

GRADUATE JOURNAL

A painful transition

Reflecting on my entry from last month (see *Nature* 433, 338; 2005), I am struck with intense pain and a feeling of naivety. When I wrote that, my future was geographically constrained because my wife was my highest priority, my outlook for 2005 was one of hope, commitment, love and anticipation.

After my wife announced she was going to leave me — somewhere between me writing my entry and its publication — my feelings shifted to loss, desperation, anger, frustration and self-loathing. It turns out that we had different perspectives about what my upcoming graduation meant. I saw this crossroads as the end of a difficult period of work. She saw this milestone as an end.

Needless to say, my roller-coaster of emotions has distracted me from my work. I initially fled the lab to deal with my feelings, but now I'm back and trying to focus on getting myself healthy, both emotionally and physically, and finishing my PhD. I am also working hard to address my spite and anger so that we can move forward not as partners, but as close friends. I try to keep in mind the wisdom of Robert Frost: "In three words, I can sum up everything I've learned about life. It goes on." One aspect of my previous journal entry remains true. It is going to be an interesting year. ■

Jason Underwood is a graduate student in microbiology at the University of California, Los Angeles.

SCIENTISTS & SOCIETIES

Japan Society for the Promotion of Science

"The typhoon is advancing — you can finish in one hour," says my *senzai* (assistant professor) and leaves the lab. I am in Japan, well known as 'the land of the rising sun' — although as a visiting fellow from Austria, I have learned that it is also the land of typhoons and earthquakes.

Why did I choose Japan? Because I longed for something different and thought that I could find my personal challenge in Asia. Western scientists working in Japan are relatively rare. In 2003, the Japan Society for the Promotion of Science (JSPS) brought in 144 European researchers and 117 US researchers for short stays, and only 32 Europeans and 15 US scientists for longer-term stints.

I applied for a JSPS short-term stipend and

eventually got an invitation to work for two months at the pharmaceutical sciences department of the University of Osaka. Life as a scientist here is very different from anywhere else I have worked. The Japanese system places a premium on tight supervision, close collaborative effort — and long hours.

Apart from needing permission from my *senzai* to take cover in the event of a typhoon, I also need his permission to begin experiments. Every new experimental idea must be checked by the *senzai* and then the professor. On Fridays, students and junior researchers present a summary of their week's activities and deliver exact research plans for the following week.

A magnetic board monitors the presence and location of everyone in the lab. Right at the beginning, I received my personal marker to indicate exactly where I spent my time. And

Japanese students have to dispose of their rubbish and clean their labs themselves.

Working days begin at 9:30 a.m. and usually end at about 10 p.m., with seminars (in Japanese only) sometimes held on Saturdays. Most students extend their work to weekends and holidays. Sleep deprivation often takes its toll in seminars or in front of the computer — but not to worry, there is no shame in dozing off at any time or anywhere.

Apart from experiencing a different research environment, doing a working visit to this country has allowed me to experience an entirely different way of life. I'd advise Western scientists to consider a visit. But take some language lessons first — and be prepared to work in a more controlled environment. ■

Marika Willeroeder recently completed her PhD in genetics at the University of Salzburg, Austria. ♦ www.jsps.go.jp

MOVERS

Harry Finch, senior vice-president of therapeutics, Argenta Discovery, Harlow, UK



For someone who co-invented an asthma drug that is, so far, worth nearly US\$1.8 billion, Harry Finch didn't exactly make a flying start. He left school at 16 to work in a tar distillery, with just five exam passes. His only science subject was physics-with-chemistry; he wasn't considered good enough at chemistry to take a whole exam in it.

Part-time study followed, and a

string of awards. Everything fell into place when a far-sighted teacher steered him towards organic chemistry.

"I was lucky because, then, I knew I'd found my niche. Very few people find their true niche, the work that matches what they're best at," says Finch.

Married with children by the time he gained his PhD at 27, he opted for a steady job. He found one at Glaxo, where he learned biology from colleagues. "I loved it," says Finch. "And I needed it for drug discovery."

Serendipity played a role in the invention of the beta-agonist salmeterol, he says, quoting Louis Pasteur: "Chance favours the prepared mind." He and his team were working on a cardiovascular drug, but kept noticing that their molecule had the activity sought by the asthma-drug team.

"Finally, we went to them and said: 'Why don't you make this analogue?'," Finch recalls. "They did, and they only

had to make two more changes and that was salmeterol."

When a merger scattered his 280-strong chemistry group in late 2000, Finch switched to biotech companies. His latest move, to Argenta Discovery, has returned him to a familiar area, as the firm works on respiratory therapeutics.

Having experienced both big drug companies and the "white knuckle" world of small biotech, Finch is aware of the advantages of each. In a small biotech you multitask across scientific and discipline boundaries, he says. But a big company provides more people in more disciplines from which to learn.

"I'd encourage people to get experience in at least two places, medium and small or big and small," he says. "Try them both as early as possible and get as much variety of experience as you can." That mix of experience can help young scientists find their niche — just as Finch did after his late start. ■

CV **2004:** Senior vice-president, therapeutics, Argenta Discovery, Harlow, UK.
2003–04: Research director, British Biotech/Vernalis, Cambridge, UK.
2001–03: Research director, RiboTargets, Cambridge, UK.
1978–2001: Research manager to director of chemistry, Glaxo/GlaxoWellcome, UK.
1976–78: Team leader, medicinal chemistry, Allen & Hanbury's, Ware, UK.
1975–76: Senior chemist, Roche Products, Welwyn Garden City, UK.
1972–75: MSc and PhD, University of Manchester, UK.