

Ethicists race to keep pace with advances in biotechnology

Biotechnology races ahead, ethics follows and popular opinion lags behind, sometimes tempted by, but often wary of, the science's new capabilities.

Or at least that's one picture that could be drawn from panellists who addressed ethical issues at BIO 2002, the international biotechnology conference that attracted more than 15 000 delegates to Toronto in June.

"Science time" is fast time, says Margaret Somerville, a professor at the McGill Centre for Medicine, Ethics and Law, while "ethics time" involves "long discussion and deliberation and feeling about the issues, not just thinking about them."

Education might help. Mark Rothstein, director of the Institute for Bioethics, Health Policy and Law at the University of Louisville, Ky., noted a need for increased public education about the science of genetics.

He said a US study that gauged public opinion on genetic research for pharmacogenomic products showed that "the public is very concerned about these issues. But oftentimes they don't understand them. They confuse all genetic research with cloning, which is on the top of their lists of concern."

Somerville noted that a recent study indicated that the more Canadians learned about xenotransplantation, the more they opposed it.

However, information can also lead to acceptance. Andrew Scheinman, a lawyer with a doctorate in biology and molecular biology, described the non-medical uses of biotechnology that involve commodities — genetically engineered pets, for example. Commodification may lead to increased consumer familiarity and greater acceptance of biotechnology, he said.

One analogy is the arrival of the per-

sonal computer, which arguably brought the computer from the military-industrial complex into the home.

For Somerville, the issue of biotechnology's impact on the future is critical. "It's not enough to think what will personally benefit me or what's good for a business opportunity. We have to realize that this technology ... has an impact on our deepest values, attitudes and beliefs as individuals and as [a] society."

Researchers in Australia have already addressed these issues. Panellist John Mattick, codirector of the Institute for Molecular Bioscience at the University of Queensland, described a simple code of ethical practice for biotechnology developed there (www.biotech.qld.gov.au/corporate/bookshop-BioTech.html#coe). It includes sections on genetically modified organisms, intellectual property rights and cloning. — *Alex Robinson, Ottawa*

DTC ads in US having huge impact on drug sales

New research indicates that direct-to-consumer (DTC) advertising of prescription drugs via television, magazines and billboards has become one of the hottest revenue producers in the history of mass media in the US and has also given some drugs the kind of instant brand recognition previously reserved for autos, soft drinks and detergents.

The National Institute for Health Care Management, a Washington-based nonprofit research group, says increased sales of the 50 drugs with the largest advertising budgets accounted for 47.8% of the US\$20.8-billion increase in retail spending on prescription drugs from 1999 to 2000. Increases in the sales of all other prescription drugs — approximately 9850 of them — accounted for the rest.

The institute says Merck's DTC advertising bill for the COX-2 inhibitor rofecoxib (Vioxx) totalled US\$161 million in 2000. This is equal to the amount spent promoting Dell computers.

From 1999 to 2000, sales of rofecoxib quadrupled to US\$1.5 billion; sales of omeprazole (Prilosec) jumped by 13% to \$4.1 billion, and sales of atorvastatin (Lipitor) rose by 39%.



Barbara Sibbald

Since the Food and Drug Administration relaxed its rules on DTC advertising in 1997, it has become difficult to watch even a 30-minute TV program without seeing at least one drug commercial.

Do the ads lead to inappropriate use of some drugs? The institute says this and other questions remain unanswered.

Writing in the *New England Journal of Medicine* (2002;346:524-6), Dr. Sidney Wolfe, director of health research for the consumer agency Public Citizen, argued that federal agencies "must move much more forcefully to replace tainted drug company 'education' with scientifically based, useful information that will stimulate better conversations between doctors and patients and lead to true empowerment."

Christopher Molineaux, vice-president of public affairs for the Pharmaceutical Research and Manufacturers of America, responded that "prescription drug ads prompt people to talk to their doctor about either the health condition the drug is intended to treat, or the specific medication being advertised."

The American Medical Association doesn't know how DTC advertising affects physician-patient relationships, but has asked the industry to place disclaimers on the ads stating: "Your physician may recommend other appropriate treatments." — *Milan Korcok, Florida*