NATURE|Vol 449|13 September 2007

MOVERS

Dennis Choi, executive director, Comprehensive Neuroscience Initiative, Emory University, Atlanta, Georgia

2006–07: Pharmacology professor, Boston University, Boston, Massachusetts
2001–06: Executive vice-president, neurosciences, Merck Research Labs, West Point, Pennsylvania
1991–2001: Director, Center for the Study of Nervous System Injury, Washington University School of Medicine, St Louis, Missouri

In the course of his career, Dennis Choi has pooled insights from academia, the clinic and industry to develop therapeutics, which has given him a highly sought after combination of experience.

Choi, an electronics buff, abandoned engineering after his mentors convinced him that biology was more exciting. His engineering background, however, gave him an edge as an MD/PhD student at Harvard Medical School doing neurophysiology work. Indeed, the former television-studio engineer skilfully built his own equipment. "Dennis is the type of person who likes to take things apart and put them back together," says long-time colleague David Farb, chairman of Boston University's pharmacology department.

As students, Choi and Farb co-discovered the cellular mechanisms of action of benzodiazepines — the class of mild tranquillizers that includes trade-name drugs such as Xanax and Valium. That high-profile work convinced Choi to seek neuroscience projects with direct clinical applications.

Choi began his faculty career at Stanford University by working on the basic biology of glutamate receptors, eventually gravitating to the emerging role of these receptors in brain injury. A self-described "challenge junky", Choi was eager for a new stage in his career after eight years at Stanford. He eagerly accepted the opportunity to lead the department of neurology and create the Center for the Study of Nervous System Injury at Washington University School of Medicine in St Louis.

Once he had helped to secure top-tier performances in clinical care and research for these Washington University units, he accepted a new challenge: leading neuroscience research at Merck Research Labs in Pennsylvania.

"Going to Merck wasn't part of a 20-year career plan, but I felt I would learn first-hand how to make practical therapeutics," says Choi. He successfully transformed Merck's dispersed neuroscience activity into a coordinated effort. Then, seeking a return to academia, he went to Boston University to work with Farb again.

Choi's greatest challenge yet will take him to Emory University to head its university-wide neuroscience initiative. There he is charged with forging a cohesive effort from 250 faculty neuroscientists in 20 departments. Developing new therapeutics is still a high priority for him. "The world needs new ways of translating knowledge into therapeutic benefits — and forging new synergies across broad disciplines is one of our best hopes," says Choi. ■

Virginia Gewin

NETWORKS & SUPPORT

A pipeline for Europe

One of us recently discussed job searches with some Indian research-group leaders in Bangalore. They had looked extensively in the United States, Singapore and India. Why not Europe? They said they were unclear as to how to go about it — a sentiment shared even by Europeans.

Indeed, Europe has systematically failed to produce a pipeline for excellence both within the member states and, more critically, between them. A pipeline for excellence is a clear and transparent system that channels the best and most motivated researchers to leading positions. It does not guarantee tenured jobs for all, but it provides clear and fair ground rules that allow everyone to compete on a level playing field. If this failure is not corrected it will impede European economic development.

The pipelines for excellence in Europe and the United States are similar to start with, through the PhD and postdoctoral fellowship. But then the European pipeline breaks down. After the postdoc comes a patchwork of career structures, which mesh neither with each other nor with the United States. How does a young scientist become an independent researcher with a clear path towards tenure? US scientists may have a hard time finding money, but at least the ground rules are clear. The situation is especially difficult for European postdocs working in the United States — and there are many, as most European systems expect élite researchers to take a training period in the United States. Faced with a clear career path there or a European system that makes finding a new job difficult, they are tempted to take the path of least resistance and apply for a job in the United States. This leads to a steady loss of talent.

Europe should build a pipeline that is clear, transparent and homogeneous across all the member states. Put another way, Europe needs to brand its science. The 'assistant professor' in the United States is a brand, and Europe needs similar names to define the science structure. One possibility would be to use the term 'principal investigator' (PI). The sequence would be graduate student, postdoc, junior PI, associate PI and full PI. The actual names are not important. The objective is a European pipeline for excellence with worldwide brand recognition that encourages home-grown talent and pulls in the best from around the world. ■

Tony Hyman and Kai Simons are directors at the Max Planck Institute of Molecular Cell Biology and Genetics in Dresden, Germany.

POSTDOC JOURNAL

Keeping good scientists

As I write, it is ten days until I get married. Needless to say, it is hard to focus on the minutiae of scientific research (or much else, for that matter) with this life-changing event looming.

Getting married is also having a significant effect on my immigration status. I'm marrying a US citizen, and therefore I will be eligible to apply for permanent residence here in the United States. I originally had no intention or strong desire to stay here after graduate school. But given that circumstances have conspired to keep me here, doing so should be relatively easy.

My situation provides a stark contrast to that of many other foreign-born scientists. Scores would give their right arm to work in the United States on a permanent basis, but are unable to do so because of discrepancies between the number of permanent-residency applicants from their native countries and the yearly quota of allowable immigrants. No doubt this forces numerous superb scientists to leave, potentially weakening the US science enterprise.

Immigration is a complex and touchy subject. As one of the lucky ones allowed to stay in the United States, I intend to make the most of it. But I also have a responsibility to advocate that others should have similar opportunities. Anything less is unfair. ■

Peter Jordan is a visiting fellow at the National Institute of Diabetes and Digestive and Kidney Diseases in Bethesda, Maryland.