Hong Kong passengers don masks during the 2003 SARS outbreak.

its fiscal 2019 budget proposal, including programs that address HIV/ AIDS, malaria, immunizations, and

parasitic diseases, said David Parkes, program associate of AAAS's R&D Budget and Policy Program. The president's budget plan would cut these CDC programs alone by a total of \$80 million, taking funding levels 16.3% below enacted fiscal 2018 levels.

The fiscal 2019 budget proposal also called for a 36% reduction below enacted fiscal 2018 levels for the U.S. Agency for International Development. It would cut 17% from a CDC infectious disease program that develops tools to stop diseases spread between animals and people, reported the Global Health Technologies Coalition, a group dedicated to advancing deadly disease treatments and diagnostic tools.

Budget constraints and global political trends heighten the need for organizations like AAAS, academic institutions, philanthropies, and the private sector to forge partnerships with emerging economies, Kolker said. Technical partnerships are needed to further expand health care infrastructure and medical expertise. Several AAAS science diplomacy training and public engagement programs contribute to meeting this goal but will be hard put to fill gaps if government commitment is reduced, Kolker added.

In discussing his experience with epidemics, Kolker explained how multidisciplinary and multinational approaches are especially beneficial as researchers in emerging economies increasingly want to select the health experts they partner with and the research they want to pursue. Such collaborations have led research teams to no longer focus exclusively on infectious diseases. Increasingly, they also study chronic diseases such as diabetes, heart disease, and cancer that present growing health burdens in their countries.

"Our health research system has led U.S. institutions to use African institutions as research platforms. This underestimates the ability of Third World institutions to actually identify their own priorities," said Kolker. "In the 21st century, the new paradigm is that lower- and middle-income countries actually want partnerships with the world's best experts to bring their own capacity to First World standards."

AAAS extends science in theological education program

Science in the Seminaries enhances science education across the religious community

By Anne Q. Hoy

Building on broad interest generated by a three-year pilot project integrating science into theological education, the American Association for the Advancement of Science is now expanding the initiative to advance understanding of science and technology across the religious community to as many as 35 seminaries over the next 5 years.

A set of seven seminaries in Michigan, Missouri, Indiana, Illinois, and Wisconsin have been selected as the first of four groups to par-

ticipate in the expanded program over the next 18 months. Three additional groups of seminaries will be chosen to join the program in stages.

"The hope is that the seminary students exposed to enriched classes will find science relevant and interesting to their vocations, and in the future, help them make science a positive component of congregational life and favorably impact the everyday lives of a broad swath of Americans," said Jennifer Wiseman, director of the AAAS Dialogue on Science, Ethics, and Religion (DoSER) program.

Fr. John Kartje, a trained astrophysicist, rector, and president of Mundelein Seminary, a Roman Catholic theological seminary in a northern Chicago suburb, expressed hope that his school's participation in the expansion phase will give students and faculty a "deeper knowledge and better appreciation for the findings and methodologies of scientific research."

"As Mundelein Seminary prepares priests who will be serving in parishes across the country, it is important that they possess a basic foundation in the fundamentals of science and are up to date on current trends in research and discovery," Kartje said. "Such 'scientific fluency' will help them better connect with their parishioners and better integrate their theological expertise into the scientifically savvy culture in which they will minister."

Anna Case-Winters, professor of theology at McCormick Theological

Seminary, said the chance to participate in the initiative drew immediate faculty support from the U.S. Presbyterian theological seminary located in Chicago. "We believe that for religious leaders today, capacity for thoughtful interaction with the sciences is not optional—it is essential," Case-Winters said.

Participating seminaries have pledged to incorporate science into at least two of their core courses and to hold at least one campus-wide event over the next 18 months. "We provide science resources and they plug that into the larger context of their programs," said Curtis

Baxter, a DoSER program associate. "The seminaries decide on their own how to incorporate the science into courses they already teach."

AAAS will recruit science advisers from nearby research and academic institutions to share knowledge and experience in designing engaging science coursework, assisting theological educators at each seminary to sort out how best to integrate science into courses the seminaries have selected. The program makes available information on advances in science and technology and provides the institutions with access to the *Science* family of journals.

Coursework that seminaries plan to fold into their core classes covers a broad sweep of science, ranging from evolution of the cosmos to genetics and neuroscience. One seminary plans to explore topics such as anxiety, addiction, and dementia to prepare church leaders

to better minister to congregants. Some seminaries plan hands-on activities, including a pilgrimage to Israel to study archaeological sites and field trips to laboratories and science museums.

The five other seminaries participating are the Seventh-Day Adventist Theological Seminary of Andrews University in Berrien Springs, Michigan; Nazarene Theological Seminary in Kansas City, Missouri; Bethany Theological Seminary in Richmond, Indiana; Kenrick-Glennon Seminary in St. Louis, Missouri; and the Sacred Heart Seminary and School of Theology in Hales Corners, Wisconsin.

Screeners needed for journalism awards

Scientists from the United States and abroad who will be in the Washington, D.C., area between late August and late September are needed to review the scientific accuracy of entries in the prestigious AAAS Kavli Science Journalism Awards competition. If you can volunteer, please contact Nkongho Beteck (nbeteck@aaas.org) for screening dates and categories.

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