

gress in 1990 as a \$500-million-a-year programme, but annual funding for it has never exceeded \$100 million.

Advocates of agriculture research in Congress, such as Senator Richard Lugar (Republican, Indiana), chairman of the Senate Agriculture Committee, are well aware of this shortfall. The new programme discussed at last week's meeting, the Initiative for Future Agriculture and Food Systems, results from a bill proposed by Lugar and signed into law by President Bill Clinton on 23 June. The bill would use mandatory funds, previously used in the food stamp programme, to support \$600 million of new agricultural research over five years.

But the proposal is already in trouble on Capitol Hill. The House Appropriations Committee, in a bill marked up only days after Clinton signed the legislation, expressly blocks the \$120 million allocated for the measure in the next financial year. The Senate appropriators allowed the spending, leaving the fate of the initiative to be determined in September, when the two chambers reconcile their budget proposals.

Even if the money is forthcoming, some fear that it will be spread too thinly across the activities — research, extension and education — it is supposed to support. Although the legislation specifies some priorities for grants, including genomics, biotechnology and food safety, a dizzying array of research interests feel entitled to a share of the pot.

As speakers at the 9 July meeting made clear, everyone wants a piece of the action, from international economists and organic farmers to environmentalists and soil scientists. The last group's advocate, Karl Glasener, at least introduced some humour: "In short, soil scientists would like everyone to stop treating soil like dirt," he says.

"The thing I worry about most is that it'll be divided up between every interest group, so that nothing that great will come out of it," says Kelly Eversole, a lobbyist for the American Cornrowers' Association, which, along with other growers' groups, wants money to go to large collaborations in areas, such as genomics, that will raise agricultural yields. "We want large, multi-institutional, well-organized projects," says Lyle Roberts of the American Soybean Association.

Eileen Kennedy, deputy under-secretary for research at the USDA and the agency's senior science official, says the department has introduced more competition into its

Monsanto backs \$150m plant science centre

[WASHINGTON] The US life sciences company Monsanto is linking up with a charitable trust to create an independent \$150 million plant science institute in St Louis, Missouri, that is intended to become an international centre of excellence for interdisciplinary plant research.

Plans for the new centre, strategically placed at the heart of America's agricultural mid-west, are due to be announced on 31 July by former president Jimmy Carter. It will operate as a joint venture between the Missouri Botanical Garden, Washington University in St Louis, the University of Missouri at Columbia, and Monsanto.

Although Monsanto will contribute cash, land and tax credits worth over \$80 million, it says that it will not lay any claim to intellectual property generated at the institute, which is expected to attract research support from government, industry and private foundations.

A search committee to find a director for the institute by the end of the summer is being chaired by Peter Raven, director of the Missouri Botanical Garden. "We're talking to some of the best plant scientists in the world," says Sam Fiorello, an assistant to the president of Monsanto.

"This is an opportunity to develop for our region a

leading centre that will bring together a critical mass of outstanding research," says Mark Wrighton, chancellor of Washington University. "We're depending a lot on the recruitment of an outstanding director."

The partners plan to spend \$45 million on constructing a 200,000 square foot building to house the institute, opposite Monsanto's St Louis headquarters, and a further \$15 million to equip it.

The Danforth Foundation, a St Louis-based charitable trust which will probably give its name to the new institute, has promised to contribute \$6 million a year for ten years to operate the centre. It is expected to employ 15 principal investigators and 105 staff in total.

"The scope and orientation of the institute will be something like a Max Planck or Pasteur Institute," says Raven. "What is unique is the combination of private funding with excellent research organizations already based here in St Louis."

He adds that it is "quite remarkable" that Monsanto is putting so much money into the centre "when they expect to exercise no control", adding that the corporation "would have had no difficulty putting the money into its own research". Monsanto is in the process of merging with American Home Products, a consumer-goods

corporation, but has said that the life sciences operation of the combined group will be based at St Louis.

Each of the four partners will have one representative on the institute's governing board, which will be chaired by William Danforth, chair of the board of trustees at Washington University. William is the brother of John Danforth, the former Missouri senator and chair of the Danforth Foundation. Roy Vagelos, the former chief executive of Merck, is the first of two outside directors who will join the board.

Raven, William Danforth and Virginia Weldon, a recently retired Monsanto executive, dreamed up the idea for the centre on their way to a National Research Council meeting at Irvine, California, in February last year. "I had a vision that this region should be strong in plant biology," says Danforth, adding that the new centre will be "embedded in a community that has a lot going on" in the discipline.

Raven says the great gains in agricultural productivity of the past 50 years have often been made at the expense of the planet's productive capacity, and that the new institute will help to establish ways of raising productivity while preserving topsoil and biodiversity. "We've got to learn to live off the interest, not the principle," he says.

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intramural research programmes, and is considering larger grants, of \$250,000 or more, for university researchers. Kennedy says that politicians' reluctance to support agricultural research reflects the public's belief that, with food so cheap in the stores, the sector's problems have been solved.

She thinks that "groups that have traditionally been locking horns" — farmers, agribusiness interests and universities — are united behind the initiative. "I don't sense any opposition to agricultural research" in Congress, she says. "It is just that they have a smaller pot of money than they'd like."

No one can predict how much of the \$120

million will be delivered when the dust settles on the USDA budget in the autumn. If any money does appear, Kennedy will issue an immediate request for proposals, and awards will be made early in the new year.

Senator Lugar's initiative will not enable a fully fledged revival of agricultural science in the United States, and agriculture schools will not soon match the opulence of many academic health centres. But, together with the National Science Foundation's plant-genome initiative (see *Nature* 390, 539; 1997) and growing private investment, it may herald a modest revival in an undervalued branch of US science.

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