CLINTON TRANSITION

Healy Stays, Fetal Tissue Ban Goes

The science news that grabbed headlines during President Clinton's first week in office was the change he made by lifting the ban on federally funded fetal tissue research. But for most scientists, what Clinton didn't change could matter more: After a week of uncertainty (*Science*, 22 January 1992, p. 447) he retained—for the time being, at least—virtually all the outgoing administration's presidentially appointed science officials.

Among the science policy heavyweights given temporary reprieves were: Bernadine Healy, director of the National Institutes of Health (NIH); Food and Drug Administration (FDA) commissioner David Kessler; National Aeronautics and Space Administration (NASA) administrator Daniel Goldin; William Happer, the energy research director at the Department of Energy; and John Knauss, head of the National Oceanic and Atmospheric Administration. (Walter Massey, the National Science Foundation director, was never in danger of losing his job, thanks to a 6-year appointment.)

When Clinton turns his attention to the top science posts later on, some of these folks are likely to be replaced. But for the next few months this familiar cast of characters will be around. That's a sharp turnaround from 2 weeks ago, when the outgoing Bush Administration said it would accept the resignations of all top political appointees, and it looked as though NIH, FDA, and NASA would be without top administrators in the early days of the Clinton Administration. But Clinton's aides convinced the Bush White House to leave the top science appointees in place, and continuity has been maintained.

If Clinton badly wanted to maintain the status quo atop the science agencies, he wanted equally badly to change the status quo on fetal tissue research. The timing of the measure, on his second day in office, was intended not just to coincide with the 20th anniversary of *Roe* v. *Wade* but also to allow researchers to make a 1 February deadline for submission of grant proposals to NIH. At least four groups have proposals for research on the use of fetal tissue transplants to treat Parkinson's disease ready for submission before the deadline, according to Richard Fuller of the American Federation for Clinical Research (AFCR).

Research groups welcomed the lifting of the ban, which Andrew Hoffman, the AFCR president, described as "a very dark chapter in American science." But AFCR's Fuller worries that Clinton missed the point by packaging the fetal tissue order with several abortion-related measures, including lifting the "gag rule" that prevented abortion counseling at federally funded health clinics. "We had hoped that he would separate [fetal tissue] from the abortion issue—it's a science issue," said Fuller. AFCR and other research groups have spent much of the past 2 years lobbying Congress to treat the issue as one of research freedom that is independent of the abortion debate.

One research issue that remains up in the air after Clinton's order is the fate of the fetal tissue bank George Bush created last year after he vetoed legislation that would have lifted the ban. The bank was intended to collect tissue from ectopic pregnancies and spontaneous abortions, thereby sidestepping the politics of the abortion issue. Those sources have been widely criticized by researchers as insufficient in quantity and quality for the job. Now that the ban has been lifted, researchers can use tissue from induced abortions, of which there are much greater supplies and local sources. That could make the fetal tissue bank unnecessary, according to Duane Alexander, who directs the preparations for the bank at NIH. But it wouldn't be hard to put a stop to the program; no tissue has actually been collected, and the bank itself wasn't expected to come into existence until late spring.

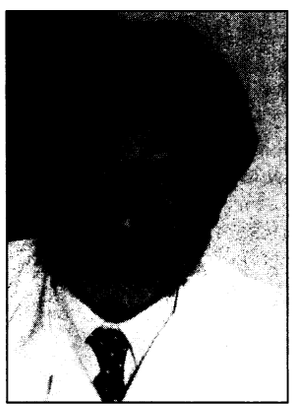
–Christopher Anderson

NEUROGENETICS

Disease Gene Search Goes Big Science

There is good evidence that inherited susceptibilities underlie the development of psychiatric diseases such as manic depression and schizophrenia. Yet finding the genes responsible is proving to be one of the most frustrating pursuits in all of science. Only a few years ago it looked as though researchers were on the verge of identifying a manic depression gene as well as one that influences the development of schizophrenia. But those hopes were dashed when subsequent work failed to confirm the initial sightings.

Far from giving up, however, psychiatric geneticists are now pinning their hopes on "big science"—consortia of researchers banding together to identify many families with multiple cases of schizophrenia or manic depression and using the tools of the Human Genome Project to pin down the genes passed along in those families. Two separate projects based on this model—one in Europe and one in the United States—are now undertaking just that task.



ESF project coordinator. Jacques Mallet.

For the European consortium of 20 collaborating groups organized by the European Science Foundation (ESF), the moment has arrived when the search begins in earnest. Earlier this month, the consortium secured the services of Généthon, the industrial-style French genome center that's at the forefront of gene-mapping technology (*Science*, 24 April 1992, p. 463), to screen the members of their families for genetic markers that could lead them to the disease genes. The researchers involved are confident that the 2-year, $500,000 effort will at last yield results that can stand up to scrutiny. "If genes of major effect exist," says psychiatric geneticist Peter McGuffin, from the University of Wales College of Medicine and a member of the project's steering committee, "we should find them." The U.S effort won't be ready to begin similar systematic genotyping of manic depression and schizophrenia family members for a year or so, but it will also be a large-scale effort, involving seven groups coordinated by the National Institute of Mental Health (NIMH). (The NIMH effort will also look for Alzheimer's disease genes, involving three additional groups.)

Both the U.S. and European projects are designed to map chromosomal locations of disease genes as a first step toward isolating them. What distinguishes the ESF and NIMH efforts from other searches for mental disease genes is that both consortia have compiled unprecedentedly large collections of families having several affected members. The European effort, for example, will type 2000 subjects from more than 100 families for 300 genetic markers spread through the genome. And U.S. project leaders eventually hope to genotype more than 2800 individuals from some 400 families for an as yet undecided number of markers.

The ESF and NIMH consortia wanted so many families, says Darrell Kirch, scientific coordinator for the NIMH-led project, because that's the only way to obtain statistically significant results for these genetically complex disorders. Gene mappers work by looking within families that have several members with a particular genetic disorder for previously mapped marker genes that are inherited along with the disease—and so must be near neighbors of the gene at fault. But the current best guess is that up to five important genes contribute to each of the susceptibilities to manic depression and schizophrenia,