Letters

Health Care and the Law

Daniel E. Koshland, Jr.'s editorial advocating a hard-headed, yet compassionate national health insurance scheme (6 Apr., p. 9) makes many important points and provides a sobering analysis of the costs of our failure to adopt such a scheme.

One argument that Koshland makes, however, is unpersuasive. He writes that indirect savings might be realized because jurors will no longer feel impelled to award damages in weak tort cases simply to enable an injured person to afford appropriate medical care. Ultimately, he suggests, the standard for liability might be cranked up to clear negligence, thereby saving more money. Koshland's premise that jurors' decisions are affected by their desire to provide funds for medical care for those without insurance is likely incorrect. More than 85% of Americans have some form of health insurance, and virtually all jurisdictions prohibit any mention to the jury of the existence of insurance (or lack thereof) in a case. Thus, there is no way for a jury to know who needs funds for medical care or who has medical insurance. Moreover, by the time cases get to trial, the vast majority of injured plaintiffs have already received (or have not received) whatever medical care they require. Finally, imposing a higher liability standard will not make the costs of accidents go away, it will simply leave those costs with the victim rather than with some other entity that may be able to take cost-effective measures to avoid such accidents in the future.

It is time to take the financial leap and afford all Americans the dignity and decency of basic medical care. The benefits of such a reform are great enough without also expecting it to improve the tort system.

MICHAEL D. GREEN
College of Law,
University of Iowa,
Iowa City, IA 52242

Full Disclosure at the University of Florida

Eliot Marshall's article "The Florida case: Appearances matter" (News & Comment, 13 Apr., p. 153) contains a number of statements that need to be corrected.

1) Nicholas Bodor did not found the company, Pharmatec, Inc., as stated in the article. It is not now, nor was it ever, owned by him. His equity position is less than 5%.

2) It is incorrect to state or imply that no one at the University of Florida was willing to discuss the issue of toxic side effects. Every question was addressed both by Bodor and by external scientists.

3) The MPTP issue was not the discovery of Kenneth Sloan, as it was considered and reviewed much earlier by Bodor and his colleagues.

4) A leading scientist in the field was asked by us to review and comment on the claim by Sloan that Bodor was using a toxic compound. The scientist wrote that such a conclusion was a "fallacy of reasoning [that] had to derive from individuals unfamiliar with chemistry or pharmacology, except in the most superficial sense."

The tough new rules referred to at Harvard were followed and complied with by Bodor from the beginning. He provided full disclosures and requested prior approval for conducting the basic research with Pharmatec funds. The research conducted by Bodor and his colleagues or students was basic research and not clinical trials or work on direct development of products.

A number of reporters have investigated and reported on this project, and several University of Florida committees have reviewed the matter. These investigations have not identified one single incident of inappropriate judgment or action by either Bodor or the University of Florida. Conflict of interest has been properly disclosed and properly managed.

DONALD R. PRICE
Vice President for Research,
University of Florida,
Gainesville, FL 32611–2037
DAVID R. CHALLONER
Vice President for Health Affairs,
University of Florida,
Gainesville

Response: Nicholas Bodor's primary role in the founding of Pharmatec is reflected in a 10-K statement submitted by the company to the Securities and Exchange Commission in 1989 (*1*). It says Pharmatec was incorporated in late December 1982 for the purpose of commercializing Bodor's chemical delivery system, and it lists Bodor as vice president since January 1983 and director since March 1983 (*1*).

As for the risk of Parkinson-like toxic effects, the record shows that Pharmatec considered this possibility before Kenneth Sloan raised it in 1984 and rejected it as most unlikely. But the company did not test the question in animals until several years later, when Bodor ran an experiment in cynomolgus monkeys, published in 1988. The results were negative (*2*).

The same leading scientist quoted by Price and Challoner, Sanford Markey, said, in a phone conversation with me, "People who look at [chemical] structures and pretend to see things are more astrologers than medicinal chemists. . . . You have to do the animal testing to ascertain whether there is toxicity or not."

—ELIOT MARSHALL

REFERENCES

1. "Form 10-K: Annual Report. . . for the fiscal year ended December 31, 1988" (Pharmatec, Inc., Alachua, FL, 1988), pp. 2 and 59.
2. M. E. Brewster *et al.*, *Neurosci. Let.* **87**, 277 (1988).

Neural Interfacing

I would like to clarify some statements made in Sarah Williams' 4 May article about our research (Research News, p. 555).

We make no claim to have been able to stimulate "individual neurons." While this may be possible with our device, our initial experiments were not designed to test this. In the pilot study, we demonstrated recording from, and stimulation of, peripheral nerves. We believe that we were able to *record* action potentials from individual neurons. However, there is a big difference between stimulating and recording. Current work is focused on determining how selective the devices are in both of these modes.

Our "next step" will not be the design of a device that can communicate, "through an implanted radio transceiver, with the outside world." This is a long-term goal. We are involved in the gradual development of the neural interface device itself and do not expect to see it clinically applied in less than a decade. Even at that point, we do not envision the use of "40 chips implanted from the elbow on down," but rather the initial use of only a few implanted devices to control a simple prosthesis.

I would also like to emphasize that the holes in the silicon were not drilled "with a laser," but with a high-performance plasma-etching process developed for this purpose. Laser drilling is not practical for use in the devices we are designing for a number of reasons, including difficulty in alignment to on-chip microelectronic devices. Such alignment calls for tolerances on the order of ± 1 micrometer. The development of such basic technologies is what is important in our present work, which is funded by the Department of Veterans Affairs.

Attempts to fabricate and use such neural interfaces are not new. Since the early 1960s experiments have been conducted along these lines, but only recently have fabrication techniques been developed that allow devices to survive in the body for extended