SCIENCESCOPE

edited by RICHARD STONE

FCCSET Develops Neurotoxicology Primer

In the last decade, scientists have identified dozens of chemicals that can damage the human nervous system. But as a National Academy of Sciences (NAS) panel warned last year, federal regulation of chemical exposure is inadequate. Last week an interagency federal committee came to the rescue with a draft report to help agencies to develop "consistent" regulatory guidelines.

From the 1987 discovery of domoic acid, a shellfish toxin, to growing evidence that lead can impair learning in children, neurotoxicology has moved into the spotlight. Despite that attention, the NAS panel reported last year that fewer than 10% of the roughly 70,000 chemicals in commercial use have been tested for neurotoxicity (*Science*, 28 February 1992, p. 1063). To make up ground, the panel called for a "rational and efficient strategy for neurotoxicity testing."

That advice became marching orders for toxicologists from eight federal agencies working as a subcommittee of the White House Federal Coordinating Council for Science, Engineering, and Technology (FCCSET). Their job was "to provide a scientific primer on what we know," says Hugh Tilson, an Environmental Protection Agency (EPA) toxicologist and panel member, in line with previous guidelines on biotechnology and cancer research. The report is expected to go to the White House for approval late this year.

The FCCSET document, among other things, outlines methods for evaluating animal models and risk-assessment principles. Although it's up to each agency to update its own regulations based on FCCSET's primer, the report is expected to help EPA in the next few months to finish a draft of its own guidelines on neurotoxicity testing.

L. FRITZ

Neurotoxic treat. New guidelines will help agencies regulate exposure to chemicals such as domoic acid (in these mussels).

NIH Sinks Its Teeth Into Dental Debate

The suggestion by an outside panel that one institute of the National Institutes of Health (NIH) narrow the focus of its intramural research program has compelled other institutes to look more closely at the work they support. And at least one scientific director has concluded that such an approach risks throwing the science baby out with the bathwater.

"Would there be a place" for the National Cancer Institute's (NCI) Dean Hamer (who recently discovered a gene linked to homosexuality) or the National Heart, Lung, and Blood Institute's (NHLBI) Terry Stadtman (who conducts research on Keshan's disease in China), mused Edward Korn, NHLBI scientific director, "if these institutes had a similar Blue Ribbon Panel report?" Korn made his comments in a 2 August letter to acting NIH director Ruth Kirschstein, who supports a recent report (*Science*, 21 May, p.1069) on the quality of intramural research at the National Institute of Dental Research (NIDR). The panel suggested NIDR should stick to its knitting, namely, research on dental and oral health.

When contacted by *Science*, Korn regretted "naming names" but reiterated that institutes should guard against taking an "inappropriately narrow" view of the breadth of their intramural research. NHLBI director Claude Lenfant goes further. While he agrees some of Stadtman's work lies outside NHLBI's bailiwick and "probably would not be supported extramurally," he believes that "it's extremely important and well worthwhile." He adds, "I hate the word 'relevant,' even though it's important."

Ukraine Goes With the Wind

Seven years after Chernobyl, two undamaged nuclear reactors are still operating despite concerns about their safety because the electricity they generate is essential to Ukraine's Crimean Peninsula. By year's end, however, 250 wind turbines could be beating the air in a joint project between Kenetech, a San Francisco-based company, and Krimenergo, Ukraine's electrical utility, that may eventually relieve the region's need for nuclear power.

Within 4 years, Kenetech hopes to have one of the largest "windplants" in the world: 5000 turbines capable of annually generating 500 megawatts, enough to power 11% of Crimea's homes and businesses. Kenetech will receive royalties on the project—mostly parts, manufactured in Ukraine, for Kenetech 's U.S. turbines—after Krimenergo becomes a private company later this year. A Kenetech spokesman estimates the entire venture will cost Ukraine about $500 million.

The plan is an environmental coup for Ukraine, which continues to operate two reactors at Chernobyl despite safety concerns about such reactors (*Science*, 17 July 1992, p. 319). In fact, greater reliance on nuclear power isn't even an option: A 1990 law prohibits construction of new nuclear power plants until at least 1995.

Investing in Science, Clinton-Style

Nineteen ninety-five may seem a long way off, but federal agencies are already putting final touches on their budget requests for the 1995 fiscal year, which begins on 1 October 1994. Despite President Clinton's plan to cut the deficit by $490 billion, the White House remains committed to investing billions in the country's infrastructure—which includes research, facilities, and education. That strategy is once again expected to benefit the National Science Foundation (NSF) at the expense of other research-intensive agencies such as the National Institutes of Health (NIH) and the National Aeronautics and Space Administration (NASA).

What makes NSF stand out? Clinton's 1994 budget created an "investment" category under which the Administration classified much of its proposed new spending. Nearly 20% of NSF's budget, for example, is considered investment, compared to only 5% of NIH's budget and 1% of NASA's. Such funding would be sheltered from an additional 10% cut in projected agency budgets ordered by Leon Panetta, director of the Office of Management and Budget (OMB), to meet a $13 billion reduction in discretionary spending in 1995.

Clinton's action is good news for NSF, whose entire $427 million proposed increase for 1994 is "investment." NIH, on the other hand, with a budget 3 ½ times the size of NSF's, had half as much ($213 million) in that category. And NIH's investment money falls almost entirely in two programs, AIDS and computing, whereas NSF's is spread across its research portfolio.

Agency budgets are due to OMB by 1 October, and Panetta, in an 18 June memo, reminds agency heads they're on the same team. Decision making "should be cooperative and interactive," he says, and savings should come from "reorganization, consolidation, and elimination of programs" rather than across-the-board cuts.