the authors write, provides new fodder for the hypothesis that "high placebo responders have a more efficient opioid system."

Jon-Kar Zubieta of the University of Michigan, Ann Arbor, who has tracked the function of the opioid receptor system implicated in the new study (*Science*, 13 July 2001, p. 311), suspects that those people who respond robustly to the placebo have increased concentrations of opioid receptors. However, he says the small number of subjects prevents any of the study's findings from being definitive.

Nevertheless, by showing the intimate relation between placebo and drug effects in the brain, the work fits with the theory that the placebo response is deeply embedded in all analgesic treatments, says neuroscientist Fabrizio Benedetti of the University of Turin, Italy. For instance, one of his recent studies shows that a painkilling injection is more effective when the patient is watching than when the drug is administered covertly.

—CONSTANCE HOLDEN

MEXICO

Cuts Add to Turmoil Over Research Spending

Mexican scientists are in an uproar over a surprise decision by the country's leading research agency to sharply cut research awards. The government of President Vicente Fox says the cuts have been blown out of proportion and are part of a major reshuffling that will result in a larger science budget. But scientists are skeptical, pointing to a series of recent actions that have raised doubts about the government's commitment to basic research.

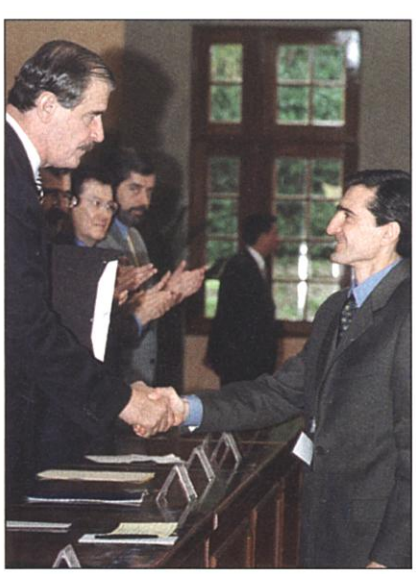
The reformist Fox began his 6-year term a year ago promising to double the budget of the National Council for Science and Technology (CONACYT), which funds research in all disciplines. But what followed was a string of financial problems. Last fall, the agency ran out of money for graduate scholarships and halted grants to visiting scientists and to attract scientists back from abroad. More recently, salary payments to researchers were delayed for several weeks.

The last straw for many scientists was the news last month that CONACYT will spend only $56 million on basic research grants and fellowships in its 2001 round of awards, a drop of 34% from the $84 million disbursed in 2000. The cut reflects a decline in the number of grants funded from roughly 1000 per year since 1996 to just 656 in 2001. "Last year was disastrous," says René Drucker, president of the Mexican Academy of Sciences. "It was one of the worst years in the history of Mexican science."

Officials at CONACYT, which oversees about 15% of the government's investment in science and technology, have tried to put the best face on these events. They say grant funding declined only slightly last year compared to the late 1990s and that 2000 was an "atypically" good year. In meetings, however, officials have explained that the agency overspent its budget in 2000 and then had to take money from 2001 funds, according to Jaime Urrutia, director of the Institute of Geophysics at the National Autonomous University of Mexico (UNAM), Mexico City. More recently, the delay of a customary $32 million end-of-the-year payment from the Ministry of Education for operating expenses forced CONACYT to borrow from the 2002 budget, says CONACYT spokesperson Armando Reyes.

The agency is also in "transition," adjunct director for scientific research Alfonso Serrano has told national media, and it plans to tap research budgets from the health, agriculture, and other federal ministries to fund new programs aimed at attacking practical problems that reflect "the country's needs." The new pot will restore some of the $28 million shortfall in the 2001 grants competition, says Reyes, and it will also reflect a 24% increase in CONACYT's 2002 budget, to $477 million.

The new programs are to begin accepting proposals this month. But that's little comfort to hundreds of scientists and students, who must now stretch existing grants for several more months or get by on personal funds. Some also worry that CONACYT's new focus on practical problems could mean less funding for basic science, says Antonio Peña of the Permanent Forum for Science and Technology, a group that advises the president. CONACYT officials, however, say there will be more money for basic research, not less.



More than praise. Mexican researchers want a greater commitment from President Fox, left.

Some scientists are hopeful that the Fox plan could eventually benefit Mexican science. "It's a new government, and we need to give them time to show what they can do," says structural biologist Lourival Possani of UNAM, Cuernavaca. But Possani and others remain concerned about the dearth of information coming from officials. "There isn't much clarity at all," Drucker says.

—JOCELYN KAISER

With reporting by Marina Chicurel, a writer in Santa Cruz, California.

CLINICAL RESEARCH

Cancer Study Lawsuit Dismissed in Oklahoma

Rebuffed. Attorney Alan Milstein plans an appeal.

A federal judge has dismissed a high-profile lawsuit claiming that a clinical trial at the University of Oklahoma violated patients' human rights under international law. The ruling derails—at least temporarily—a legal juggernaut driven by New Jersey lawyer Alan Milstein. Milstein has taken four respected clinical centers to court claiming that their research projects violated the Nuremberg Code, a set of medical rules established half a century ago in reaction to Nazi experiments. Last week, federal Judge H. Dale Cook of Oklahoma City cast doubt on that legal strategy by ruling that the Nuremberg Code can't be used as the basis of a civil suit in U.S. courts.

Milstein began testing the Nuremberg argument 2 years ago. A partner in a Pennsauken, New Jersey, firm, he made headlines when he sued the University of Pennsylvania in Philadelphia on behalf of the family of Jesse Gelsinger, a patient who died in a gene therapy trial. The university settled for a large but undisclosed sum in 2000.

Since then, Milstein has sued the Fred Hutchinson Cancer Research Center in Seattle, the University of Oklahoma Health Sciences Center in Oklahoma City, the Ohio State University Medical Center in Columbus, and Penn, this time over a second patient in the Gelsinger gene therapy trial. In all cases, the suits accused researchers and others of violating the patients' human rights under the Nuremberg Code and other international standards.

The Oklahoma case was one of Milstein's largest. Federal authorities had closed down a trial of an anticancer vac-

CREDIT: (TOP TO BOTTOM) A. MILSTEIN; NOTIMEX

cine, and the university dismissed some of the staff members who were involved (*Science*, 4 August 2000, p. 706). Milstein filed a complaint on behalf of 19 patients, alleging that the doctors had engaged in "careless, negligent and reckless conduct," violating the patients' dignity and privacy. By invoking international standards, Milstein elevated the case from a local to a national matter, suitable for trial in a federal court.

In throwing out the federal case, Cook reasoned that no "fundamental" constitutional rights were at stake. He said "there is no private right of action for an alleged violation of international law," such as guidelines for the conduct of research. He also argued that the "right to be treated with dignity" enshrined in the Nuremberg Code is too "vague" to serve as the basis for a civil suit.

Milstein says he has already filed an appeal with the federal appeals court in the 10th Circuit. "We believe we can show that the American people believe it is a fundamental right not to be treated as a guinea pig," he says, adding that Cook's opinion "assumes that these people gave their consent when in fact there was no informed consent."

Arthur Caplan, director of the Center for Bioethics at Penn, says he isn't surprised by the decision. He calls the Nuremberg argument "a balloon that would burst anytime it got near a judge." (Caplan himself was named, and later dropped, as a defendant in Milstein's first Penn lawsuit.)

Milstein's three other human-rights lawsuits are still in preliminary stages; no trial dates have been set. Paul Lombardo, associate professor of law and medicine at the University of Virginia in Charlottesville, calls Milstein's argument "creative" but predicts it will be "very tough" for him to prevail.

–ELIOT MARSHALL

FRANCE

CNRS Under Fire From Government Auditors

PARIS—France's mammoth basic research agency has come under blistering attack from the nation's government accounting body. In a report issued last week (www.ccomptes.fr), the Cour des Comptes took the Centre National de la Recherche Scientifique (CNRS) to task for a variety of alleged faults, including a lack of overall research strategy, organizational rigidity, and lackadaisical efforts to recruit young scientists and encourage them to become independent. But CNRS officials argue that the report did not take into account recent initiatives or the organization's prodigious scientific output.

With a $2.2 billion annual budget and 11,400 researchers, CNRS is often a target of the Cour des Comptes' annual scrutiny of government operations. But the report for fiscal year 2001 is particularly harsh. "The recent history of the CNRS is marked by the incapacity of the organization ... to get beyond the stage of collective reflection and working group discussions to launch strategic orientations," the auditors declared. They also complained that many labs were pursuing their own research strategies with too little guidance from CNRS administration. The Cour des Comptes was particularly alarmed about the "aging" of CNRS's scientists—nearly 30% of whom are due to retire between 2008 and 2010—and concluded that current recruitment is too slow to fill the looming gap.

Chief defender. CNRS head Geneviève Berger.

CNRS director-general Geneviève Berger dismissed most of these complaints. "Having a strategic vision does not mean stifling the researchers," she says. Others also reject the complaint that labs have too much autonomy. "The Cour des Comptes did not understand that the CNRS can't be run like the post office," says Anne-Marie Duprat of the Center for Developmental Biology in Toulouse. "You can't do whatever you want, but the labs must have a certain amount of freedom." Berger says the agency does think strategically, such as in its efforts to commercialize its research, a primary reason why Berger, a medical researcher, was tapped to run CNRS (*Science*, 8 September 2000, p. 1667). Since 1994, annual license and royalty income from the agency's scientific patents has soared to $26 million, a 10-fold increase.

Berger also argues that the report "hardly mentions" the scientific output of CNRS, whose researchers are authors or co-authors of more than 70% of all scientific papers published in France. She does agree, however, with the auditors' criticisms that CNRS needs to encourage more interdisciplinary research and collaborate more with other European countries.

The Cour des Comptes saved much of its fire for CNRS's treatment of young researchers, who—under the hierarchical French system—often find it difficult to set up their own labs. The auditors complained that most so-called new units were the result of reshuffling old ones and few truly new teams were being created. But Berger and other CNRS researchers counter that this critique does not take into account measures begun last year to set aside funds for young scientists. "That is really starting to work well," says Duprat. "The young teams are starting to take off."

–MICHAEL BALTER

GENETICS

Germany's Elite Tie Knot With Big Pharma

MUNICH—Germany's top research organization, the Max Planck Society, took a leap into the unknown this week when it inked a multimillion dollar deal to form a joint institute with one of the world's largest pharmaceutical companies. GlaxoSmithKline (GSK) will establish a new Genetic Research Center on the campus of the Munich-based Max Planck Institute of Psychiatry, dedicated to finding genetic links to common diseases.

GSK will buy and install the sequencing machines and computers needed to process the genetic data from patients, pay rent for a whole floor of the institute's lab building to house the center, and employ the center's technical staff. The Max Planck Institute, in turn, will provide clinical data and scientific expertise on collaborative projects. Institute scientists will have access to 15% of the center's sequencing and data-crunching capacity for their own projects.

Such a close alliance with big pharma is a first for the organization, but it mirrors a trend in Germany. The society has been aggressively establishing new biotech spin-offs on or near its campuses. In contrast, few academic scientists had any connections to industry 7 years ago, says molecular biologist Axel Ullrich of the Max Planck Institute for Biochemistry in Martinsried, near Munich. Ullrich, who helped found Genentech

CREDITS: (TOP TO BOTTOM) CNRS; GLAXOSMITHKLINE

Dealmakers. Officials announce Max Plank–GlaxoSmithKline collaboration.