conceived for research purposes, and that cloning of embryos should probably be prohibited. But he feels that the language of the bill does not give researchers clear guidance about what they can and cannot do. "What does it mean when research does not affect the integrity of the embryo?" "Are we simply to observe it with our eyes and nothing else?"

Most French researchers contacted by *Science* feel that some embryo research should be allowed, but they appear more divided on the question of preimplantation diagnosis. An outspoken opponent of these techniques is Jacques Testart, director of the IVF laboratory at the American Hospital, in the Paris suburb of Neuilly. Earlier this month, Testart—an IVF pioneer who has since become a leading advocate for strict regulation of the field—published an article in the French daily *Le Monde*, cosigned by more than 20 other scientists and academics, warning that genetic screening of embryos would lead to the "irreversible and unlimited" revival of eugenics.

THE AMENDED BIOETHICS BILL

The bill on biomedical ethics consists of three major texts:

Protection and respect of the human body:
- **Bans eugenic practices, genetic screening for purposes other than medical research or judicial proceedings, and surrogate motherhood.**
- **Preserves the anonymity of gamete donors in medically assisted procreation.**

Donation and utilization of organs, cells, and tissues, including medically assisted procreation:
- **Detailed rules for giving consent for organ donations and transplants, and an absolute prohibition against trafficking in or profiting from such donations.**
- **Guidelines for infertility treatments, including in vitro fertilization, which are not permitted for single women, widows, or menopausal women.**
- **Prohibition on preimplantation diagnosis.**
- **Severe restrictions on embryo research.**

Research and data banks:
- **Permits the compilation of information on patients, particularly for epidemiological research, as long as informed consent is given and confidentiality is maintained.**

Testart rejects the argument that there is no difference between such screening and conventional prenatal diagnosis, such as that resulting from amniocentesis. "Where prenatal diagnosis permits us to avoid the worst, by elimination," he says, "preimplantation diagnosis will elect the best, by selection." But this view is vigorously contested by Plachot. "The people working on this have no intention of doing eugenics," she says. "They simply want to avoid a child with genetic damage. The only difference between prenatal and preimplantation diagnosis is that the former can lead to an abortion, which is an assault on a woman's body, while the other cannot."

Kahn predicts that the law will be revised in the lower house, but the conservative government's strong majority will probably prevent a radical revision of the Senate version. "We have been badly served by the recent debates over menopausual women having babies," says Plachot. "The senators wanted to avoid such things, and so they have tried to forbid everything."

–Michael Balter

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NATIONAL LABORATORIES

Another Shakeup at LBL Genome Center

The human genome center at the Lawrence Berkeley Laboratory (LBL) once again has posted an "under new management" sign on its door, following the abrupt departure earlier this month of its director, geneticist Jasper Rine. Rine's return to full-time research as a faculty member of the University of California (UC), Berkeley, comes as the center is moving toward production-scale genome sequencing, a transition that Rine feared could weaken its basic research.

The $10 million a year LBL center, one of three operated by the Department of Energy (DOE) at its national laboratories, has been plagued with management problems since its formation in 1988. Its first director, geneticist Charles Cantor, was forced out in 1990 after criticism that he was spending too much time away from the center promoting the government's overall human genome project (*Science*, 14 September 1990, p. 1238). LBL officials tried unsuccessfully to woo University of Washington geneticist Leroy Hood, then at Caltech, and finally resorted to collective leadership by a committee of local scientists (*Science*, 26 April 1991, p. 500). This approach lasted for 6 months until Rine, one of the members of the committee, agreed to take on the job alone.

Accounts differ on the reasons for Rine's departure. "We had a serious disagreement over which direction the center should take," says Mina Bissell, director of the life sciences division at LBL, which includes the genome center.

Bissell says the lab's top management and the center's scientific advisory committee thought the center should concentrate more on production-scale genome sequencing. Gerald Rubin, a UC Berkeley geneticist, is proposing to the National Institutes of Health (NIH) a $70 million, 5-year effort to complete the *Drosophila* sequence. Rubin's team has been collaborating with the LBL genome center on much of the *Drosophila* work to date, and Bissell says the lab hopes to be a major participant in the new effort.

But Rine, who says his departure was motivated primarily by his desire to get back to science, argued that the production sequencing effort should be spun off from the center to protect the center's basic research activities. "An expansion of the [*Drosophila*] project would be fine," Rine says, "But I chose a balance between production and basic research. Now that I'm leaving, the next person must decide which way to go."

Rine is credited with boosting the center's research program on genome informatics and laboratory automation. But management proved more of a challenge. Rubin, a long-time collaborator with the LBL center, says Rine's strengths "are scientific, not administrative." Directing the LBL genome center "was a large administrative job," Rubin says, and Rine "was miscast in this role."

Although Rine says he had already planned to leave in the fall, LBL asked him on 14 January to step down immediately to avoid having a "lame duck" director, according to Bissell. Mohandras Narla, who heads LBL's Cell and Molecular Biology Department, has been named acting director and a search is under way for a permanent successor.

Years of management turmoil have taken their toll on the center's research agenda. The mapping of human chromosome 21 was a priority during Cantor's tenure, and the administrative problems that led to his departure were a setback to the project, according to lab officials. In 1992, the LBL center was scooped on a map of the chromosome by a group at the French genome laboratory CEPH.

The current plan, says Bissell, is for LBL scientists to develop new sequencing technology while Rubin's team "gears up a sequencing factory" at the center. LBL's role would be unusual for a DOE genome center, which typically focuses on the human genome rather than those of model organisms. But Bissell says that the improvements in sequencing technology should be applicable to the human genome as well. With the LBL center experiencing yet another change in research direction, geneticists hope that the latest tack will finally provide smoother sailing for the troubled center.

–Christopher Anderson