

MOVERS

Stephen Brandt, Director, Oregon Sea Grant, Corvallis, Oregon



1997-2008 Director, NOAA Great Lakes Environmental Research Laboratory, Ann Arbor, Michigan

1994-97 Director, Great Lakes Center for Environmental Research and Education and Professor of Biology, State University of New York College at Buffalo, New York

As the new director of Oregon Sea Grant, Stephen Brandt has eagerly accepted a daunting task: helping the US Pacific coastal regions address fisheries declines and prepare for climate change. It's his latest interaction with Sea Grant, the coastal science programme of the US National Oceanic and Atmospheric Organization (NOAA), which has been a staple of his career since he was conducting graduate research.

California Sea Grant director Russ Moll says that Brandt's background will boost ecosystem-based management efforts. "Stephen is one of those rare folks with the skills to look at the big picture in oceans — which we need as we struggle with ecosystem-wide concerns such as ocean acidification," says Moll.

Brandt started his science career with a mathematics degree at the University of Wisconsin in Madison. But the outdoorsman decided to get a second degree in zoology, and spent weekends conducting field work on Wisconsin's freshwater lakes. That led to a graduate project applying sonar to study fish dynamics, then a PhD using underwater acoustics to see how temperature affects habitat preference in Great Lakes fish. But instead of accepting a tenure-track position there, he joined the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Marine Laboratories in Australia. "I sought adventure when, at 28, I took the Australia position — and I got a full-blooded marine experience," he says.

At the CSIRO, he refined acoustic approaches to investigate how Australia's vast, warm eddies might serve as nursery grounds for fish in the open sea. After four years, Brandt returned to the United States to study the Great Lakes' evolving salmon fishery with Sea Grant's programme at the State University of New York in Syracuse. Later, he studied the largest US estuary at the University of Maryland's Chesapeake Biological Laboratory.

When Sea Grant's Great Lakes Center for Environmental Research and Education was created in 1994, Brandt jumped at the chance to direct it. Four years later, he was overseeing the NOAA's Great Lakes Environmental Research Laboratory in Ann Arbor, Michigan, where he created a single 'science' branch to strengthen the cross-disciplinary work that bolsters their now-leading role in ecosystem forecasting. Moll says that Brandt's past success with region-wide projects will help the west coast to tackle the effects of climate change, including organism range shifts and increased storminess. ■

Virginia Gewin

NETWORKS & SUPPORT

Masters of professional science

Some people have expressed concern about the legitimacy, usefulness and costs of professional science master's (PSM) degrees, a relatively new US entity that could promise additional career avenues for fledgling scientists (see *Nature* **454**, 547; 2008). As advocates and purveyors of the PSM, we would like to address those concerns and endorse it as an option for scientists seeking management and science training in just a few years.

First, it is not intended for students considering a PhD, although a few PSM graduates do continue on to the PhD after becoming excited by the research to which they have been exposed. Rather, it is designed for students and science professionals who want to work in non-academic sectors, in interdisciplinary fields and in emerging areas. Science professionals looking to gain a competitive edge, re-enter the workforce or refine their skills may also find it worthwhile.

Second, the PSM is a relatively new degree; there are approximately 2,100 graduates nationwide. Not enough data exist yet to declare it a clear success. But the data we have are promising. A recent survey showed that in two years alone, the number of programmes grew by at least 20% (2006-08), and enrolment increased

54% (2004-06). Placement data are also encouraging: almost 70% of 2006 graduates who were not already working full-time found employment in business, government and non-profit sectors, either before they graduated or immediately after.

Cost is an issue. In contrast to PhDs, the master's degree is usually funded by the student. However, the highly competitive salaries PSM graduates can expect make it a worthwhile investment. A recent report from the National Research Council (NRC) notes a strong and growing current demand for master's-level science professionals and healthy growth in the salaries of master's degree-holders in science and engineering — salaries that have grown faster during the past ten years than those of PhD holders. The NRC advocated financial aid for PSM students.

There is good evidence to date that the PSM is a worthwhile investment, and that it benefits the institution and the employer. We are confident that forthcoming data will support the PSM even more strongly. ■

Eleanor Babco is co-project director, Professional Master's Initiatives. Carol Lynch is senior scholar in residence and director of Professional Master's Programs at the Council for Graduate Schools.

POSTDOC JOURNAL

The coming challenge

In 2009, I will start yet another project: a baby. It is a terrifying prospect. But many seem surprised at my financial anxiety, given the Singapore government's policies aimed at boosting a birthrate in decline. Incentives range from financial bonuses to the creation of a fund to encourage family-friendly work practices. Some even say that childbirth is a woman's 'national service' or duty.

The tax breaks and additional days of childcare leave provide welcome relief, but as a researcher, many family-friendly options are not feasible, such as extended maternity leave or working part-time or from home. Given the high expectations of employers, a career break might mean career suicide. We are evaluated according to productivity, which is inevitably affected by parenthood. One non-scientist relative of mine was told that her maternity leave cost her a promotion. The competitive environment may be exacerbated by single people and childless couples who are upset by policies they perceive as discriminatory.

A newspaper article here recently profiled two successful female senior researchers, citing them as role models. One is single, the other divorced. Being successful may come at the cost of one's marriage. As I prepare to start a family, I must re-evaluate my priorities. I will soon discover for myself how Singapore's biomedical research community defines 'work-life balance'. ■

Amanda Goh is a postdoctoral fellow in cell biology under the Agency of Science, Technology and Research in Singapore.