## Sixty Young Epidemiology Scholars Compete in the Nation's Capital

The excitement was contagious at the fourth annual YES Competition for junior and senior high school students, held in Washington D.C., April 13–16, 2007. Sixty students from across the nation presented their research to nationally recognized epidemiologists and teachers as they competed for college scholarships ranging from \$2,000 to \$50,000.

It was a record-breaking year for the competition with 717 research projects submitted. During the regional and national segments, students

gave a 12-minute oral presentation about their research, followed by a 10-minute question and answer session conducted by the judges. This year's projects included a range of topics such as studies on the correlation between obesity and buffets, and the relationship between infant allergies and learning disabilities.

While at the competition, students got the chance to hear from Emily Lefkowitz, a 2005–06 YES Scholar, currently majoring in policy analysis and management, with a concentration in

health policy, at Cornell University. Other speakers included Dr. Virginia Ernster, University of California, San Francisco, School of Medicine; Dr. Harvey V. Fineberg, Institute of Medicine of the National Academies; Dr. Howard Frumkin, Centers for Disease Control and Prevention; and Rear Admiral Kenneth Moritsugu, Acting Surgeon General of the United States. Students were also able to discuss their research with leading health professionals.

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#### 2006-07 YES Competition Winners

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First-place winners Megan Blewett and William Slack

Read more about the students online at www.collegeboard. com/yes

The twelve finalists show their winning spirit.



#### First Place \$50,000 Scholarship

#### Megan Blewett

Madison High School
Madison, New Jersey
A Space/Time
Epidemiological Comparison
of Multiple Sclerosis (MS)
and Amyotrophic Lateral
Sclerosis (ALS)

"I began mapping the distribution of MS in the eighth grade. I hope to continue researching MS and Lou Gehrig's disease until the causes and cures for these diseases are found."

#### William Slack

Decatur High School
Decatur, Georgia
Teen Drug, Alcohol and
Tobacco Use: A Social
Network Examination

"I think many answers to questions in health can be found by doing a social examination into why people make the unhealthy choices they do, why certain advertising is so effective and how to counter the factors that make a population so unhealthy."

#### Second Place \$35,000 Scholarship

#### Jessica Nussbaum

Roslyn High School Roslyn, New York The Impact of Anti-Alcohol Presentations on Teens' Perceptions and Consumption of Alcohol

#### Julie Rechel

Thomas Worthington
High School
Worthington, Ohio
A Comparison of Practiceand Competition-Related
Injuries Among High School
Athletes Participating in
Nine Sports During the
2005–2006 School Year



#### Third Place \$20,000 Scholarship

#### Sarah Silverstein

Patrick Henry High School San Diego, California A Longitudinal Study of Stress in First-Year Dental Students

#### Paul Welle

Statesboro High School
Statesboro, Georgia
A Study of the
Effectiveness of Lifestyle
Habits and Coping Strategies
on Stress Tolerance in
College Students by Race
and Gender

#### National Finalists \$15,000 Scholarship

#### Dalene Cook

Seneca High School Seneca, Missouri How Sweet It Is: The Influence of Taste Perception and Sensitivity on Food Choice Based on Taste Status

#### Mio Frisk

Menlo-Atherton High School Atherton, California Examining the Correlation between Physical Activity, Body Mass Index and Amenorrhea in Young Women

#### **Charles Hyman**

Bellaire High School Bellaire, Texas All-You-Can-Eat Buffets and Obesity

#### **Seth Levine**

William A. Shine Great Neck South High School Great Neck, New York Fast Food and Obesity in New York City Neighborhoods: A Statistical Approach

#### **Kelsey Miller**

Swink High School Swink, Colorado A Study of Early-Morning Breakfast Habits of Teens and Their Midmorning Blood Sugar Levels

#### **Justin Petrillo**

Union County Magnet
High School
Scotch Plains, New Jersey
Personal and Ambient
Concentrations of PM2.5 in
Camden, New Jersey













### Sixty Young Epidemiology Scholars Compete in Nation's Capital (continued from page 1)

Twelve students were selected as National Finalists. The top two national winners, who each received a \$50,000 college scholarship, were Megan Blewett from Madison, New Jersey, whose research entailed a comparison between Multiple Sclerosis (MS) and Amyotrophic Lateral Sclerosis (ALS), and William Slack, from Decatur, Georgia, who researched teenage alcohol, drug and tobacco use. "Megan and Will displayed amazing initiative, talent and hard work," said Risa Lavizzo-Mourey, M.D., M.B.A., President and CEO of the Robert Wood Johnson Foundation. "Their projects show what a difference America's youth can make in improving the lives of those around them."

The YES Competition was life-altering for many students. "After listening to the speakers and hearing what epidemiology is really about, I

have an entirely new outlook on the world," said Dalene Cook from Seneca High School in Seneca, Missouri. Dalene was a National Finalist, earning a \$15,000 college scholarship.

Supported by the Robert Wood Johnson Foundation and administered by the College Board, the YES Competition promotes student research that uses epidemiological methods of analysis to investigate public health issues that affect human populations. "The YES Competition encourages students to use advanced research methods to help analyze today's major public health problems," said Gaston Caperton, President of the College Board. "Problem-solving and critical-thinking skills will serve these students well not only in the pursuit of any college major, but throughout their careers and lives."

Rear Admiral Kenneth Moritsugu, Acting Surgeon General of the United States, addresses YES participants on the importance of public health research and practice.

RADM Moritsugu has been a representative to numerous national health care agencies and provided expertise to international organizations and governments including Kuwait, Saudia Arabia, Nigeria, Germany, Mexico and the Trust Territory of the Pacific Islands. The recipient of numerous awards, he has served on boards of trustees for organizations including the United Network for Organ Sharing and the National Kidney Foundation.

"The YES Competition is proof that it is never too soon to be engaging students in solving our nation's most pressing public health challenges," he said in his address to the YES



participants. He went on to convey information about the state of public health in the nation today. For example, more than 90 million Americans live with chronic diseases, with treatment costs

of \$1.5 trillion a year. And 70 percent of deaths in this country are caused by chronic diseases. RADM Moritsugu outlined three main priorities for the Office of the Surgeon General: prevention, preparedness and the elimination of health disparities.

"Remember that you are all leaders," RADM Moritsugu said in closing. "We must have a vision, and we must be able to speak out in the face of adversity because speaking out, and then always doing the right thing, is the only way to secure the health, vitality and prosperity of our nation." RADM Moritsugu no doubt left an indelible impression on the YES Scholars.



#### Schools of Public Health See Major Increase in Enrollment



2007-08 YES Competition

**Guidelines**Available online now

Online submission deadline February 4, 2008 by 5:00 pm ET

**YES National Event** April 4–7, 2008

Turn on the television and you won't have to wait long to see the many public health crises around the world. From mad cow disease in Europe to the continued HIV pandemics in Africa, from the SARS scare in Asia to the rise in obesity in the U.S., the growing global demand for health experts could not be more apparent.

Commonly cited as one of the fastest growing fields, public health has urgent needs for more doctors, nurses, environmental scientists, health educators, informaticians and, of course, epidemiologists. "The challenges of emerging diseases such as avian flu, threats of bioterrorism and the current epidemics of chronic diseases like obesity and diabetes, can only be solved by attracting the most intelligent, creative and committed young people to be the leaders of the next generation," said Dr. Pamela G. Russo, Senior Program Officer at the Robert Wood Johnson Foundation.

College students are starting to respond to the demand. Undergraduates are choosing public health majors in record numbers. And after graduating, many are pursuing advanced degrees in public health. In fact, since 1992, schools of public health that offer graduate degrees in the field have witnessed a 50 percent increase in applications. There are currently 38 accredited schools of public health in the U.S.—a number that is expected to rise as demand continues to increase.

"The University of Minnesota School of Public Health has seen a dramatic increase in applications," says Diana Harvey, Communications Director of the University of Minnesota School of Public Health. "In 2002, we had 604 applications. We now have double that number. Our student body has grown to a record number of 1,177, which is the fourth largest enrollment in the U.S."

The Arnold School of Public Health at the University of South Carolina has also seen a significant increase in applications, particularly in the field of epidemiology, says John E. Vena, Ph.D., Professor and Chair, Department of Epidemiology and Biostatistics. In 2006, South Carolina became part of the

Schools of Public Health Application System (SOPHAS), which allows interested students to apply to multiple accredited public health schools at once.

David Celentano, Johns Hopkins Professor of Epidemiology at the Bloomberg School of Public Health, attributes much of the recent interest to increased media coverage of emerging infectious diseases and to popular television shows such as *CSI*.

Dr. Vena of the Arnold School says there is a wide variety of research areas in public health, such as cancer, diabetes, obesity, physical activity, diet, children's health, women's health, mental health and environmental health, which appeals to prospective students. High school students are also showing more interest in public health. Many schools now have epidemiology and global health clubs, and membership in them is growing.

Even with increasing numbers of students pursuing public health careers, the demand for these professionals will remain high. For example, in addition to focusing on traditional issues, such as outbreaks of tuberculosis, the field has begun to pay more attention to manmade outbreaks, like the high-profile anthrax contamination of 2001. In the anthrax case, epidemiologists were called upon to determine the poison's origins and find ways to contain it.

In addition, health policy has begun to shift its focus from treatment alone to prevention. "There is a renewed emphasis on prevention because of skyrocketing health care costs and the rise of new epidemics, such as obesity," says Dr. Harvey of the University of Minnesota School of Public Health. As this occurs, the demand for trained professionals has increased.

Baby boomer retirements in the field will also increase the need for public policy experts. "Over the next five to ten years, approximately half of the public health workforce will retire," says Dr. Vena. The demand for highly skilled experts is good news for public health students and those considering it as a future career, he says. "Our students are in demand when they graduate, and all are placed in great public health academic or industrial jobs."

