BA Tries Out Role as Parliament of Science

At its 150th anniversary meeting, British Association serves as a sounding board on current concerns in science

Oxford BACK IN 1860, a meeting held in Oxford by the British Association for the Advancement of Science—the forerunner of the now much larger American organization—provided the setting for an event that entered the annals of the history of science: a fiery debate between biologist Thomas Henry Huxley and the local Bishop, Samuel Wilberforce, over whether one should accept Charles Darwin's theory of natural selection.

Today's annual meetings are more sober, and clashes with authority tend to be confined to scientists' pleas for more sympathetic treatment by government. Indeed, until a few years ago, meetings of the BA, as it is familiarly called, were usually low-key affairs. The association often seemed to regular attendees to be in danger of falling asleep on its feet.

However, things have picked up, largely as a result of the association's decision to pin its colors to the mast of three specific causes: the promotion and popularization of science; efforts to bridge the gap between science and industry; and the promotion of debate within the scientific community on the government's science policy, a role in which the BA describes itself as "The Parliament of Science."

This year's annual meeting in Oxford, the 150th to be held since the association was founded, reflected this new-found vigor. And the opportunity to address each of the three causes in turn was firmly grasped by its current president Walter Bodmer, research director of Britain's largest cancer-research funding body, the Imperial Cancer Research Fund, in his opening address.

Wearing an advocate's hat, Bodmer put in a strong plea for support of the proposed international project to sequence the entire human genome, which he described as an effort to produce "The Handbook of Man," and argued that benefits would accrue in medical fields, and also have important implications for social scientists seeking to understand the genetic roots of individual and collective behavior.

Bodmer went on to criticize British industry for not spending more on research and development. He also took issue with the government for spending too much of its research budget on military projects. The current expenditure on basic science in the United Kingdom, he pointed out, was just over \$1 billion a year, compared to the \$680 million spent on subsidizing the arts. "Is a premium of [\$340 million] a year for the basic sciences really enough, especially against a background of support for the arts and humanities that many would consider is, itself, inadequate?"

The Thatcher government also came under fire at later sessions for failing to do more to address a long-standing complaint of Britain's scientific community, namely that, although it's scientists have as strong a track record as those in other countries of coming up with useful ideas, the country consistently fails to exploit them commercially.

A prime example, according to Ian Young, laboratory manager of the General Electric Company's Hirst Research Centre, is the use of nuclear magnetic resonance (NMR) for medical imaging, a technique for which much of the early research and development work was carried out in the U.K., but which is now much more widely used in other countries.

Only 25 NMR machines are currently installed in Britain, while France has 30 machines, and both West Germany and Italy have 40 (the United States, he added, has over 800).

Greater government support is needed, Young said, to safeguard intellectual property rights in the international marketplace and to pursue legal claims for royalties in other countries. "We should be blunt about it, for, as a nation, we have had done to us by the U.S.A. what they, rightly, feel aggrieved has been done to them in semiconductors by Japan."

Kenneth Baker, Britain's Secretary of State for Education and Science, defended his government's record on science spending. He argued that there had been a 15% real increase in its spending on research since Thatcher came to power in 1979.

But the meeting provided several opportunities for scientists to dispute Baker's claims about the health of British science. Denis Noble, professor of cardiovascular physiology at the University of Oxford and a leading light in the current "Save British Science" campaign, said that the evolution of the research budget could be looked at in different ways, and that his own analysis revealed a pattern of "steady decline"; while Bodmer, in his presidential address, spoke of a "widespread consensus that the science base for research in this country is now substantially underfunded."

The meeting was also the occasion for the signing of a cooperation agreement between the BA and its Soviet counterpart Znaniethe All Union Knowledge Society. The agreement, the first signed between the 2.6million member Soviet body and one in the West, provides a broad framework for cooperative activities, although BA officials say it is most likely to be used for exchanges, such as visits by school groups. After the signing, Rem Petrov, director of the Soviet Academy of Sciences Institute of Immunology, said Znanie would be interested in signing a similar agreement with the AAAS. Alvin

Trivelpiece, AAAS executive direc-SOTH MER tor who attended the BA

meeting, said the AAAS would be happy to "explore such possibili-

The meeting also had its offbeat moments, such as a report that small doses hallucinogenic compounds could be found in breakfast cereals or the hypothesis advanced by the medical director of Broadmoor Hospital, Britain's

top-security psychiatric prison, that the willingness of German soldiers to commit atrocities in the Second World War can be partly blamed on the excessive obediency imposed by German parents on their children at the beginning of the century. He noted that Hitler himself had been abused as a child and this contributed to the "insatiable hatred" which led him to order acts of barbarism (headline "Child abuse 'led to the Holocaust'")

Not quite the same significance as the Huxley-Wilberforce debate, perhaps. But still sufficient to remind people, just as the Huxley/Wilberforce must have done, that science intersects with their daily lives, often in unexpected ways. ■ DAVID DICKSON

SCIENCE, VOL. 241 1592