

ScienceScope

Patented Cells An ethics advisory group last week recommended that the European Commission (EC) oppose patenting embryonic stem (ES) cell lines unless they have been modified for specific industrial applications. The European Group on Ethics' proposal, if adopted, would put the EC at odds with U.S. policy, which granted a patent covering both the technique the University of Wisconsin's James Thomson used to derive ES cell lines and any lines thus derived. Stem cell policies vary widely across Europe.



A spokesperson for the Wisconsin Alumni Research Foundation (WARF), which holds the patent on Thomson's derivation technique, says WARF is reviewing the panel's report but adds "the European Union seems to believe that [our ES cell lines] occur in nature. This is not the case."

The panel argues that unmodified lines derived from ES cells "are so close to the fetus or the embryo from which they have been isolated" that patenting them represents "commercialization of the human body." The panel also backed the use of "compulsory licenses" in situations where the public good required access and proposed a European Union registry of unmodified ES cell lines.

Innovation Plus Brazil is preparing legislation to strengthen ties between academic scientists and industry. Although both sectors support the idea, neither thinks the proposal will turn the country into a technological powerhouse.

The plan, drafted by the Ministry of Science and Technology, would allow universities for the first time to license discoveries to industry, give companies access to public research facilities, and provide greater protection for intellectual property. "We want to give universities greater flexibility," says the ministry's senior executive, Carlos Américo Pacheco.

Roberto Nicolsky, a physicist at the Federal University of Rio de Janeiro and head of a high-tech business coalition, would like the bill to go further and subsidize companies willing to take risks. And the president of the Brazilian Society for the Advancement of Science says the government's priorities are askew. "We must first strengthen our infrastructure of basic and applied research," says biochemist Glaci Zancan.

Pacheco agrees that reforms in basic science are needed. "But we cannot wait for them," he says. In the meantime, he says, the proposal is "a huge advance for public universities."

Such statements may sting the home crowd, but they aren't being disputed. Members of the Swiss scientific community agree that their research programs are underfunded and offer few incentives to retain young talent. Last November, the Swiss Science and Technology Council launched a petition imploring the government to boost the research budget by 10% within 5 years. "The Novartis move is a very serious symptom of the downhill course of research in Switzerland," says Catherine Nissen-Druey, the advisory body's vice president. "It sends a message to young Swiss scientists that research is more promising in the U.S.A. than it is here." Nor is the Novartis move the first symptom of an ailing research community: Last summer, Switzerland's other drug giant, Roche, shuttered its once-vaunted Institute of Immunology in Basel (*Science*, 13 July 2001, p. 238).

Novartis hasn't turned its back on Switzerland entirely: Vasella says that all of the company's 1400 researchers in Basel will keep their jobs. It will also maintain its labs in the United Kingdom and Austria. But there's no getting around the fact that the European contingent will now be looking west for their marching orders. —ANDREW LAWLER
With reporting by Helena Bachmann in Geneva.

NEUROSCIENCE

Big Bucks for MIT Brain Center

CAMBRIDGE, MASSACHUSETTS—Just across the street from Novartis's new center (see previous story), another impressive research facility will break ground this fall, a \$150 million academic complex devoted to neuroscience. That effort got a big boost last week, when the Massachusetts Institute of Technology (MIT) received \$50 million—its largest contribution in history from a foundation—to jump-start one part of the complex: a learning and memory center led by Nobel laureate and biologist Susumu Tonegawa.

The money will pay for the new facility, additional faculty members, and an endowment for Tonegawa's center. But the gift won't clarify the fuzzy boundaries among the different

pieces of MIT's neuroscience effort, which also includes a new institute led by fellow Nobel laureate and biologist Phillip Sharp, MIT's existing brain and cognitive sciences department, and an imaging institute. MIT officials say they are intentionally leaving the lines of responsibility blurred, and that the new neuroscience complex will allow the different groups to interact closely.

"MIT is taking a comprehensive approach to the study of the brain," says Robert Silbey, MIT science dean. And MIT president Charles Vest acknowledges "some conceptual overlap," saying it reflects not only the difficulty in drawing boundaries in an interdisciplinary field but also "some conceptual separation." At a 9 May press conference announcing the gift from the Picower Foundation based in West Palm Beach, Florida, Vest said that Tonegawa's piece of the brain pie will cover research from fundamental molecular neurobiology to systems neuroscience, whereas Sharp's institute will focus on systems, imaging, and computational neuroscience.

Sharp's institute, which has been slow to set a research agenda (*Science*, 24 August 2001, p. 1418), held its first major meeting this week with a heavy emphasis on molecular biology; many papers were devoted to neural stem cells and genetic neuroscience as well as imaging. Sharp doesn't see a boundary problem between his group, the imaging institute, or that of Tonegawa. "It's healthy overlap," he asserts.

The Picower gift to Tonegawa's center, which will be renamed the Picower Center for Learning and Memory, will disburse \$10 million a year over 5 years, giving

new clout and personnel to Tonegawa's efforts to understand the molecular basis for learning and memory. Thirty million dollars of the gift will go toward the complex, \$12 million will be allocated to four new faculty positions, and the remaining \$8 million will be used to establish an endowment.

This amount is far smaller than the \$350 million pledged to Sharp's McGovern Institute for Brain Research. But that pledge provides only \$5 million a year for the first 20 years, half of what Tonegawa will receive in the first 5 years. The complex will be ready in 2004 or 2005.

—ANDREW LAWLER



Better mousetrap. Barbara Picower, left, Jeffery Picower, center, and Norman Leventhal, MIT class of 1938, examine an experiment designed to test mouse memory at Tonegawa's institute.