

MOVERS

Haifan Lin, director, stem-cell programme, Yale University, New Haven, Connecticut



1994–2006: Assistant then full professor, Duke University, Durham, North Carolina

1990–94: Postdoc, Carnegie Institute of Washington, Washington DC

Haifan Lin made an early decision to pursue only projects that he felt passionate about. Physics and maths captivated him first. But when he heard the term 'genetic engineering', he thought he'd found the ultimate scientific feat.

While a biology undergraduate at Fudan University in Shanghai, Lin became one of the first Chinese students to win a joint China-US biochemistry fellowship. He went to Cornell University, where he was fortunate in his adviser, Mariana Wolfner. A new assistant professor, Wolfner was just starting her own lab, focused on gender-specific gene expression. But she supported Lin in studying the genes responsible for initiating embryonic cell division. His success vindicated the risks he'd taken. "It also gave me the confidence that I could get a new project to work," he says.

Seeking a fresh way to study cell division in development, Lin chose to work on stem cells as a postdoc with Allan Spradling at the Carnegie Institution of Washington, years before these cells became a household term. Although most such work was being conducted on mammalian cells, Lin focused on identifying stem cells in the fruitfly. He found that stem cells were not autonomous, as had been thought, but could have their function controlled by adjacent cells.

His achievements in stem-cell research paved the way to a faculty position at Duke University in Durham, North Carolina. There, Lin respectfully disregarded warnings from colleagues not to spread himself too thin, and opted to extend his stem-cell research in mammalian and even clinical directions. "I wanted to pursue interests that allowed me to see the bigger picture," he says. But, he adds, it was more difficult than starting a new lab in his field of expertise. "We had to start over from square one — even learning how to determine the gender of mice," he says.

In 1999, Lin started working with Duke researchers and clinicians to create an informal stem-cell programme, which eventually led to a university-supported programme co-directed with Brigid Hogan. He recently left to head a similar programme at Yale University. After a year of strategic planning, Yale leaders and Lin have created a new centre focused on fundamental stem-cell biology.

Lin's courageous approach to taking on new areas of research set him apart from other candidates, says deputy dean for scientific affairs at Yale's School of Medicine, Carolyn Slayman. But, his optimism, curiosity and, most importantly, his energy, she says, convinced everyone that he would set Yale's work apart from others. ■

Virginia Gewin

RECRUITERS & ACADEMIA

Investing in people

As the biomedical research enterprise evolves, funders' portfolios must evolve along with it. We need to respond to the growing importance of multidisciplinary research, consider how to nurture research in translational medicine, and make sure gifted young researchers are given sufficient opportunity to establish their careers.

The Wellcome Trust traditionally gives high priority to supporting individual scientists, through training programmes and career fellowships, which currently account for more than 20% of its funding. But to ensure that our funding schemes reflect emerging trends in biomedical science, we recently revamped our personal-support funding portfolio.

Establishing a research group is an important step. The Wellcome Trust's research career development fellowships, like most such awards in Britain, are for people who have held at least one postdoctoral position. But some high-flyers are ready for independence earlier. Our new Sir Henry Wellcome fellowships are for people within the first year of getting their PhD. These four-year awards will give postdocs ample freedom to tackle important biomedical questions in leading labs in Britain or overseas.

Young clinicians wishing to start a

research career in Britain can apply for a Wellcome Trust research training fellowship, but the quality of training environments does not always match the calibre of candidates. Meanwhile, research training for medics is at a premium. With clinical training also undergoing a major shake up in Britain, there is a need for a strong, integrated approach to clinical research training. We are launching a competition to host PhD programmes for clinicians, based in labs where research and training is of proven excellence. These will complement existing fellowships and help medics to identify first-class supervisors and mentors.

Opportunities for researchers to collaborate, learn skills and obtain experience in other disciplines are also crucial, particularly with the growth of inter- and multidisciplinary research. Our new flexible travel awards will help established scientists take sabbaticals and provide travelling fellowships to those without established posts.

Biomedical research has become a competitive, global endeavour. We hope our revised portfolio better reflects the challenges and opportunities for research in the twenty-first century. ■

Sohaila Rastan is director of science funding at the Wellcome Trust.

GRADUATE JOURNAL

Sounds of scientists

Heading downstairs late one night to concentrate DNA in the speed vac, I thought I had finally lost it after too many long nights in the lab. As I was putting my samples in the machine, I thought I heard someone bellowing show tunes from around the corner. Poking my head into the adjacent lab space, I discovered a now mortified friend of mine, Sandra, singing along at full tilt to the soundtrack of the musical *Wicked*. That's when I realized that maybe she had lost it.

Alternatively, perhaps we're both still at least somewhat sane. The truth is, I too have been known to carry a tune or two. Usually I sing along with the big speakers in the lab blaring, when I think no one is around. Occasionally I slip up when I have headphones on and everyone is around. It's never musicals, though — folk rock is more my thing. The exact choice of tunes changes with my mood. I spent one rather bleak month of unsuccessful experiments soulfully intoning Bob Dylan's *Highway 61 Revisited*. By contrast, after a particularly long and fruitful day of experimenting you'll find me rocking out to Bruce Springsteen's *Better Days*.

I suspect Sandra and I aren't the only lab crooners. We all have to vent our emotions somehow. I've spent a lot of hours talking to my yeast, some in joy and many in frustration. At least Springsteen knows how I feel. Refer to his recent release: it's titled *How can I keep from singing?* ■

Milan de Vries is a molecular-biology graduate student at the Massachusetts Institute of Technology.