NEWS

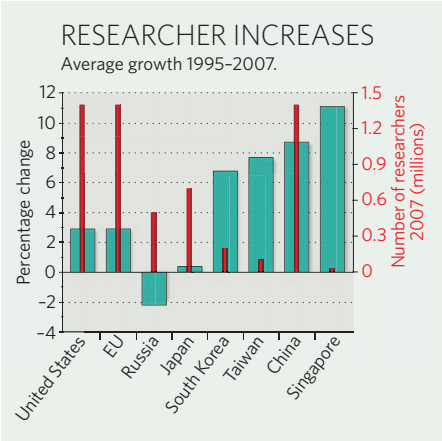
China's research rise

China has approximately as many researchers as either the United States or the European Union (EU), according to the US National Science Foundation (NSF) *Science and Engineering Indicators 2010* report.

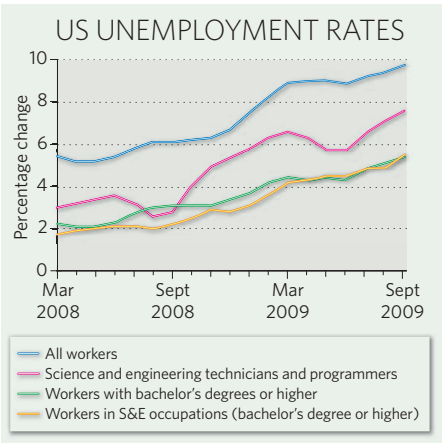
The biennial report found that each of the three had about 1.4 million researchers as of 2007, but the annual growth in the number of researchers is much higher in China (see graph, top right). That growth includes a continued steep increase in the number China's science and engineering doctorates, up to 21,000 in 2006, the latest data available. The relentless rate of growth over the past decade is unusual, says Rolf Lehming, programme director of the indicators project. "When we see this kind of strong increase in numbers, we usually expect a flattening out after several years," he says.

Although most of the NSF indicators are based on statistics collected before the global recession took hold in 2008, the NSF did track more recent unemployment figures for US scientists. Unemployment rates for scientists and engineers remain lower than for the general population. However, the estimated recent rate of unemployment increase was much higher for scientists and engineers (see graph, right). From March 2008 to September 2009, the rate increased from 5.4% to 9.8% for the general population, less than a twofold change. For scientists and engineers, it tripled, jumping from 1.8% to 5.4%. ■

Gene Russo



SOURCE: NSF *SCIENCE AND ENGINEERING INDICATORS 2010*



SOURCE: US CURRENT POPULATION SURVEY, PUBLIC USE MICRODATA SAMPLE

the people you mentor often realize the effect much later. That makes this award a very special, humbling thing. I'm delighted to be recognized.

What motivated you to create some of the most progressive graduate maternity policies in the country?

I grew up in Cleveland, Ohio, in a family in which the stereotyped roles for men and women were very much alive. Going to an all-boys school didn't help. But my wife, who regards herself as a feminist, and my three daughters, who all have professional careers, made me much more sensitive to women's issues. I strongly believe that the wealth of a country is tied up in its skilled, educated people, not in its resources. Therefore, it is incumbent on society to make use of the whole human talent pool, not just half of it. We need more policies, such as 12 weeks' paid leave for late-stage pregnancy, childbirth and newborn care, that can help keep women in science.

What is the secret to successful mentoring?

Confidence building. Understanding people's strengths even when they don't realize them themselves. The other thing is giving people the freedom to do what they want. It is helping people find a delicate balance between passion and persistence.

Do you enjoy teaching?

Teaching is the researcher's secret weapon. You never question how well you know something as keenly as when you are responsible for explaining it to others. Teaching forces you to question what's known, or whether there could be another way — which is exactly the attitude a researcher should have. Every time I teach a course, I learn something from the process.

What's next for your research career?

Oh, I'm not done. I'm not satisfied yet. I have various projects left to solve. In fact, I'm quite interested in pursuing whether some of my research could have a medical pay-off. For example, I'm exploring a way to use isotopes to study disease states. ■

Interview by Virginia Gewin

IN BRIEF

From lab to laundry

Female US scientists do nearly twice as much housework as their male counterparts, according to a study in *Academe*, the online publication of the American Association of University Professors. Science historian Londa Schiebinger of Stanford University in Palo Alto, California, and analyst Shannon K. Gilmartin found that partnered women scientists at 13 top US institutions do some 54% of household tasks, requiring more than 10 hours a week on top of the 60 hours they work. Partnered male scientists, however, do just 28%. The remainder is done by hired help. The authors propose that university benefits could be made more flexible to include support for housework help.

Responsible work plans

Three non-profit agencies have published a booklet to clarify US animal researchers' responsibilities under the Freedom of Information Act (FOIA) in light of escalating threats by animal-rights activists. *Responding to FOIA Requests: Facts and Resources* gives advice on how to deal with information requests under the act, which activists are increasingly using to target scientists. The publication, by the National Association for Biomedical Research, the Federation of American Societies for Experimental Biology and the Society for Neuroscience, gives such tips as not posting personal data online.

India offers foreign grant

For the first time, an Indian educational institution is launching a paid fellowship programme for international science students. The Indian Institute of Science (IISc) in Bangalore will support some international students admitted to its doctoral or master's degree programmes in science or engineering. The fellowship will pay 15,000 rupees (US$325) a month. One-third of this covers accommodation, food and tuition; the rest is for miscellaneous expenses. The IISc hopes that the influx of international students will boost campus diversity and that fellows will pass on positive reviews to potential students in their home countries. The IISc admits about 600 students annually, and expects to bring in 5–10 fellows for autumn 2010, with an eventual goal of 60 per year.