SCIENCE AND HEALTH

Scholars at First Abelson Seminar Urge Focus on Chronic Disease

Influential experts in medicine and public health warned a AAAS audience that heart disease, cancer, diabetes, and other chronic diseases have emerged as the world’s dominant health threat, posing a greater human and economic risk than infectious diseases, hunger, and afflictions related to childbearing and early childhood combined.

Speaking at the first AAAS Philip Hauge Abelson Advancing Science Seminar, several of the experts stressed that prevention strategies and treatments are available to prevent millions of deaths from chronic disease. And developments at the frontiers of medicine may mean dramatic and effective future treatments for such illness.

“We can stop already the global pandemic of chronic disease, and conservatively and relatively easily save 36 million lives between now and the year 2015,” said Robert Beaglehole, director of Chronic Diseases and Health Promotion for the World Health Organization (WHO). “The solutions are inexpensive, they’re cost-effective, and they’re widely applicable.”

But, the speakers said, health, research, and funding agencies must develop a new appreciation of the global threat posed by chronic disease and invest more in addressing it. Too often, the agencies still see the world as it was a half-century ago, when poverty, high infant mortality, and low life-expectancy were overwhelming threats outside the developed world, said Susan Raymond, senior managing director for research, evaluation, and strategic planning at Changing Our World Inc., a New York–based philanthropic service company.

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“New Directions in Health: The Global Burden of Chronic Disease” was held 8 December 2005 at AAAS headquarters in Washington, D.C.; it was the inaugural event in a series named for Abelson, who died in 2004 after a career that included research in physics and biology and 22 years as the editor of Science. The seminar series is expected to focus on the frontiers of science and technology and address major social challenges.

Indeed, several speakers focused on the science of battling chronic disease, describing research that could revolutionize future health policy and treatment.

Eric J. Topol, provost of the Cleveland Clinic Lerner College of Medicine, described how future heart attacks could be prevented by early intervention into families with genes that make them vulnerable. Michael Selton, professor of biomedical engineering at the University of Toronto, described efforts now under way to grow new tissues, new organs—even new hearts—to address the ravages of chronic disease and other afflictions.

Beaglehole, the opening speaker, and Raymond, the closing speaker, combined to paint a picture of dramatic changes in the global health profile, with chronic disease rising along with living standards in developing countries—but with medical, research, and funding agencies failing to take heed.

Poverty, infant mortality, and population growth are down sharply since 1950, Raymond said. In all but the least developed countries, people are more likely to be working, better fed, and living longer. But that creates more opportunity for chronic diseases that arise with poor dietary habits, physical inactivity, and tobacco use. For example, Beaglehole cited “a very frightening statistic”: Worldwide, 22 million children under the age of 5 are obese. That means more future risk of obesity-related chronic diseases.

Raymond said the workforce in some developing countries could be “devastated” by chronic disease, with ripple effects exacting a human and multibillion-dollar toll on families, communities, and economies. “Dealing with chronic diseases at the onset of a stroke is a lot more expensive than dealing with the problem when it’s at an earlier stage,” she added.

“We need to invest seriously in a broad-based approach to the prevention and control of chronic disease,” Beaglehole concluded. “The way forward is clear. It is up to us all now to take appropriate action.”

Paul Rcer contributed to this report.

AAAS

Call for Nomination of AAAS Fellows

AAAS Fellows who are current members of the Association are invited to nominate members for election as Fellows. A Fellow is defined as “a Member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished.” A nomination must be sponsored by three AAAS Fellows, two of whom must have no affiliation with the nominee’s institution.

Nominations undergo review by the Steering Groups of the Association’s sections (the Chair, Chair-Elect, Retiring Chair, Secretary, and four Members-at-Large of each section). Each Steering Group reviews only those nominations designated for its section. Names of Fellow nominees who are approved by the Steering Groups are presented to the AAAS Council for election.

Nominations with complete documentation must be received by 12 May 2006. Nominations received after that date will be held for the following year. The nomination form and a list of current AAAS Fellows can be found on the AAAS Web site at www.aaas.org/aboutaaas/fellows. To request a hard copy of the nomination form, please contact Linda McDaniel at the AAAS Executive Office, 1200 New York Avenue, NW, Washington, DC, 20005, at 202-326-6635, or at Lmcdanie@aaas.org.
Results of the 2005 Election of AAAS Officers

Following are the results of the 2005 election. Terms begin on 21 February 2006.

General Offices

Section on Agriculture, Food, and Renewable Resources

Section on Anthropology

Section on Astronomy

Section on Atmospheric and Hydrospheric Sciences
Chair-Elect: Thomas P. Ackerman. Member-at-Large: Peter J. Webster. Electorate Nominating Committee: David D. Houghton, David A. Randall.

Section on Biological Sciences

Section on Chemistry

Section on Dentistry and Oral Health Sciences

Section on Education

Section on Engineering

Section on General Interest in Science and Engineering
Chair-Elect: Lynn E. Elfner. Member-at-Large: Linda Trocki. Electorate Nominating Committee: Jack O. Burns, Robert D. Crangle.

Section on Geology and Geography

Section on History and Philosophy of Science

Section on Industrial Science and Technology

Section on Information, Computing, and Communication

Section on Linguistics and Language Science

Section on Mathematics

Section on Medical Sciences

Section on Neurosciences
Chair-Elect: Mary E. Hatten. Member-at-Large: Leslie P. Tolbert. Electorate Nominating Committee: Gail Mandel, Robert H. Wurtz.

Section on Pharmaceutical Sciences

Section on Physics

Section on Psychology

Section on Social, Economic, and Political Sciences

Section on Societal Impacts of Science and Engineering
Chair-Elect: Susan Hackwood. Member-at-Large: Elizabeth Chornesky. Electorate Nominating Committee: Donna Gerardi Riordan, Albert H. Teich.

Section on Statistics