

## NEWS

# Expanding energy frontiers

Dozens of new US Department of Energy (DOE) centres are expected to recruit some 1,100 postdocs, graduate students and technical staff. The DOE announced on 27 April that it is creating 46 Energy Frontier Research Centers, with the dual goals of training the next generation of researchers and fostering energy-related research.

Each centre will receive between US\$2 million and \$5 million per year in federal funds for the next 5 years. "We hope the new centres will lead to growth of energy-related fields and that subsequent technological advances will be the seed corn to generate future green jobs," says Harriet Kung, the DOE's associate director for basic energy sciences.

Sixteen centres will get their full 5 years of funding from \$277 million allocated in the American Recovery and Reinvestment Act of 2009, the national economic stimulus package. The DOE has funded 30 other centres for their first year, and plans to fund the 4 subsequent years subject to budget constraints.

Of the 46 centres nationwide, 31 will be housed at universities, 12 at DOE national labs, two at nonprofit organizations and one at a private, commercial, research laboratory. The centres' specialities range from solar energy to catalysis to carbon storage.

The DOE's Oak Ridge National Laboratory in Tennessee (pictured), for instance, will host two centres to concentrate on materials science. Each will address areas that sorely need revolutionary breakthroughs, says Michelle Buchanan, the lab's associate director for physical sciences. For example, a



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major bottleneck in developing new batteries or fuel cells is an incomplete understanding of how fluids interact with solid surfaces.

In March, Oak Ridge National Laboratory also received \$71 million in stimulus funding to build a chemistry and materials-science lab for similar multidisciplinary research projects. Buchanan says the lab has begun recruiting at least a dozen researchers and up to two dozen students and postdocs.

Training will be the focus of Northwestern University's Center for Integrated Training in Far-From-Equilibrium and Adaptive Materials in Illinois. Centre director Bartosz Gryzbowski expects to provide hands-on training to 40–50 students and postdocs hired to help develop materials that adapt usefully to environmental stimuli. For example, one project aims to create materials that can turn light into mechanical energy. Gryzbowski says the energy-research funding has another benefit — it will draw interest back to mathematics and physics. "Solving the energy crisis captures the imagination," he says. ■

Virginia Gewin

## POSTDOC JOURNAL

### A Cajun-style meeting

As a child growing up in Texas I used to spend my summers outdoors, sometimes plodding through creeks hunting for crayfish. I ate fried crayfish recently when I attended the annual meeting for the American Society for Biochemistry and Molecular Biology in New Orleans. It reminded me of my childhood even as I pondered my future.

The meeting represented a milestone for me. For the first time, I gave an oral presentation in addition to presenting a poster. I was both excited and anxious. But I had another agenda: I hoped

that contacts I made would help me to decide whether I wanted to pursue a career in academia or industry.

Apparently the meeting organizers anticipated my burning question, offering a plethora of career-development workshops. In particular, a workshop on military scientists opened my eyes to intriguing jobs in the US Department of Defense. Another workshop discussed how to hunt effectively for jobs in the biotech industry. And I chatted with professors in my field — gene regulation — about their research;

perhaps this could help open up future postdoc and academic job opportunities.

The Internet, of course, has excellent job-opportunity resources. But there is no substitute for meeting the people who have the types of jobs that interest me. Considering the slow US economy and the increasingly competitive PhD job market, I plan to keep all options on the table. ■

Bryan Venters is a postdoctoral fellow at the Center for Eukaryotic Gene Regulation at Pennsylvania State University, University Park.



## IN BRIEF

### High cost, high reward

US medical school graduates who earned their degrees last year owe a median sum of US\$155,000, a 53% increase since 1998, according to a report released by the US Government Accountability Office (GAO) this month. It says that a medical resident's average monthly loan payment could top \$1,700 with a debt of that amount.

Meanwhile, legislation has been introduced in Congress that would increase the number of Medicare-supported training positions for medical residents. Under the proposals, the number of federally supported training posts would grow from the current 100,000 — a cap in place since 1997 — to about 115,000. The GAO report says that although medical students' debt is rising, many are benefiting from specializing in lucrative fields.

### FASEB on Facebook

In an effort to boost visibility and grab younger members' attention, the largest US coalition of biomedical research associations has launched pages on Twitter and Facebook. The Federation of American Societies for Experimental Biology has 44 Twitter followers and 45 'fans' on its Facebook site, according to communications assistant Jennifer Pumphrey. Twitter is a social-networking and micro-blogging service, Facebook a social-networking website. "We wanted to capture this audience that is more dependent on electronic media," says federation president Richard Marchase, noting that this effort will supplement e-mail and press releases. The federation updates its Facebook page weekly and 'tweets' once or twice a day.

### ZymoGenetics cuts back

Biotechnology firm ZymoGenetics of Seattle, Washington, is cutting 129 research and development positions in cancer research. Susan Specht, spokeswoman for the company, says that ZymoGenetics will now concentrate on immunology. "All oncology research projects have been cancelled," she says. She adds that some R&D positions in cancer research will be transferred to immunology research but could not specify how many. The company, which now employs 349, expects to save US\$30 million a year.