinated their PhUn Week event to coincide with the Southern Arizona Math, Science, and Technology Funfest. Funfest is an annual three day math and science extravaganza held at the Tucson Convention Center which aims to introduce fourth through eighth graders to diverse math, science, and engineering principles using real-life perspectives. More than 30 students and faculty from the Department of Physiology and the Physiological Sciences Graduate Program at the university volunteered over two days reaching more than 2,400 students.



A young child at the Boston Children's Museum makes a connection between an image on an x-ray film and an anatomical skeleton with guidance from a research volunteer. Skeleton model loaned by VWR Education.



A group of students work through the activity on their own on the LabTutor system in Albuquerque, NM.

Table 1. Lead coordinators and event sites for PhUn Week 2008. RT: APS Research Teacher (current or past fellow), K: Kindergarten, PS: Primary School, ES: Elementary School, MS: Middle School, HS: High School.

APS Member Coordinator	Institution	City, State	Teacher/Educator Coordinator	Grade Level(s)
Curt Anderson	Univ. of Idaho	Pocatello, ID	Teri Mitton (RT)	HS
Marvin Bernstein	Univ. of New Mexico	Las Cruces, NM	Sandra Cross (RT)	MS
Lorrie Brilla	Western Washington Univ.	Bellingham, WA	Carter Maden	HS
Jackie Brittingham	Simpson College	Indianola, IA	Lara Eberlein	ES
Heddwin Brooks, Zoe Cohen	Univ. of Arizona	Tucson, AZ	Stacey Forsyth	ES/MS
Gregory Brower	Univ. of South Carolina	Columbia, SC	Karen Walton (RT)	HS
Jessica Clark	Washington Univ.	Albuquerque, NM	Carmen Carrejo	ES
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Joseph Covi	Colorado State Univ., Fort Collins	Fort Collins, CO	Tom Creegan, Matthew Foster, Michelle Goodwine	HS
Jeff Falcone	Univ. of Louisville	New Albany, IN	Margaret Shain (RT)	K/MS
Peter Farrell	East Carolina Univ.	Greenville, NC		MS
Jon Fisher	Saint Louis Univ.	St. Jacob, IL	Leigh Apple Jennifer Davis (RT)	MS
Rayna Gonzales	Univ. of Arizona	Phoenix, AZ	John Nishan (RT)	HS
Barb Goodman	Univ. of South Dakota	Vermillion, SD	Sally Stoll (RT)	MS
TanYa Gwathmey	Wake Forest Univ.	Statesville, NC	Glenn Usry	ES/MS/HS
Andrea Gwadiniey	Gwosdow Associates	Boston, MA	Boston Children's	ES/MS ES/MS
My Helms	Emory Univ.	Atlanta, GA	Museum Cynthia Hightower,	pre-K
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Robert Hester	Univ. of Mississippi	Jackson, MS	Chandra Stork (RT)	HS
David Holtzclaw	Univ. of Nebraska	Omaha, NE	Pamela Ford	ES
			Cara David	MS
C 41: I 1	m 1 II.	77. 1. A.T.	Kris Sandall	HS
Cynthia Jackson	Tuskegee Univ.	Tuskegee, AL	Belinda Hart	MS
D. 1	II : CM 1 1	m 1 1 OH	Mary Arrington	HS
Bina Joe	Univ. of Toledo	Toledo, OH	Ohio Physiological Society Meeting	HS
Kelvin Jones	Univ. of Alberta	Edmonton, Alberta, Canada	Jessica Shewchuck	MS
Richard Lieber	Univ. of CA, San Diego	San Diego, CA	Juanita Quevedo (RT)	HS
Laura Lorentzen	Kean Univ.	East Orange, NJ	Adriana Rojos	MS
Keisa Mathis	Louisiana State Univ.	New Orleans, LA	Jeff Colassi	ES
			Gwen Gilbert	MS
Steven Miller	Indiana Univ.	Indianapolis, IA	Norm Leonard (RT)	HS
Diane Munzenmaier	Medical College of	Milwaukee, WI	Keith Bilello,	HS
	Wisconsin		Elizabeth Siegel	
Thomas Pressley	Texas Tech Univ.	Lubbock, TX	Emma Lovering	MS
Kathy Ryan	US Army Inst. of Surg. Res.	Fort Sam Houston, TX	Diana Comuzzie	MS
Guido Santacana,	Univ. of Puerto Rico,	San Juan, Puerto Rico	Zugeily Marcano	HS
Nildris Cruz	Medical Sciences Campus		Ana Rodriguez	HS
Christine Schnackenberg	GlaxoSmithKline	Malvern, PA	Sheri Lawrence	ES
Harold Shlevin	Chana Tikvah Pharma Partners	Atlanta, GA	Christine Hippeli	MS
Jessica Snow	Univ. of New Mexico	Albuquerque, NM	Craig Snow	MS
Patric Stanton	New York Med. College	Scarsdale, NY	Maria DeCandia (RT)	HS
Britt Wilson	Univ. of South Carolina	Columbia, SC	Lisa Norman	HS
Bill Yates	Univ. of Pittsburgh	Pittsburgh, PA	Monica Erwin (RT)	HS
n/a	n/a	Louisville, KY	Jonni Miller (RT)	HS
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A kindergartner is a model in the "Dress a Scientist" group activity in which stereotypical perceptions of a scientist are debunked.

Margaret Shain, an APS Research Teacher and Mentor/Instructor, in partnership with Jeff Falcone (Univ. of Louisville) and two of his graduate students, coordinated a peer teaching PhUn Week event in New Albany, IN. She guided her 42 eighth grade students at



Young students give attention to the researcher volunteer in taking their own pulses.



Students use stethoscopes to detect their heart beats while one student is monitoring and recording his heart beat into a data acquisition system.

Our Lady of Perpetual Help School in PhUn Week exercises, such as taking a wrist pulse and learning aspects of the heart, circulation, health, exercise and nutrition. The following week her troop of students engaged 30 kindergartners rotating through different stations set up throughout the school's gymnasium. The experience was exciting not only for the kindergartners, but also for the middle school students in learning how to communicate and express science concepts to younger children.

All event sites received educational resources for students such as the Science of Life, Physiology Research in Action comic books, career brochures, and promotional memorabilia such as squeezy anatomical hearts, key rings, and drawstring sport packs. The team of presenting volunteers received PhUn Week 2008 t-shirts. Additionally, APS members and lead teacher coordinators



Graduate and undergraduate physiology students perform jumping jacks to engage elementary and middle school students in taking their pulse during the Funfest event in Tucson, AZ.

received hats for their efforts in planning their local PhUn Week events. The success of this APS member-based program is a testament to the dedication of our members who make an impact on the next generation of research scientists by reaching out to young students.

Plans are developing for PhUn Week 2009 during the week of November 2. Although the theme highlights the physiology of exercise and fitness, APS members are welcome to focus on other areas of physiology. For more information, be sure to join us for coffee and a light breakfast at the PhUn Week training session on Sunday, April 19 at EB 2009 (9:00-11:00 am, Hilton Riverside, Grand Salon Room 15). Send an email to: phunweek@theaps.org to claim a free gift at the session, and/or for notification of program updates on the www.PhUnWeek.org website. For other information, contact Mel Limson in the Education Office at mlimson@theaps.org. *



Another small group rotation on nutrition for kindergartners led by eighth grade students, coordinated by Margaret Shain and Jeff Falcone.