A Budget Out of Balance

The new administration's science budget, sketchily outlined in a request to Congress, brought March in like a lion for the National Institutes of Health (NIH). Although that is likely to please our biomedical readers, the budget will disappoint almost everyone else. But from the unfortunates, the silence has been deafening, at least so far. The Battle of the Budget has scarcely been joined, after all, and the advocates for more of this and that are treading carefully. They have abundant reasons for their caution: Although it is a brand-new White House, it has already proven to be hard to move and willing to punish.

Thus, the tough questions about the care and feeding of science have, for the most part, not yet been asked. The National Science Foundation's (NSF's) Rita Colwell tactfully eschewed complaints about her agency's miserly less-than-cost-of-living increase, and other heads of agencies have been equally silent about their low budget marks. Even the lobbyists are keeping their powder dry for a while. The happiest camper in the entire government is surely the secretary of Health and Human Services, whose 14% boost for NIH presumably got him high-fived all over the NIH campus during his triumphal budget-day tour.

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We'll get to the unhappiest campers later. In the meanwhile, since *Science* (the journal, that is) receives nothing in this budget and therefore has nothing to lose, it seems safe for us to evaluate this proposal in terms of its balance. Does it really make sense for some pieces of the enterprise to be treated very well indeed and others to be held back or cut? There are good reasons for thinking it doesn't.

In the first place, an increasing proportion of the important problems in science are interdisciplinary in character. At *Science*, we have published contributions to nanotechnology that come from disciplines as diverse as chemistry, materials science, and electrical engineering. The climate sciences, on which we will depend in formulating international policies, draw from paleontology, oceanography, and atmospheric chemistry. The dramatic scientific gains that will flow from the sequencing of the human genome will be harvested not only by molecular biologists but also by specialists in bioinformatics, trained in such disciplines as mathematics and computer science. Nurturing fields such as these requires a balanced portfolio. And the balance has to come from a thoughtful cross-cut of the entire federal science budget, by those who know the enterprise well. It is hardly surprising that the balance is lacking here, because the offices that could supply such oversight (most notably, that of the director of the Office of Science and Technology Policy, the president's Science Adviser) are dark. It is well past time for this administration to turn the lights on.

As things stand, though, NSF will, unless protests avail, limp along on an increase of 1.2%: an actual reduction in constant dollars once the nonresearch increases are deducted. The Department of Energy (DOE) actually loses 3%. These marks portend difficulties for the physical sciences, but that is not all. Less attended to, but also important, is the prospective impact on the plant sciences. Those disciplines, heavily dependent on both NSF and DOE as well as the flat-lined Department of Agriculture, will provide the science essential to feeding a population due to reach 10 billion by mid-century. That's a worry for the rest of the world, where the needs will strike hardest, and also for U.S. agriculture, which will be heavily depended on to meet them.

So where are the unhappiest campers of all? Look for them in the U.S. Geological Survey (USGS), originally targeted for a monster cut of 22%, subsequently reduced to "only" 11%. This agency has supplied most of the government research that has guided fossil fuel exploration for decades. The year of a power production crisis seems an odd time for a cutback. The most compelling irony, though, has to do with another administration plan. USGS, it turns out, has supplied the framework geology that will enable—guess what?—drilling for oil in the Arctic National Wildlife Refuge! Environmentalists may wonder: Could USGS meet its reduction target by going back and undoing that work? Afraid not.

Donald Kennedy