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**Information for Contributors** appears on pages 93–94 of the 5 January 1996 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1200 New York Avenue, NW, Washington, DC 20005.

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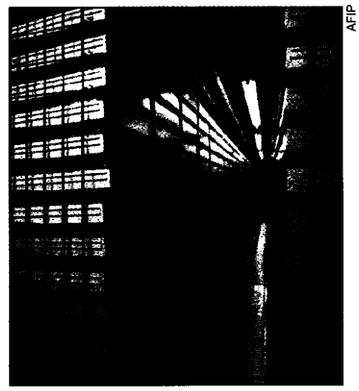
# LETTERS

## Cell blocks

Research funds from the Tobacco Council are said to be "crucial to furthering biomedical research." A pending decision to sell U.S. mercury stockpiles could "come back to haunt us" in the form of pollution. Confidence is expressed that "guidelines and regulations can be crafted" that adequately answer ethical questions surrounding research that uses samples from tissue banks. (Right, tissue storage at the U.S. Armed Forces Institute of Pathology.) How the hippocampus in the brain changes with age, as reflected by memory loss and by (debatably) the death of neurons, is discussed.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## Tobacco Council and Research

In contrast to the statement by Brown University's Paul Calabresi (26 Apr., p. 493) in the special news report by Jon Cohen "Tobacco money lights up a debate" (26 Apr., p. 488) about research funding by the Council for Tobacco Research (CTR), this funding agency provides a "no strings attached" source of peer- reviewed funding in amounts often not obtainable from nonprofit private funding agencies. This source of funding is crucial to furthering biomedical research by allowing young investigators to start a research program and enabling established investigators to begin new projects. Thus, the money is used to expand basic disease-related research, which is not different from the government using tobacco tax revenues to support socially significant programs.

To question the morality of using money from tobacco products to further disease-related research is to beg the larger question, What is the responsibility of private industry to contribute to funding basic research in an era of ever-contracting federal support? Why is there no "Council for Pharmaceutical Research" to support basic biomedical studies that are the foundation of the pharmaceutical and biotechnology industries? Although large technology-based corporations claim to have bottom-line considerations that do not allow them to invest in risky long-term basic research endeavors, it is clear from the CTR example that, when corporations see an advantage to supporting such research, funds can and will be made available. Perhaps it is time for the biomedical research community to make clear to other members of the private sector that there are broad advantages to contributing greater financial support to the basic research that provides the technologies and insights from which the profits of their industries derive.

Finally, it is noteworthy that several research institutions refuse to allow their investigators to apply for CTR funding. In contrast to their high moral position, one wonders if a low indirect cost rate (15%) plays a role in their eschewing these awards.


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## Mercury Stockpile

With great environmental and economic naïveté, the U.S. Department of Defense (DOD) is considering selling its mercury stockpile—60% of the world's supply. The sales would thwart scientific, regulatory, and industrial efforts to protect human and ecological health by limiting mercury release to the environment.

Individual states have long worked with industries, utilities, and the U.S. Environmental Protection Agency (EPA) to reduce, collect, and recycle mercury in industrial products and processes. European nations have taken similar actions. Sweden will phase out most mercury uses by the year 2000 and is considering permanent storage to remove mercury from global commerce (*1*).

The actions are in response to rising environmental mercury contamination, notably in lake fish from remote regions of

Scandinavia, Canada, and the United States. The principal source is long-distance atmospheric transport of mercury, most from anthropogenic uses (*2*, *3*). In aquatic systems, mercury can be converted to methylmercury, a neurotoxic compound that bioaccumulates. Game fish may contain 225,000 times the mercury levels found in water (*3*, *4*), and state health departments advise anglers to limit consumption of fish from most Upper Midwestern lakes.

Since 1970, market demand for mercury has dropped steeply, and DOD sales are likely to reduce mercury prices. This could depress the market for recycled mercury but stimulate mercury mining. Mercury mines today are subsidized by foreign governments. Typically run to maximize revenues for workers, such mines usually raise production when prices drop.

Eventually, DOD's mercury could end up in such applications as gold mining. In 1989 alone, gold mining in Brazil released 168 metric tons of mercury into the environment, most of it imported from nations that restrict mercury within their own borders (*5*). Because volatile mercury is likely to enter the atmosphere, DOD's stockpile will come back to haunt us. DOD's plans are not consistent with national policy to curtail environmental mercury releases.

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## Bioethical Issues

Eliot Marshall's News & Comment article "Policy on DNA research troubles tissue bankers" (26 Jan., p. 440) and Lori B. Andrews's Letter "Genetics and informed consent" (8 Mar., p. 1346) address very important, but difficult and emotion-laden issues that lie at the intersection of patient privacy and confidentiality and the substantial public benefit that for generations has been derived from research on human tissue specimens. Such research—applying novel molecular biological approaches to tissue samples removed for medical reasons and archived in our nation's academic medical centers—provides often unique access to fundamental questions of human disease pathogenesis and generates insights that can have a powerful impact on diagnosis, treatment, prognosis, and even strategies for prevention of some of the major afflictions of mankind.

The meeting described by Marshall was organized in response to concerns within a broad cross-section of the leadership of American pathology that the processes under way to examine these issues and recommend policy guidance did not have adequate representation or input from the pathology community or, for that matter, from the many other scientists engaged in such research. Accordingly, the several draft proposals that have emerged from those processes were perceived to reflect an abundance of bioethical sensitivity and perspective but a deficit of informed medical and scientific insight. In contrast to the opinion of Andrews, the proposals also were thought in some instances to impose unreasonable, impractical, and costly requirements that