



alert:



2009-2010

WINNERS

Research on Energy Drinks and Migraines Earns Top Prizes

An epidemic of talented high school juniors and seniors – 60 students from 21 states in all – arrived in the nation’s capital April 23 for the seventh annual Young Epidemiology Scholars (YES) Competition. Their enthusiasm, curiosity and concern about population health were infectious. It was a remarkable weekend at America’s leading public health competition for high school students, with illuminating student presentations on a vast range of health topics from Alzheimer’s disease and air pollution to smoking and infertility.

Lead judge Dr. Lorna Thorpe, Director of the Epidemiology and Biostatistics Department at the City University of New York’s School of Public Health, characterized the Regional Finalists as an impassioned group. “The topics they chose to focus on this year were

[continued on page 2]

YES You Can!
9 Steps to Entering the YES Competition

Do you have what it takes to think like an epidemiologist? [Back cover]

PERSPECTIVES

Troy High School teacher and Science Olympiad coach Nga Ngo talks about her first time attending a YES Competition. [Page 3]

2009-10 YES WINNERS: Research on Energy Drinks and Migraines Earns Top Prizes



Left to right: Breaking the ice over ice cream; Dr. Richard Besser of ABC News



side effects and risks stated on the labels. The most compelling surprise of the study was the young age at which middle school students began consuming energy drinks. Shoshanna hopes her research will lead teachers of

health classes to include information on the subject in high school and middle school.

Gazelle Zerfati, Baldwin School, Bryn Mawr, Pennsylvania, won for her research on underdiagnosed migraines in teenage girls. In her study, she surveyed female high school students to determine the prevalence of migraines among teenage girls and assess their knowledge of this common neurological disorder. Her study showed that a great majority of the students were poorly informed about migraine symptoms and treatment, and that migraines are seriously

Clockwise from top: Signing books on the last day; lead judge Dr. Lorna Thorpe; 2009-10 regional finalists



under-diagnosed and undertreated.

"I was surprised to find that a large portion of the students who had migraines were not aware of it, and therefore never sought medical attention." The results of her study encouraged her to apply for Institutional Review Board (IRB) approval from a local medical school to expand her research to other high schools. So far, Gazelle has recruited eight high schools to participate.

Guest speakers at this year's competition included such leading public health figures as Dr. Richard Besser, senior health and medical editor at ABC News; Dr. Harvey Fineberg, president of the Institute of Medicine of the National Academies; Dr. Paula Braveman, Director of the Center on Social Disparities in Health at the University of California, San Francisco; and Dr. Walter Orenstein, Deputy Director, Vaccine Delivery, the Bill and Melinda Gates Foundation.

This year, 639 students from 44 states and the District of Columbia entered the YES Competition. To date, YES has awarded more than \$3 million in scholarships. Congratulations to all of this year's exceptional YES Scholars!



[continued from front cover] highly imaginative and relevant to 2010. Many looked deep into new issues affecting teenagers today, while others showed great empathy for other populations such as older adults, communities in poor neighborhoods and ethnic minorities."

As the competition reached its conclusion, two high school juniors from Pennsylvania each earned a First Place \$50,000 scholarship for research projects that shed light on little recognized health problems threatening today's teenagers.

Shoshanna Goldin, Moravian Academy, Bethlehem, Pennsylvania, won for her research on rising consumption of energy drinks among adolescents. When energy drinks took her school by storm, Shoshanna became wary of the dangers they posed. "I wondered if they were aware of the ingredients and understood the potential health risks." To help raise awareness, she surveyed her peers on their consumption and knowledge about these stimulants.

She discovered that teens were unaware of the amount of stimulant,



2009-10 NATIONAL FINALISTS

\$35,000 Scholarships

- **Hannah Borowsky**, Hopkins High School, Minnetonka, MN, “Adolescent Smokers’ Perceived Risk of Cigarette Use”
- **Jessica Hart**, Brighton High School, Cottonwood Heights, UT, “Comparative Risk Assessment of Female Infertility and Pregnancy Problems from Exposure to Toxicants Discovered in a Residential Neighborhood Located in the Mouth of Little Cottonwood Canyon in Salt Lake County, Utah”



\$20,000 Scholarships

- **Otana Jakpor**, Woodcrest Christian School, Riverside, CA, “Indoor Air Pollution: The Pulmonary Effects of Ozone-Generating Air Purifiers and Other Ozone-Generating Household Devices”
- **Jeffrey Wang**, Auburn High School, Rockford, IL, “A Spatial Approach to Epidemic Dynamics Using Stochastic Cellular Automata with a Case Study of Novel H1N1 in Illinois”



\$15,000 Scholarships

- **Matthew Lam**, Jericho Senior High School, Jericho, NY, “Epidemiological Study of Cancer Pain in New York City Chinese Immigrants and the Role of Education in Overcoming Barriers to Pain Treatment”
- **Jan Gong**, Garden City High School, Garden City, NY, “Myocardial Infarction in Chinese Populations: A Genome-Wide Association Study”
- **Anisha Mudaliar**, Pacific Ridge School, Carlsbad, CA, “An Epidemiological Analysis of Youth-Onset Diabetes Mellitus in India”
- **Haley Shopp**, Grace Preparatory Academy, Arlington, TX, “Effects of Vaccination on Spread of Influenza Strain H1N1”
- **Joan Kim**, Amity Regional High School, Woodbridge, CT, “Does Facebook Prevent Alzheimer’s? The Relationship Between Online Social Networking and Cognitive Function in Senior Citizens”
- **Carl Nist-Lund**, Canterbury School of Fort Myers, FL, “Emerging Threats of Mosquito-Borne Diseases in Southwest Florida, Specifically Dengue Fever and Dengue Hemorrhagic Fever”



TROY HIGH SCHOOL TEACHER AND SCIENCE OLYMPIAD COACH NGA NGO TALKS ABOUT HER FIRST TIME ATTENDING A YES COMPETITION.

PERSPECTIVES

How did you end up attending the YES Competition this year?

Our students who participated in Disease Detectives at Science Olympiad won first place and part of our prize was going to the YES Competition (Ms. Ngo attended with fellow SO coach Kurt Wahl).



How was YES different from Disease Detectives? What’s most different is the public speaking as there are no presentations at Disease Detectives. Also YES students are actually collecting data, whereas in Disease Detectives, students are given a set of data to analyze.

Do you think a student who has done Disease Detectives is in a good position to enter YES? Oh absolutely. I would say that every person who does Disease Detectives would be a good match for YES because they already have a good foundation in epidemiology. They know the terminology and they know the ins and outs.

What was your most memorable moment at YES? I loved watching the students present. The subjects they chose to research were fascinating and it was great to see their enthusiasm. I also loved the guest speakers and getting to meet such a variety of people who are experts in their field. You rarely get to meet so many people who are so good at what they do all at one time.

What do you think are the main benefits for students who participate in YES? Other than the scholarships, which is huge, just the experience of going out and researching their topics and presenting their findings. They learn how to write, how to speak and how to answer questions properly.

What would you say to a teacher thinking about bringing YES into their classroom? I would tell them there are so many benefits for the students. To expose a child to an opportunity where they actually have to collect their data, analyze their data and draw some conclusions – that unto itself is worth entering.

Do you hope to have a few students of your own at YES next year? We’re already encouraging our students who are doing Disease Detectives this year to do YES next year.



YES You Can! 9 Steps to Entering the YES Competition

Epidemiologists make headlines, save lives and are in demand more than ever before. Do you have what it takes to think like an epidemiologist? Here's your chance to find out and win a \$50,000 scholarship.

1. Choose a health-related topic that's important and meaningful to you.
2. Make sure it falls into the field of epidemiology.
3. Develop a research question to help define what your study will answer.
4. Find a mentor—it's not required, but a mentor can provide valuable resources and insights.
5. Choose a design for your study.
6. Obtain your data. Whether you use an existing data set or collect your own, this is key to answering your research question.
7. Analyze your data—time to use your critical thinking skills and interpret your findings.
8. Present your data in the standard format for epidemiological papers.
9. Submit your research paper by the entry deadline of February 1, 2011, 9 a.m. Eastern Time.

For more information, including the downloadable guide, *Writing Your YES Research Paper*, and to register for the YES Competition, visit: www.collegeboard.com/yes



The College Board
11955 Democracy Drive
Reston, VA 20190
www.collegeboard.com/yes

YES

in the **press**
Epic coverage of the YES Competition

YES took the media by storm as the spotlight shone on America's future public health leaders. Stories of teens tackling the pressing health challenges of our time dominated the headlines from coast-to-coast. Poised, confident and ready to share their passion for public health, YES Scholars showed their epi savvy to the world. Here's what the press had to say.

- "In their search for answers, all four Utah high school students became amateur epidemiologists, researching their way into a national public health competition."—*The Salt Lake Tribune*
- "Their passions, rooted in their personal experiences, have grown into scientific research, earning the high school students a chance at a \$50,000 scholarship."—*The New Haven Register*
- "We wish them (YES Scholars) the best and hope that their success leads to improved health, whether it is public or private."—*The Pioneer Press*
- "These are the people that are going to take our jobs."—Dr. Manny Alvarez, Fox News



Identify the mystery person for a chance to win a special prize from the YES vault!

EPILOGUE

WHAT'S MY NAME?

- I am one of the founding fathers of epidemiology.
- I was one of the first doctors to use anesthesia.
- I helped deliver Queen Victoria's children.
- I investigated and mapped one of the worst outbreaks of cholera in England.

Send your answers to yes@dcinyc.com by July 26 and include your full name, email address, mailing address and YES Competition year. We will randomly choose a winner from the correct responses.

We want to hear from you! To suggest an Epi-Logue quiz topic for the next issue, write to us at yes@dcinyc.com. If your topic is chosen you'll be credited in the next issue!