NATURE|Vol 447|21 June 2007

MOVERS

Andreas Meyer-Lindenberg, director, Central Institute of Mental Health, Mannheim, Germany

2005–07: Chief, Unit for Systems Neuroscience in Psychiatry, National Institute of Mental Health (NIMH), Bethesda, Maryland
2004–07: Co-director, Neuroimaging Facility, NIMH
2001–05: Staff clinician, Clinical Brain Disorders Branch (CBDB), NIMH
1997–2001: Visiting associate researcher fellow, CBDB

Andreas Meyer-Lindenberg owes his interest in neuroscience to his psychiatrist father. And now his work could help revolutionize his father's field by offering better options for diagnosis and treatment of mental illness.

At the medical school of the University of Bonn in Germany, Meyer-Lindenberg initially focused on neurochemistry: he did a thesis on receptor mechanisms associated with risk of suicide. Then switched gears to investigate mental illness by understanding how the brain is wired. After a neurology residency, he moved to the Justus-Liebig University hospital in Giessen to conduct neuroimaging research. This "failed miserably", he says, in part because the technology was relatively new and no local partners were interested in applying it to brain study.

Meyer-Lindenberg chose to pursue a postdoc in the United States at the National Institute of Mental Health. Intending to stay for two years to learn neuroimaging methods, he has stayed for ten: in recent years, for example, he has investigated the interaction of the prefrontal cortex and striatum in people with schizophrenia. He also studied mathematical models, earning a master's degree in mathematics from the University of Hagen in Germany. "I was hoping to get a broader tool belt to look at these things," he says.

His mathematical skills have helped him develop methods to investigate complex interactions between genetic variants and their influence on the human brain. He now combines studies of genetic indicators of mental illness with neuroimaging. The approach helps uncover the elusive biological mechanisms of mental disorders, he says.

Starting on 1 July he plans to further that aim in his new role as director of Germany's Central Institute of Mental Health. His predecessor, Fritz Henn, has no doubt he will succeed. "Andreas is the brightest young guy in the field," Henn says, adding that Meyer-Lindenberg pioneered the marriage of genetics and imaging in neurobiological research. Henn has spent the past five years trying to recruit Meyer-Lindenberg — all the while helping the institute excel in biological psychiatry and making it proficient in both genetics and imaging.

His tactic worked. Meyer-Lindenberg says that the institute's top-notch facilities and departments will allow his group to work towards a new level of therapeutic application. His long-term goal, he adds, is to overhaul how mental illness is categorized and treated. ■

Virginia Gewin

NETWORKS & SUPPORT

Employing Japan's postdocs

Osaka University in Japan recently surveyed 83 of its science and technology postdocs and found that more than 60% no longer wanted to be postdocs. More than 85% felt insecure about their careers. Why are so many PhD recipients at Osaka concerned about their future?

In the early 1990s, the Japanese government attempted to strengthen the country's graduate schools. As a result, the number of PhDs awarded each year increased from 8,968 in 1996 to 15,966 in 2004. However, many PhD recipients fail to get permanent jobs.

The government has tried to help. In 1996 a programme was launched to support 10,000 postdocs by 2000. Meanwhile, Japan's science and technology budget remains high, totalling over 3 trillion yen (about US$24.5 billion at today's rates) per year since 2001.

Despite this investment, job security is hard to find. Any small growth in the number of permanent academic positions in the past ten years has been overwhelmed by the growth in the number of PhDs awarded. Only a decade ago, most PhD recipients found permanent positions. Today, some PhDs have taken as many as four different three-year jobs by the age of 40.

The Japanese government chose Osaka University as one of eight organizations to take part in a 2006 project to promote the diversification of career paths for science and technology researchers. Some organizations support postdocs by educating them about the business world or providing individual consultation. However, we think that it's not only important to find people jobs, but to create new jobs and new types of job.

More opportunities must be created in a variety of fields. Universities can help solve the problem, as they receive a budget from the government that they can use to create projects and so also jobs. Cooperation between industry and the academic world also creates jobs such as project manager, technology coordinator and programme officer.

At Osaka's career-creation support division, we hope that our activities help increase the number of postdocs who consider unconventional career paths — and, as a result, make them feel more secure about their futures. ■

Yasuo Kanamatsu and Kyoko Takahashi are in the career-creation support division of Osaka University's Center for Advanced Science and Innovation.

POSTDOC JOURNAL

Growth

My mom always says that we should grow where we're planted. I take this advice to heart, especially since my parents flourished after immigrating to the United States with four small children, 12 big boxes and not much else. As a postdoc, I live by these words, particularly since my husband and I relocated to London to pursue our research fellowships, albeit without children, and with many more boxes, but with a similar challenge of acclimatizing to a foreign land.

Scientific mobility often means successive moves to different environments to which we must adapt, and in which we must thrive, in order to be productive scientists. Naturally we seek places where our development will be nurtured, both professionally and personally. Nonetheless, we occasionally face inclement conditions — such as a drought in funding or an unrelenting deluge of responsibilities — that we must endure and survive in order to be fruitful.

However, it is in such climates that we can discover the depths of our own resources. Deeply rooted values and goals can provide us with the tenacity to hold our ground and to weather various storms, thus allowing us to bloom even in the toughest of fields. So the next time I feel buried under a pile of manure, I'll see it as an opportunity to cultivate my strengths and to grow. After all, it's just more fertilizer. ■

Maria Thelma Ocampo-Hafalla is a research fellow at Cancer Research UK's London Research Institute.