

MOVERS

James Halpert, Associate Dean for Scientific Affairs, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California, San Diego



2003-2008 Director, Environmental Health Sciences Center, University of Texas Medical Branch, Galveston, Texas

1998-2008 Professor and Chairman, Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, Texas

James Halpert is a self-described cautious, methodical guy. But his career path suggests a bit of daring. He left promising undergraduate work in chemistry to travel to Europe and learn a new language. And he has uprooted himself repeatedly when eager for new challenges, a tendency that he says has benefited his scientific career.

After receiving a bachelor's degree in Scandinavian languages from the University of California, Los Angeles, he took up laboratory work at a Swedish hospital, ultimately deciding to pursue biochemistry. He deciphered the amino acid sequence of a deadly snake venom neurotoxin while earning his PhD at Uppsala University. Having published several papers on natural toxins, Halpert's interest shifted to manmade toxins; he went on to earn an MSc in toxicology at the Karolinska Institute.

After seven years in Sweden, Halpert returned to the United States and a postdoc at Vanderbilt University in Nashville, Tennessee. It was there that he began work on the cytochrome P450 superfamily, the most important element of drug metabolism and a focus that would tie together his interests in biochemistry, the environment and human health. Halpert was the first to determine how various P450s are inhibited while carrying out reactions to metabolize drugs.

"Jim's work is always at the cutting edge," says Paul Hollenberg, a pharmacologist at the University of Michigan.

Shortly after joining the University of Arizona — where he became a professor of pharmacology and deputy director of the Southwest Environmental Health Sciences Center — the junior faculty member made an important decision. "At 37, I was worried I might become a dinosaur if I didn't learn molecular biology techniques," he says.

A move to the University of Texas Medical Branch at Galveston allowed Halpert to focus on structural biology and do some of the best work of his career — solving several P450 structures. Eventually, he became the director of the university's National Institute of Environmental Health Sciences Center.

As the new associate dean for pharmaceutical sciences at the University of California at San Diego, Halpert plans to recruit a cadre of researchers and move beyond simply training pharmacists, in part by a nascent joint PharmD/PhD programme. "We want to create researchers able to develop the next generation of drugs," he says. ■
Virginia Gewin

NETWORKS & SUPPORT

Postdoc competencies

In 2004, the US National Postdoctoral Association (NPA) set out to identify and recommend postdoctoral 'best practices', a document the NPA issued in 2005. We suggested things such as standardized classification, establishing postdoctoral offices and implementing specific policies regulating appointments.

In releasing these best practices, the NPA asked research institutions to develop specific competencies crucial to a successful training experience. In response, institutions challenged us to develop guidelines, a draft of which was presented at the NPA annual meeting held in April. We believed that the dramatic change in the number and demographics of US postdocs made targeted training vital. And we expect these competencies will help postdocs and their mentors in developing rational career plans.

With input from postdocs, faculty and administrators, the NPA policy committee created a set of core principles that was recently released. We did not try to develop a one-size-fits-all solution. Rather, we sought to identify a set of skills flexible enough to let institutions with different populations and resources develop their own programmes. The final competencies (scientific knowledge, research skills, communication skills,

professionalism, leadership and management skills, and responsible conduct of research) cover all career outcomes and research fields.

This list raised the question: how should the competencies be evaluated and regulated, if at all? Mandatory evaluation would be misplaced, as postdoctoral positions, programmes and their objectives vary tremendously among institutions.

They are simply a tool to help improve and customize training. Institutions with a uniform method for classifying postdoctoral positions may see a valuable role for regulation.

Others may develop resources such as short courses, seminars or dedicated professional development assistance. And postdocs can incorporate the principles into individual development plans, a 'mapping out' of expectations done in conjunction with one's adviser.

We are planning to release the core competencies as a Web-based resource in autumn 2008. To finalize the document, we would appreciate feedback, including resources that could inform the competencies.

Lisa Curtis, Keith Micoli and Jennifer Reineke Pohlhaus are current and former members of the board of directors of the National Postdoctoral Association.

POSTDOC JOURNAL

Cool and collected

"I thought of ice-cream today," my fellow researcher announced last night. We were sitting outside, shivering in three layers of clothing, clutching beers to toast the setting Ethiopian sun. I nodded as he added that the fat little birds called francolins that run in front of the truck every day make him salivate. They look so plump and delicious. I can relate. We are far from starving, but food has become the topic of every second conversation. Even the grass looks tasty.

Being out in the middle of nowhere with minimal comforts can transform trained intellectuals into beings whose mood depends on the amount of rain that fell the night before. It becomes hard to look past the here and now; cravings for our favourite foods tie us to the world beyond the Simien Mountains. Little victories help us to adjust, from a successful two-minute conversation in Amharic (the local language) to making pancakes that taste like the real thing.

For a couple of weeks I've had the company of two fellow researchers: a graduate student and a professor out here to investigate gelada behaviour. After three solitary months it was wonderful to engage in intellectual conversation, babble about ideas and experiments and politics. But after a spell, the focus changed to basic cravings. I really just want to know how to get my hands on a T-bone steak, right now. I'll trade my field hat for it.

Aliza le Roux is a postdoctoral fellow in animal behaviour at the University of Michigan.