Early intervention

Fifty of the United States' most promising early-career biomedical scientists now have the chance to pursue their research dreams without the corresponding nightmare of trying to find funding.

Under the new Early Career Scientist initiative at the Howard Hughes Medical Institute (HHMI) in Chevy Chase, Maryland, the 50 — 9 women and 41 men from 33

institutes — will receive a full salary and benefits along with \$1.5 million each in research funds over the course of their six-year appointment.

"This is a time when money is tight for everyone, and I'm extremely lucky to have this measure of financial security for my lab for the next few years," says appointee Rachel Wilson, a neurobiologist at Harvard Medical School in Boston, Massachusetts. "This kind of grant allows us to do research that's more adventurous and risky."

More than 2,000 scientists flooded the HHMI's offices with applications when the institute announced the programme in March 2008. Applicants had to be 2-6 years into their first independent position and could not hold more than one early-career award from anywhere else.

Wilson, who is studying how fruitfly brains process information about odours, will now extend her work to investigate how the brains deal with other sensory stimuli. Ultimately she hopes to uncover fundamental information about the human brain. "I don't claim that what I do in my lab today is going to cure human brain disease tomorrow, but this work will shed



Rachel Wilson.

light on fundamental questions about how the human brain works," says Wilson. "It's a shameful truth that we, as a field of neuroscience, don't understand how patterns of electricity in the human brain affect perception, thoughts and actions." Appointee Joe Thornton, a

molecular evolutionary biologist at the University of Oregon in Eugene, identifies the genetic mutations by

which ancient hormone receptor proteins took on modern-day functions. He is excited about the chance to research more thoroughly.

"We've resurrected ancient proteins to understand how they've evolved new functions," he says. "But I want to know if what we've observed is of general importance or if there are different rules for different gene families to evolve. Now we can develop new models."

Tom Cech, who was president of the HHMI when the scheme launched, says that on a fact-finding mission last year, he and other HHMI officials found the greatest need for funding support was among those at the early stage of their careers.

Funding difficulties for early-career scientists include short-term grants that aren't renewable, which can be compounded by a drop in success rates. "When a researcher has their lab up and running and has great ideas and lots of energy, instead of being in the lab working, they're writing grant application after grant application trying to get continuous funding," Cech says. "We decided this was an area of opportunity and we should invest in this particular stage."

FOSTDOC JOURNAL Kidding around

Shortly after getting married in 2000, my wife and I decided to have three kids. It seemed like the perfect-size family for us - not too big, not too small. We figured three would still allow us to give each plenty of attention. Recently, we discussed the prospect of having our third. However, our hands are already full with a bright-eyed three-year-old daughter and an inquisitive one-year-old son. We are beginning to reconsider the notion of having that sought-after trio.

This is perhaps the most difficult of the important

personal and professional decisions looming before me, as graduate school fades away behind me and my career stands facing me. The decision to have a third child falls during this transitory period of my life as a postdoc.

Job changes can occur quickly, and moving to another city with an infant is not ideal. So what is the solution? Procrastinate. We can afford to wait to have another child because my wife and I are still relatively young, although I think the longer we wait, the less likely we are to have another child. We would both love to have a third child eventually, but at the moment we must make the tough decision to put family growth on hold. Right now I need to focus on my career: on publishing, publishing, publishing and then looking for a job.

For the time being this is my next priority — raise a paper and nurture a career. Then think about raising another little one. Bryan Venters is a postdoctoral fellow at the Center for Eukaryotic Gene Regulation at Pennsylvania State University, University Park.

IN BRIEF

Vietnam pay complaints

The most significant impediments to science in Vietnam are low pay and a paucity of research funding, according to a report by the International Foundation for Science, a research council in Sweden that supports scientists in developing nations. Sixty per cent of respondents in a poll published in the document said that salary was a "serious" or "obstructive" problem. "Vietnamese scientists' salaries are very low and [they] find it difficult to live on their government salaries alone," the report says, adding that 83% of all scientists consider their salary to be inadequate to support a family. For female scientists, it's 89%. The report also cited a lack of funding for research equipment and fieldwork as a significant obstacle to doing good science.

Bioscience park launched

Plans for a biosciences park in Minnesota are under way along with the creation of a venture-capital fund worth up to US\$1 billion to support the state's biotech sector. The 940-hectare Elk Run site in Pine Island includes the BioBusiness Park that aims to create and attract bioscience and biomedical firms to this southeastern part of the state. It is supported by property developer Tower Investments, based in Woodland, California, and venture capitalist Steven Burrill. Tower and Burrill are also creating the fund to support development of new technologies created by the University of Minnestota, the Mayo Clinic, a medical research institute in nearby Rochester, and private research organizations.

BP Solar cuts 620 jobs

Solar technology firm BP Solar said this week that it will cut about 140 jobs at an assembly plant in Frederick, Maryland, and another 480 at manufacturing and assembly plants in Madrid. The cuts are part of an effort to reduce costs and refocus its global manufacturing operations. The company is phasing out its photovoltaic module assembly in Maryland and closing its photovoltaic-cell manufacturing and module assembly operations in Spain. Chief executive Reyad Fezzani says solar markets have been hit hard by three major interrelated factors: the economic downturn, oversupply and increased competition. BP Solar is a subsidiary of UK-based global energy company BP.