

taxpayer-funded inventions if NIH granted the petition. “It’s a misapplication of the statute ... [that] would likely have serious unintended and adverse consequences,” said AAU representative Theodore Poehler, vice provost for research at Johns Hopkins University in Baltimore, Maryland. “It would be a major deterrent to licensing inventions ... if potential licensees believe the government has authority” to control

prices, added COGR representative Andrew Neighbour, a law professor at the University of California, Los Angeles.

NIH officials gave little hint after the hearing of how they will rule. Mark Rohrbaugh, head of the agency’s technology-transfer office, said he plans to “move expeditiously” to make a recommendation to NIH Director Elias Zerhouni, who will make the final decision. Although many le-

gal observers predict that NIH will reject the petition, Love is hoping for a boost from election-year politics. “Drug pricing is a big political issue” that President George W. Bush won’t want to hand to his opponent, he says. Love has also asked NIH to exercise march-in rights on another drug, Pfizer’s Xalatan glaucoma treatment, which he says costs up to five times more in the United States than abroad. —DAVID MALAKOFF

## DEVELOPMENT SPENDING

# Economists Rate Greenhouse Gas Curbs a Poor Investment

**COPENHAGEN**—Feel like throwing your tax money away? Invest in measures to rein in global warming. That’s the controversial conclusion, at least, of a workshop here last week that brought together a varied group of economists, including three Nobel laureates, to analyze spending on global problems.

Participants of the “Copenhagen Consensus” weren’t purely naysayers: They lauded, as money well spent, initiatives proposed to combat AIDS, malaria, and malnutrition, for example. “This will help us focus on the more important problems,” says workshop organizer Bjørn Lomborg, director of the Environmental Assessment Institute in Copenhagen.

Many scientists don’t buy that argument, however. “We shouldn’t be spending less on climate change so we can spend more on sanitation. The problems are interrelated,” says Stephen Schneider, a climatologist at Stanford University, who labels the workshop’s premise “phony and a distortion.”

The stated premise was that the industrialized world has limited funds—about \$50 billion a year—for aid to developing countries and no objective way to set priorities. According to Lomborg, author of *The Skeptical Environmentalist*—a 2001 book that sought to discredit a host of environmental concerns (*Science*, 2 January, p. 28)—“eco-myths” such as global warming “prevent us from acting rationally” when committing resources to improving the world. It would be better, he argues, to base spending on cost-benefit ratios. Measures to stem climate change should compete for development aid, Lomborg suggests, because according to predictions “the developing world will suffer most of the damage from climate change.”

With backing from the prime minister of the right-leaning Danish government, Lomborg invited the nine economists who attended—including Nobelists Robert Fogel of the

University of Chicago, Douglas North of Washington University in St. Louis, Missouri, and Vernon Smith of George Mason University in Fairfax, Virginia—to rank solutions to pressing problems according to their likely return on investment. Experts, chosen by Lomborg, argued for and against each of 10 “challenges” (see table).

Laying out the case for climate change was William Cline, an environmental economist at the Center for Global Development in Washington, D.C. His primary evidence was the 2001 report of the Intergovernmental Panel on Climate Change (IPCC), which predicts an increase in average global temperatures of between 1.4° and 5.8°C by the year 2100. Lomborg acknowledged that the report is “the best of our knowledge on climate change.” The economic benefits of stemming global warming include protecting the lives of income-generating human beings as well as arable land. Steps to limit warming center on reducing emissions of greenhouse gases such as carbon dioxide, a tenet of the Kyoto Protocol. The most cost-effective strategy, Cline argued, would be a global carbon tax, more aggressive than the one called for under Kyoto, that would halve greenhouse emissions by the end of the century.

The panel rejected that line of argument, concluding that Cline’s proposals would be “very bad” investments. Panelist Nancy Stokey, an economist at the University of Chicago, explains that the solutions would require “large expenditures for benefits that would come far in the future.” Even with a less limited budget, the Kyoto Protocol, in the panel’s view, is not worthwhile.

That leaves scientists such as Schneider, a lead author of the IPCC report, fuming.



**Stacked deck?** Bjørn Lomborg (right) with Danish Prime Minister Anders Fogh Rasmussen.

“Climate change is not an economics problem. It’s an ethics problem,” he says. Adds John Holdren, an environmental policy expert at Harvard University, “One can’t help suspecting ... that Lomborg has stacked both the participants list and the framing of the questions to achieve this result.”

Lomborg rejects that charge, arguing that the workshop’s organization was “unbiased.” He acknowledges, though, that the panel was short on environmental expertise. “I invited other economists,” who declined to come, he says, dismissing his critics as “conspiracy theorists.” Lomborg plans to distribute the panel’s conclusions to governments and to the United Nations.

Illustrating how influential Lomborg is perceived to have become, environmental economists convened an alternative conference, “Global Conscience,” in Copenhagen last week to discuss sustainable development. “We shouldn’t choose between poverty eradication and prevention of climate change,” says co-organizer Christian Jørgensen, chair of the nonprofit Danish Ecological Council. “Prevention of climate change will pay off; it will reduce our dependence on Middle East oil, and it will create a new industrial sector for renewable energy and energy conservation.” Clearly, economics alone won’t reconcile these sharply divergent world views.

—JOHN BOHANNON

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### The 10 Challenges

- Armed conflicts
- Climate change
- Communicable diseases
- Education
- Financial instability
- Governance and corruption
- Malnutrition and hunger
- Population and migration
- Sanitation and water
- Subsidies and trade barriers