

MOVERS

Linda Birnbaum, director, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina



2008-present: Senior toxicologist, National Center for Environmental Assessment, Research Triangle Park, North Carolina
1989-2008: Director, Experimental Toxicology Division, National Health and Environmental Effects Research Laboratory, Research Triangle Park, North Carolina

After 16 months without a director, the US National Institute of Environmental Health Sciences (NIEHS) in Research Triangle Park, North Carolina, has a new head. Toxicologist Linda Birnbaum, who has spent much of her career at the Environmental Protection Agency (EPA), took the helm at the institute this month.

Birnbaum started off as a biologist at the University of Rochester in New York, and was soon attracted to the burgeoning fields of molecular biology and molecular genetics. Her PhD at the University of Illinois in Urbana saw her map the ribosomal RNA genes of *Escherichia coli*. After a postdoc at the University of Massachusetts in Amherst and a stint at Kirkland College in Clinton, New York, Birnbaum took a post at the Masonic Medical Research Laboratory in Utica, New York, where she studied ageing. Here began her career-defining work in toxicology.

In studying how altered metabolism could affect ageing, Birnbaum modulated metabolism in rats using dioxins and polychlorinated biphenyls. She looked at how these chemicals break down in the human body and for the next 10 years explored the molecular effects of dioxins, analysing the relative toxicity of related chemicals, and designing long-term bioassays to assess cancer risk. "If anybody had told me that 30 years later I'd still be working with that family of chemicals, I wouldn't have believed them," she says.

Taking over as head of the EPA's Environmental Toxicology Division in 1989, Birnbaum expanded its ranks to an all-time high of 90 full-time employees and dozens of students and postdocs. Despite budget cuts, she found ways to continue toxicology studies by partnering with other federal agencies or academia. She spearheaded some of the first work documenting the mechanism of action of endocrine-disrupting chemicals, such as brominated flame retardants.

Kenneth Ramos, president of the Society of Toxicology, hopes that Birnbaum will help the NIEHS, and the maturing field of environmental health, better define itself. "With an internationally recognized toxicologist as its leader, the institute can now focus its efforts and have an impact on disease causes," he says. "Linda has the expertise and conviction to inspire and grow the institute on many levels."

Birnbaum is encouraged by the incoming administration of Barack Obama's stated commitment to science, health and the environment. "I plan to create a holistic approach that can deal with the biggies, from complex mixtures of toxic chemicals to climate change," she says. ■

Virginia Gewin

NETWORKS & SUPPORT

Research assistants join a union

Research assistants at the Research Foundation of the State University of New York (SUNY) in Stony Brook have decided to unionize — the latest development in ongoing unionization battles at US universities. Nearly all who voted last month to join the Communication Workers of America (CWA) are working in science, says Matthew Engel, a Stony Brook research assistant who campaigned for union representation. Frustrated by issues such as fees and job insecurity, they are seeking benefits comparable to those received by teaching assistants.

Research assistants are graduates temporarily doing academic research at a college, university or non-university institution. They usually work on projects supervised by full-time academics who administer the funds that provide their salaries. Teaching assistants generally receive fixed pay from the university.

In 2004, the federal National Labor Relations Board ruled that research assistants are students, not employees, and so could not be represented by a union. But a 2007 board ruled that those at the SUNY Research Foundation in Albany, Buffalo and Syracuse were fundamentally employees.

Teaching assistants are already represented by the CWA. "We found

out that they had negotiated some benefits, and we thought it was a good idea," says Engel, a doctoral student in Stony Brook's biomedical engineering department. According to the union website, its local branch now represents more than 4,000 research and teaching assistants throughout the SUNY system. Engel hopes to negotiate reduced fees and improved pay and health benefits.

SUNY research assistant Luigi Longobardi emphasizes the importance of job security for non-US research assistants whose visa status depends on funding. "If we're going to be without funding, we should have a fair amount of time to find another adviser or alternative sources of funding," he says.

According to the Coalition of Graduate Employee Unions, some 30 unions cover graduate employees on more than 60 campuses.

"The Research Foundation is committed to following all laws and regulations related to collective bargaining," a foundation spokeswoman says. The university has raised no objections to the vote.

Engel says the research assistants are selecting a negotiating team and expect to sign a contract with the Research Foundation soon. ■

Karen Kaplan

POSTDOC JOURNAL

A pregnant pause

What is the science behind short-term memory loss? As the sleep-deprived mum of a six-month-old boy, I'd enjoy knowing the technical aspects of my hamstrung brain. I study craniofacial development and evolution with the aim of understanding the molecular mechanisms underlying coordinated morphological change in the teeth and jaws, mostly in primates.

I've had frequent memory lapses since returning to the lab in December after half a year of leave. Finicky bench work was challenging enough when my pre-offspring focus was at its sharpest. I will have to compensate for my sideways mind by finding tactics that enable me to be productive while managing the baby's demands on my time. I am my own work-life balance guinea pig.

The next 12 months will be about finding my balance as a partner and a parent, regaining my stride as a scientist, and achieving my career goals. I aim to be a tenure-track assistant professor with my own lab and minions. (What's a bona fide scientist without minions?) Will I cut it? Or will I cut out? Private industry may offer me a more liveable (and lucrative) work-life equilibrium. I must thoroughly research how my skills could best be applied in an enjoyable non-scientific career. And I must talk to people who have successfully made this leap. This is my quandary and my journey as a postdoc. ■

Julia Boughner is a postdoc in evolutionary developmental biology at the University of Calgary, Canada.