

# MOVERS

**Jose Alonso, director, Sanford Underground Science and Engineering Laboratory, Homestake, South Dakota**



**2005-07:** Consultant, Lawrence Berkeley National Laboratory and CERN, Switzerland

**2000-02:** Project leader, Lawrence Berkeley National Laboratory, Berkeley, California

**1994-2000:** Deputy director for accelerators, Spallation Neutron Source, Oak Ridge National Laboratory, Tennessee

When a family friend gave then high-school student Jose Alonso a tour of the particle accelerators at the Lawrence Berkeley National Laboratory (LBNL) in Berkeley, California, Alonso knew his career would be in physics.

Alonso got his PhD in nuclear physics at the Massachusetts Institute of Technology in Cambridge, and began his career as a junior researcher at Yale University working for a professor with strong ties to the LBNL. It wasn't long before he jumped at the chance to return to the LBNL. There, he and his wife Carol were part of the team that discovered the element seaborgium.

Alonso's evolution into an accelerator physicist reached a pivotal point when he began to explore new applications for accelerators. "Ferretting out different uses for these machines and interfacing with new communities has become a passion during my career," he says.

His first high-profile project was the Bevalac, a linear accelerator addition to an existing Bevatron accelerator at the LBNL. The Bevalac accelerated relativistic heavy ions used in both nuclear science and radiation therapy. Once newer machines made the Bevalac obsolete in 1993, Alonso turned his attention to the materials-science community's desire for an accelerator-based neutron source. The subsequent Spallation Neutron Source at Oak Ridge National Laboratory in Tennessee combined resources and collaborators spread out across six US national labs, and Alonso became its coordinator.

Alonso officially retired from the LBNL in 2002, but continued to take part in projects including the Large Hadron Collider at CERN near Geneva, Switzerland. Now that the Homestake Mine in Lead, South Dakota, is to become a deep-underground science and engineering laboratory, Alonso is heading the effort to reopen the mine and set up the first experiments.

"It's almost as if my career has been leading up to this," says Alonso. His greatest challenge may be managing the expectations of the various scientists. Particle physicists need the overlying rock to act as a shield while they search for rare neutron decay events, but geochemists want to probe it for chemical clues of life's origin. "Jose strives for consensus approaches to grow a broad base of support," says Kem Robinson, LBNL engineering-division director and long-time mentor. Communication, Alonso agrees, is the hardest part of large-scale physics experiments — a skill he has honed throughout his career. ■

**Virginia Gewin**

## BRICKS & MORTAR

### How to handle drug withdrawal

Pharmaceutical company Pfizer left a big gap when it decided to move out of Ann Arbor, Michigan, with the loss of hundreds of jobs. But the town responded by setting up a science incubator and planning to diversify.

Local economic development organization SPARK and the University of Michigan, Ann Arbor — with \$1 million from the state — have assumed Pfizer's lease on 3,150 square metres of lab space and are turning it into a science and technology incubator. SPARK is renting a third of the space to biotech firms, with Oncolmmune of Ohio, SensiGen of Ann Arbor and German company Genomatix Software as the first three tenants. University of Michigan researchers working on spin-off companies will occupy the remainder of the space.

"We are not here crying into our beer because of this," says Mike Finney, president and chief executive of SPARK. Instead, he wants to use Pfizer's move out of Michigan — caused partly by restructuring after buying Pharmacia — as a way to diversify the state's economy. Rather than rely on biopharmaceuticals, SPARK has courted high-tech companies in other sectors. Google will eventually hire 1,000 people for its Ann Arbor area operation. Spanish aerospace company Aeronova plans

to hire 600 engineers at an Ann Arbor site. And Toyota and Hyundai are developing technical centres.

Another 186,000 square metres of former Pfizer lab space will be empty by next August, and another 2,000 jobs lost. According to SPARK officials, some are relocating to other facilities, some are retiring, and about 600 hope to stay and find work.

The loss of Pfizer and the shrinking of the Detroit automobile industry have been hard for Michigan, which has the highest unemployment in the United States. Finding tenants to fill 186,000 square metres will be a big challenge. "That's a lot of space," says Steve Forrest, University of Michigan vice-president for research.

SPARK is working with 19 groups of Pfizer employees who want to launch their own companies, and Michigan has put up \$8.5 million in start-up funds. Forrest says that some University of Michigan start-ups have hired former Pfizer employees and expects that more companies will emerge once Pfizer has left. The incubator will allow university companies and private biotechs to interact and share resources.

"We're very strongly in favour of not just funding our own companies, but building up infrastructure for others," Forrest says. ■

**Paul Smaglik**

#### POSTDOC JOURNAL

### A conference too soon

I enjoy scientific conferences. I can find out what everyone else in my field is up to, and receive advance notice of any exciting new developments. I get a valuable opportunity to discuss technical issues and talk through problems with the real experts. As the sole palaeomagnetist on the staff here in Johannesburg, that's not something I get to do very often. Most importantly for a young researcher like me, I can improve my visibility in the scientific community: future collaborations and jobs will probably come much more easily if people can put a face to the name on an application or proposal.

So when I got an abstract accepted for this year's American Geophysical Union meeting in San Francisco, I was very excited — until reality intervened. It is hardly a short hop from South Africa to California, and my attendance would far exceed my travel budget for this year. As I can afford to go to only one or two big conferences during my postdoc, I'll be spending my money much more wisely, and I'll make much more of an impact, if I've got an exciting story to present on the basis of my work here in South Africa. It's a little early yet to tell that story. So I regret that San Francisco will have to wait. Perhaps next year I'll be ready. ■

**Chris Rowan is a postdoctoral student in the geology department at the University of Johannesburg, South Africa.**