

## Increasing public awareness

**In the battle for increased US federal research funding, scientists and universities could benefit from mobilizing the power of public support.**

Several scientific issues were among the 'hot' topics discussed during the 2006 US midterm election campaigns. Stem cell research and biodefense concerns graced the front pages of national newspapers and were often debated on television. However, other issues of equal importance to many scientists barely received attention. In the academic scientific community, a furor rages over the ever-tightening National Institutes of Health (NIH) budget that funds non-bioterrorism-related biomedical research. This past year, the topic was a fixture among the headlines of science journals and magazines, but it was buried deep in the 'issues' sections of most political candidates' websites and was rarely featured in mainstream news periodicals.

Political candidates and the media alike paid so much attention to stem cell research and biodefense at least in part because those issues bear relevance to moral values and national security. More importantly, those topics garnered attention because the American public—the people who determine the fate of political candidates—were aware of and cared about them. In contrast, the American public seems woefully uninformed of the factors influencing biomedical research funding. A 2005 Research!America poll found that 73% of Americans were unable to name the NIH as the federal agency providing most of the government funding for medical research and 62% could not name a single institution or company conducting medical research.

Yet according to a *USA Today*–Gallup poll in October 2006, 80% of Americans cited healthcare as a very or extremely important factor influencing their vote in the midterm elections. From an economic standpoint, it is certainly in Americans' interest to care about healthcare; in 2002, asthma alone cost the US \$16.1 billion, \$4.6 billion of which comprised lost earnings due to illness and death. In fact, Americans consider curing diseases a priority, so much so that many are willing to lend their time and/or money to promote the cause. For example, over one million Americans participated in the 2006 Susan G. Komen Breast Cancer Race for the Cure and the 2006 American Heart Association Heart Walk. And so far, over 20 million Lance Armstrong Foundation Livestrong bracelets have been sold.

What the US public may not realize is that the NIH supports research into those and many other diseases, with funds far exceeding the grant money awarded by any private fundraising organization. In 2004, the NIH spent \$22.96 billion on research and training, whereas the American Cancer Society and the American Heart Association, two of the largest private fundraising organizations, awarded \$120 and \$140 million in grants, respectively. If Americans care about curing diseases, which they obviously do, why are they unaware of important facts concerning biomedical research funding? One reason, as mentioned above, is that mainstream news coverage of research funding issues is scant. According to Research!America, in 2005, 67% of Americans said that they would like to

see more about scientific and medical research in the media. In the 2006 election year, however, only 9% felt informed of their candidates' stance on issues related to scientific research.

Political lobbies aimed at increasing federal research budgets do exist. The Ad Hoc Group for Medical Research and the Coalition for National Science Funding write to and speak to Congress, explaining the benefits of federal research funding. Scientific societies such as FASEB and the AAAS also discuss funding with lawmakers. Those efforts have met with some success; for example, American Competitiveness and Innovation Act, which would provide additional federal funds for biomedical research, awaits a vote in the US House of Representatives and was drafted mostly as a result of discussions between lawmakers and scientific lobbying associations. However, such efforts effectively, if inadvertently, bypass the American public.

Fortunately, scientists are beginning efforts to harness the power of public awareness. In 2006, the Albert and Mary Lasker Foundation and Research!America implemented a new voter initiative called 'Your Candidates—Your Health', designed to inform the public of their candidates' positions on issues related to scientific research. Such organizations also offer a network through which the general public can stay informed, via e-mail updates, of biomedical research news. Research!America offers advice on how people and organizations can effectively contact elected public officials to appeal for increased biomedical research funding and runs ads highlighting the economic benefits of biomedical research in mainstream periodicals. During the 2006 election season, other scientist-founded groups worked to gather votes for candidates who support scientifically relevant issues. For example, Scientists and Engineers for America went to college campuses, raised funds and posted ads on the internet to gain votes for congressional candidates who support stem cell research, the teaching of evolution in public schools and the fight against climate change.

What more can be done? Unlike many private fundraising organizations that support specific diseases, the NIH lacks a celebrity advocate, which, as mentioned in a recent *news@Nature.com* article (<http://www.nature.com/news/2006/061002/full/061002-4.html>), can help enormously in rallying public support. Celebrities willing to promote private organizations are often those with a personal interest in a particular disease. Perhaps large universities, some of which have celebrity-like status and sufficient cachet to attract the attention of mainstream journalists, can reach out to the public. Such institutions certainly have a vested interest in preventing further federal research budget cuts; as an example, 36% of Rockefeller University's 2006 annual operating costs alone are funded by NIH dollars. Whether the NIH budget will rebound anytime soon is not known. It therefore is up to scientists and universities to tap every available resource, particularly one as powerful as the American public.