

U.S. CLONING DEBATE

Hatch Signs On to Pro-Research Bill

More legislators took sides last week in one of the most emotional scientific debates ever to hit the U.S. Congress as the Senate prepares to vote this month on anticloning legislation.

Proponents of therapeutic cloning welcomed the support of two right-to-life conservatives, senators Orrin Hatch (R-UT)



Major catch. Senator Orrin Hatch tells colleagues that he supports their cloning bill.

and Strom Thurmond (R-SC), on a bill that would outlaw human reproductive cloning but allow what researchers prefer to call nuclear transplantation. The measure, introduced last week by Senator Arlen Specter (R-PA), is the scientist-backed response to a bill sponsored by Senator Sam Brownback (R-KS) that would ban all forms of human cloning; Brownback's measure is identical to a bill the House of Representatives passed last summer. Senate Majority Leader Thomas Daschle (D-SD) has promised to schedule a vote before the Senate takes a 1-week recess on 24 May.

Science lobbyists who favor the Specter bill claim that the political climate has improved markedly from mid-April, when both President George W. Bush and influential physician-senator Bill Frist (R-TN) came out strongly for the Brownback bill. "I think Hatch deciding to join the [Specter] bill has decisively shifted the debate in the research community's favor," says Pat White of the Federation of American Societies for Experimental Biology.

The penultimate phase of the Senate battle opened on 1 May, when Specter and 11 co-sponsors introduced a new version

of a bill originally crafted by senators Edward Kennedy (D-MA) and Dianne Feinstein (D-CA). Hatch, although a strong opponent of abortion, has made it clear over the past few months that he's sympathetic to the scientists' side. But he hadn't committed to a specific bill until a press conference the day before.

The new bill, called the Human Cloning Prohibition Act of 2002 (S. 2439), contains no substantive changes from the Kennedy-Feinstein measure. However, it has been updated with references to a report published early this year by the National Academy of Sciences that said human cloning, but not research cloning, should be banned (*Science*, 25 January, p. 601). The bill also makes a determined attempt to establish nuclear transplantation as the accepted term for the latter. "Human cloning," that is, cloning to make a baby, is pronounced "unsafe, immoral, and unacceptable." Hatch said at the press briefing that he doesn't believe test-tube embryos are humans, because "human life requires and begins in a mother's nurturing womb."

S. 2439 anticipates the development of artificial uteri by banning implantation of a cloned human embryo not just in a uterus but in "the functional equivalent of a uterus." Otherwise, it follows the earlier bill: It establishes criminal penalties—up to 10 years in jail and a \$1 million fine—for implanting a cloned embryo, calls for nuclear transplantation research to be conducted according to federal rules on scientific and ethical review of research, and specifies penalties of up to \$250,000 for violations.

Lobbyists count roughly a dozen undecided—or at least opinion-withholding—senators, with the rest of the 100 members equally divided pretty much along party lines. Last month the National Right to Life organization launched radio ads in eight mostly southern and midwestern states that refer to the opposition as "clone and kill" advocates. Ads in Rhode Island accuse the state's biotech firms of wanting to get rich patenting human embryos. Last week a new group called CuresNow began airing TV commercials featuring Harry and Louise, a fictional couple created by the health insurance industry in 1993 to attack the Clinton Administration's proposed health care plan.

Today the pair are talking about finding a cure for their diabetic niece.

Adding to the suspense are the Senate's arcane rules, which leave plenty of room for surprises. Daschle has not explained the rules under which the bills will be debated or whether amendments will be permitted. Although it only takes 51 members to pass a bill, 60 are needed to overcome delaying tactics by opponents.

Any bill that passes the Senate will then have to be reconciled with the House's version (H.R. 2505). Although Congress is likely to face intense pressure to do something, the deep philosophical divide on the issue leaves little room for it to maneuver. A temporary moratorium on nuclear transplantation "is not a compromise," says Kevin Wilson of the American Society for Cell Biology. "It might as well be Brownback." Douglas Johnson of National Right to Life also dismisses the idea of half a loaf. "A ban just on reproductive cloning would be worse than no bill at all," he says, warning that it would open the door to "human embryo farms."

—CONSTANCE HOLDEN

U.S. APPOINTMENT

Zerhouni Confirmed as NIH Director

Elias Zerhouni's nomination to head the National Institutes of Health (NIH) sailed through the Senate last week. Two days after a gentle hearing that only briefly touched on tough topics such as stem cell research, legislators confirmed Zerhouni's appointment on a voice vote. Only his swearing-in remains before he takes the helm of the \$23.6 billion biomedical research giant.



This close. Elias Zerhouni clears Senate, awaits NIH swearing-in.