EDITORIAL

nature cell biology

The scientist citizen

As the US Congress debates the 2011 budget, US scientists must act to prevent damaging cuts to research funding.

In February this year, the US House of Representatives passed a continuing resolution to reduce government spending in the 2011 fiscal year. As a consequence, the National Institutes of Health (NIH) budget for the remainder of 2011 could potentially be slashed by $1.6 billion. Although the US Senate countered the House measure with a more reasonable alternative, continued budget wrangling in both chambers of US Congress raises questions about funding for US science. As cuts to science funding threaten the vitality of scientific research across the world, scientists must be more proactive in engaging the political process to influence legislative decisions that affect the health and future of scientific research and education.

Scientific societies, such as the American Society for Cell Biology (ASCB) and the American Association for the Advancement of Science (AAAS), and learned societies, such as the National Academies in the US and the Royal Society in the UK, undertake a variety of activities to enhance direct communication between scientists and elected representatives. These include educating lawmakers on key issues that impact research activities and providing expert scientific advice to government. But how can the individual scientist participate? Elected officials have self-interest in representing the concerns that resonate with their constituents, so taking action by writing and calling elected representatives is a first step. For example, the Congressional Liaison Committee (CLC) of the Coalition for Life Sciences (CLS), an advocacy and public policy group that represents six independent organizations, not only flags up legislative issues with consequences for the life science and biomedical research communities, but also enables rapid communication by providing customized letters that scientists can send their representatives (http://capwiz.com/jscpp/home/). The Capitol Hill Days programme run by CLS also creates an opportunity for scientists to meet with their Congressional representatives. In the UK, CaSE (Campaign for Science and Engineering), an independent advocacy group, is a prominent voice in the public debate over the economic and societal impact of investing in science and technology. Individual scientists have also organized campaigns to successfully mitigate the effects of proposed government policies that might threaten research activities. In 2010, Jennifer Rohn founded the 'Science is Vital' campaign in response to the ominous spectre of cuts to science funding in the UK. In 2004, 'Sauvons La Recherche' (Let's Save Research) was initiated by biologists to protest against belt-tightening measures by the French government, and eventually resulted in concessions to the campaigners' most urgent demands. These examples attest to the power of a grassroots movement of scientists in influencing politicians.

Lobbying in response to looming threats can have an immediate result on outcomes. But to mobilize enduring public support for pressing scientific issues, the scientific community needs a sustained strategy and long-term commitment to educating and engaging the public. Universities, research institutions, funding agencies and the individual scientist can do more to communicate to the public the knowledge and practical benefits emerging from scientific research, and the practise and culture of scientific enquiry. The European Molecular Biology Organization (EMBO) sets a noteworthy example. EMBO's Science and Society Conferences Series, revolving around scientific themes with societal implications, are intended to spur a discussion between scientists and the public. In the same vein, the Royal Society's annual Summer Science Exhibition, an event open to the public, highlights cutting-edge research and provides an opportunity for people to interact with scientists. In the Europe and the US, science festivals are becoming a potent way of engaging the public in the scientific activities of individual universities (http://comms.group.cam.ac.uk/sciencefestival/; http://www.sciencefestivals.org, http://www.fetedelascience.fr/). Concerted efforts such as these to facilitate conversations between scientists and the public should be supported. Although it is unlikely that wider public appreciation of science and its practise will galvanize popular support for all aspects of research, it would be an important step forward. To this end, research organizations and funding bodies should make improving public understanding of science a central feature of their overall mission.

As we went to press, the NIH budget for 2011 hung in the balance as the US Congress works towards a resolution to the current impasse.

Protocol Exchange

***Protocol Exchange*, a new online repository to enable sharing of protocols.**

Nature Protocols has recently launched the *Protocol Exchange* (http://www.nature.com/protocolexchange), an open access, online repository for protocols designed to serve as a community forum for rapid dissemination of detailed protocols. More details regarding the mission and scope of *Protocol Exchange*, information about submission and editorial policies, and specific features can be found at About *Protocol Exchange*.

Traditional Methods sections aim to provide sufficient information to facilitate reproduction of results. However, rather than presenting detailed methods for an individual experiment, information about general techniques used throughout the paper is presented in consolidated sections within the Methods. Papers describing more intricate procedures, such as the identification of new multiprotein complexes or organelles, complex imaging approaches using new tools, or the derivation of new lines for stem cell research, could therefore greatly benefit from a protocol-style description to complement existing Methods sections. Although Methods sections of *Nature Cell Biology* papers should continue to provide all details necessary for faithful replication of the findings, we strongly encourage authors to upload step-by-step methodologies to the *Protocol Exchange* as an added resource. Protocols related to findings published in *Nature Cell Biology* papers can be cited in, and bi-directionally linked with, the published paper.