

## Budget cuts put children's health study on chopping block

The fate of a much-anticipated long-term study on the effect of the environment on children's health is in jeopardy, a potential victim of the tight federal budget.

The \$3.2 billion National Children's Health Study, launched with much fanfare in 2000, was intended to follow 100,000 children over 20 years, and was set to begin recruiting in late 2007.

But the president's budget request for fiscal year 2007 directs the US National Institute of Child Health and Human Development (NICHD), the lead agency in the study, to shut down all operations, including a pilot study of 900 expectant mothers that is already under way.

At the same time, the NICHD is operating under the 2006 funding bill, which directs the agency to continue preparations.

"We're kind of schizophrenic doing both at the same time," says study director Peter Scheidt.

The study is intended to track the effects of different environmental factors—from chemical exposures to parental nurturing styles and television viewing—from the womb through

adulthood. The vast database would then help researchers fathom the causes of birth defects, autism, diabetes and a host of other childhood disorders. The data would be made freely available to researchers.

Because the study would recruit children even before their birth, the first research questions address prenatal risks, such as whether low thyroid activity in the mother leads to cognitive defects and autism in her child, and whether inflammation or infection of the uterus can lead to premature birth.

Smaller studies could address some of these questions, but "there are a large number of conditions that are so infrequent that you can't study them unless you collect a very large sample," says Scheidt. For common conditions, such as obesity or asthma, he adds, a large sample also allows researchers to examine which of the many risks contribute to the disease.

"Ending the study before it begins would be a tragedy for our children," adds Nancy Chuda, president of the Children's Health Environmental

Coalition, a Los Angeles-based nonprofit advocacy group. "The only way we can prevent these illnesses is to learn what causes them."

Democratic Senator Tom Harkin is trying to revive the study, which has already consumed five years and \$50 million for study design, database development and pilot research. That amount includes \$7.4 million awarded to seven recruiting centers that are gearing up to enroll expectant mothers.

Language in the House version of the funding bill directs the agency to continue the study but provides no specific funding. Deputy study director Sarah Keim says this approach is unworkable. "We've been funded out of pocket change for the last five years," she says. "Big science can't be done like that—we can't keep scraping pennies out of the couch."

The fate of the study will remain in limbo until Congress passes a spending bill; at press time, neither chamber had scheduled a vote on the bill.

Brian Vastag, Washington, DC

## German foundation helps women juggle science and family

Ute Queitsch worried she might have to cut back her research on nanotechnology. Queitsch, a PhD student at the Leibniz Institute for Solid State and Materials Research in Dresden, was juggling work on the rigorous project, caring for her five-year-old daughter and staying on top of household chores—and it was proving too much for her.

But in July 2005, Queitsch won a new fellowship on offer to women scientists with children. "The scholarship gave me the courage to follow my passion and have a family," she says. She was able to continue with her work and is preparing two papers for publication.

Queitsch is among the first to benefit from the fellowship. Launched in December 2004, the program aims to lessen the burden of domestic chores and child care, responsibilities that fall to female scientists at home, according to a 2002 European Commission report.

Female students are given a monthly stipend of €400 that can be applied toward cooking and cleaning costs or additional childcare during evenings or conferences. The fellowships have benefited eight graduate students thus far and may extend to postdoctoral fellows by the end of this year.

The gender gap in the highest echelons of science can be at least partly explained by the struggle women scientists experience trying



**Money matters:** Grad student Martina Knirsch says the fellowship has helped her find quality time both at work and at home.

to balance a demanding career and family, says Christiane Nüsslein-Volhard, whose foundation awarded Queitsch's scholarship.

She should know. A Nobel Laureate in 1995 and director of the Max Planck Institute for Developmental Biology in Tübingen, Nüsslein-Volhard has few equals in Germany, where women occupy only five percent of the top positions at universities.

Inspired by one of her graduate students who considered dropping out of science to care for her child, Nüsslein-Volhard decided to help others in a similar position. The Max Planck Society and private donations fund the fellowships, which are renewable for three years.

The tendency for women to drop out of science after starting a family is not unique to Germany (*Nat. Med.* 10, 114–115; 2004). More than half of graduate students in the life sciences in Europe are women, but less than 12% make it to the top, according to a comprehensive European report, *She Figures 2006*. Both institutional and cultural barriers, such as the proverbial glass ceiling and family responsibilities, are thought to contribute to the steep fall in numbers.

By funding graduate students, who have lower salaries than postdocs, the foundation hopes to keep talented scientists on their career path, says Nüsslein-Volhard. "The money really helps."

Childcare is particularly expensive and difficult to find in Germany. "Almost my entire salary goes for the day care of our three children," says biologist Martina Knirsch, one of the recipients. Knirsch says the scholarship has helped her hire a cleaning woman and cover partial childcare costs, allowing her more quality time at home and at work.

"Since I am able to delegate jobs like cleaning our rooms, I have more time for my work and also for my children in the evening," Knirsch says. Knirsch, who will complete her PhD this fall, plans to apply for the postdoc fellowships when they become available.

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