

for nearly two decades. Both aim to block the effects of HCG, a glycoprotein hormone made up of alpha and beta subunits, which is secreted by the placental trophoblastic cells. HCG plays an important role in the first trimester of pregnancy by stimulating the ovarian secretion of oestrogen and progesterone required to maintain the integrity of the conceptus.

Trials of Talwar's vaccine are being funded by the Department of Biotechnology, which is affiliated to the Indian Ministry of Science and Technology, with additional support provided by the International Development Research Centre in Ottawa, Canada. The WHO decided against backing Talwar's vaccine, which is made up of the entire beta subunit of HCG, because it showed some cross-reactivity with luteinizing hormone. (Steven's vaccine uses only a fragment of the beta subunit.)

Although a government-appointed task force concluded that the vaccine should now be tested for efficacy on a larger number of women, researchers were first asked to refine the production and delivery methods to ensure that the approach is both practical and cost-effective. To speed development of the vaccine, three more laboratories have joined in the effort, now headed by Talwar's successor Om Singh.

"It is expected that women in India would prefer a vaccine to other [forms of] contraceptives [that is] if they do not have to take the shots frequently," says Badri Saxena of the Indian Council of Medical Research in New Delhi. Singh hopes that the vaccine to be used in the forthcoming trial will use a better adjuvant, making it more immunogenic, so that at least 90 per cent of women respond. Singh also hopes that only one shot instead of three will be required because slow-release polymer microspheres will be used.

Keeping costs down will be an important factor if the vaccine is to find widespread use. Talwar, now at the International Centre for Genetic Engineering and Biotechnology in New Delhi, hopes eventually to produce a live recombinant anti-HCG vaccine using fowlpox virus at a cost of US\$0.30 a shot.

K. S. JAYARAMAN
New Delhi

France's new guard does volte-face on independent research ministry

Jacques Chirac, the new Conservative president of France, has reneged on a campaign promise to set up an independent ministry of research. Many in the scientific community were disappointed to learn that scientific and medical research will now come under a new 'superministry,' which will also include secondary education, higher education and the integration of young people into the job market.

Specifically, they are concerned that François Bayrou, head of the new superministry, will be too preoccupied with the weighty matters of education. Under the new set-up, research will be run on a day-to-day basis by a secretary of state for research, a position that has unknown authority and autonomy.

In an attempt to allay such fears, soon after they were nominated, Bayrou and Dufourcq paid a surprise visit to the headquarters of the Centre Nationale de la Recherche Scientifique (CNRS) in Paris; one of the country's main research organizations. At that time, Bayrou reaffirmed his commitment to research. These sentiments were echoed by the new Secretary of State for Research, Elisabeth Dufourcq, who, in a recent interview with *Nature Medicine*, said that under the new government "research will keep its special character and its cohesiveness. I will personally stand up and fight for the budget, and being supported by Bayrou can only be a plus."

Nevertheless, Dufourcq, 54, will still have to earn political credibility. She is little known in science policy circles and lacks the political clout of former research ministers. From 1980 to 1985, she was an administrator at INSERM, the national biomedical agency. Before her appointment as secretary of state, Dufourcq was carrying out research into the epidemiology of the human immunodeficiency virus.

Dufourcq admitted that her appoint-

ment was a bit of a mystery, but added "I am better prepared for this job than one might think because of the positions I've held, my time abroad (her husband was a high-level diplomat), [and] my experiences as a member of INSERM's board of directors and its scientific commissions."

But Dufourcq will have her work cut out for her if she is to meet the expectations of researchers, which will mean defending and, if possible, increasing the research budget, which was reduced last year. That may be difficult given that the government has just announced a series of high-priority measures for tackling unemployment, which will likely put an even tighter squeeze on discretionary spending in areas such as research.

It is too soon to assess the government's longer term commitment. But some within the scientific community still remember the lean years, between 1986 and 1988, when Chirac, then prime minister, halved the public research budget and attempted to dismantle CNRS on the grounds of perceived inefficiencies.

But for the time being, at least, Dufourcq will likely continue with the main thrust of the policies of the former Conservative research minister, François Fillon. She hopes, for example, to continue the practice of establishing cooperative contracts between government and research institutes that are intended to define the main goals and focus of research organiza-

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Going to bat for research: Elisabeth Dufourcq, France's newly appointed secretary of state for research.

Ariel Heise

nizations. She is also keen to support international science projects and would like to see more young researchers find permanent positions in France's research organizations.

While such gestures of goodwill may be reassuring to some, the true test for Dufourcq comes when discussions for the next budget allocations get under way at the end of June.

CATHERINE TASTEMAIN
Paris