

## Royal Society under spotlight

The British Parliament is set to put the Royal Society—one of the world's oldest and most distinguished scientific bodies—under the microscope. The focuses of attention will be on efforts by the society to promote public understanding of science, an examination of why there are a few women and minority groups among the organization's members, and what the society does with the £26 million a year that it receives from the public purse.

The House of Commons Select Committee on Science and Technology will hold public hearings into the activities of the society, which may yield a head-on confrontation between Britain's scientific establishment and left-wing members of the government, who claim that the Royal Society is an elitist organization in need of radical reform.

Ian Gibson chairs the Select Committee and in addition to being a former professor of biology at the University of East Anglia, he was also a trade union activist. He says that it is time to broaden the criteria by which fellows of the Royal Society—one of the highest honors a British scientist can receive—are elected. "Perhaps more weight should be given to the role that an individual has played in promoting the public understanding of science and the social use of scientific knowledge, not just to scientific achievements," Gibson says.

The Royal Society strongly defends its record. Presently, the Royal Society has

1200 Fellows, of which 44 (3.7%) are women. Of 366 Fellows who are under 65 and living in the UK, 17 (4.6%) are women. It says that this reflects the proportion of professors in scientific and engineering disciplines who are female. It adds, "statistically, a woman stands a slightly higher chance than a man of being elected once nominated."

Lord Bob May, the society's president and a former chief adviser to the government, points to several ways it is helping to increase the number of women in senior scientific positions. He also feels that the organization has little to fear from parliamentary scrutiny of the way that it conducts its affairs.

**David Dickson, London**



## Experts at odds over mammography

In the latest round of arguments over the value of mammography, two sets of researchers have reached opposite conclusions after analyzing the same data. Fearing further erosion of public confidence in the technique, 10 US medical organizations placed a full-page advertisement in *The New York Times* last month declaring, "The evidence as a whole solidly supports reduced breast cancer mortality rates due to mammography screening."

Claudia Henschke and colleagues, of Weill Cornell Medical College in New York and McGill University Medical School in Montreal, analyzed a study performed in Malmo, Sweden and found that women 55 or older who were followed from 8 to 11 years had a reduced risk of death of 55% with routine screenings. Women 45 to 54 at the beginning of the study experienced a 30% reduction in mortality (*Lancet* 359, 404; 2002). "The major message of the paper is: annual screening with mammography saves lives," Henschke told *Nature Medicine*.

Their claims are a direct contradiction of earlier reports—also published in *The Lancet*—by a team from the Nordic Cochrane Center in Copenhagen led by Ole Olson and

Peter Gotzsche (*Lancet* 358, 1340; 2001). This group focused on two studies—the Malmo study and a Canadian study—and concluded that mammography is "unjustified because it does not reduce mortality among the population being screened."

Henschke's team say the Danish researchers did not follow patients long enough for the life-saving benefits of mammography to become apparent. "They did not recognize that the benefit of screening in reducing breast cancer deaths in a randomized controlled trial only becomes apparent after years of screening—in the Malmo study after seven years of screening—and that screening must continue for assessment of this benefit," she says. "Otherwise, the moment screening stops, the deaths from breast cancer in the screened group again increase towards that of the control group." The Canadian study would not show the benefit because it only lasted three years, she adds.

But Gotzsche insists the Cornell doctors should have analyzed both studies, and not just a subset of the Malmo trial. "The overall result of these two good trials is negative and does not lend support to screening," he told *Nature*

*Medicine*, adding "...a 55% reduction in breast cancer mortality is too good to be true. It is contradicted by national breast cancer mortality trends in countries that have adopted screening."

Joann Schellenbach, an official with the American Cancer Society (ACS), called the controversy "a somewhat arcane scientific debate about methodology" and an "interpretation of results from trials that were mostly done outside of the US decades ago," and says the studies used "screening intervals and technology that does not compare with today in the US." Nevertheless, the ACS is to convene a meeting of experts to re-examine existing evidence and draft new guidelines for breast cancer screening.

The US National Cancer Institute (NCI) had also stepped into the fray by convening a panel of experts to evaluate the data. They appeared to side with the Danish researchers. However, a new statement by the NCI hedges its bets. It continues to recommend screening whilst admitting that it will "address the uncertainties ... surrounding screening mammograms," and that it is now examining new data on mammography.

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