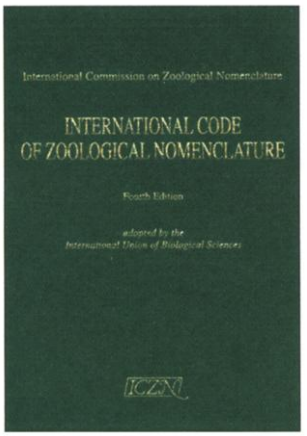
TAXONOMY

Zoology Naming Rules Eased

While most of biology has kicked into hyperdrive, taxonomists pride themselves on keeping their research in line with work done decades, even centuries, ago. That means sticking with the principles that each organism's true name be the oldest one appearing in the print literature, all names be in grammatically correct Latin, and any deviations from these rules be approved by an international commission. But even taxonomists are feeling the pressure of our accelerated pace of life, as shown by the new edition of the *International Code of Zoological Nomenclature*, (ICZN) a set of naming rules that first came out in 1905 and was last updated in 1985.



Going green. The 95-year-old *Code of Zoological Nomenclature* has its first green cover, instead of a red one, reflecting its editors' hope that 2000 will be the dawn of a biodiversity millennium.

The code, newly revised under the auspices of the International Commission on Zoological Nomenclature, allows its users to make some time-saving changes and even begins to bring zoological nomenclature into the digital age. Still, a few researchers fear that the revisions don't go far enough in preparing the field for the 21st century. "A lot of people wanted a lot more changes," notes William Eschmeyer, an ichthyologist at the California Academy of Sciences in San Francisco.

To its credit, the new, fourth edition "gives individual scientists a lot more authority" to sidestep priority when they find an early name if that name has not been in use for at least 100 years, says Eschmeyer. It also relaxes some rules for making sure that the Latin spellings of names are correct. And while the old rules required that descriptions of new animals or name changes be printed in a journal, the new code allows researchers to publish them on compact discs, as long as "identical and durable copies" are put in at least five libraries that are accessible to the public. The World Wide Web, however, is not acceptable, nor are electronic journals, says Alessandro Minelli, a zoologist at the University of Padova in Italy.

To streamline searches for existing species names, the code opens the door to the establishment of official species lists that anyone could check. "There are many lists in progress," notes Minelli, president of the commission, but there is no agreement yet on exactly how the lists should be set up or kept current. That, he says, may be in the next revision.

At least one of the revised code's new authors, entomologist F. Christian Thompson of the U.S. Department of Agriculture systematics laboratory at the National Museum of Natural History, wishes that the commission had not put off that step, however, and that the code had also gone further in eliminating Latin requirements so as to make it easier to automate and computerize taxonomic data. Indeed, Thompson worries that there might not even be a "next revision." Over his 25-year career, he says he has seen a steady decline in the number of taxonomists as the pace of progress in other areas of biology lures budding scientists. "With fewer and fewer people [in the field], I'm not sure we could assemble a core group of people to do this again," he says.

–ELIZABETH PENNISI

POSTDOCS

Academy Plans Guide To Improve Status

"I'm taking a risk just being here. Missing a day of work could raise questions about my priorities." That frank statement from Daniel Zuckerman, a physiology postdoc at Johns Hopkins Medical Institutions in Baltimore and president of the university's Postdoctoral Association, reflects the vulnerability that many postdocs feel today. But Zuckerman was among friends: His comments were made at a workshop held late last month by the National Academy of Sciences (NAS) that was aimed at reducing that vulnerability for the 40,000 postdocs who contribute mightily to the U.S. research enterprise but rarely receive commensurate pay, rights, or recognition.

Zuckerman and 100 other people crammed into an academy conference room in Washington, D.C., to offer advice to its Committee on Science, Engineering, and Public Policy (COSEPUP) on a publication due out in the fall. Its "Guide to the Postdoctoral Experience" will describe issues facing these fledgling scientists and advise all the players—graduate students, postdocs, mentors and supervisors, university administrators, and the government agencies whose funding keeps the system afloat—of their rights and responsibilities. (Questions and comments may be sent to cosepup@nas.edu)

The status of postdocs is a hot topic in academic circles (*Science*, 3 September 1999, p. 1513). Last month, for example, the Association of American Medical Colleges adopted a 1998 report from the Association of American Universities that tells institutions to define the position clearly; set "realistic" salaries and benefits; standardize hiring, training, and evaluation practices; and create an office to enforce these policies. A growing number of universities have already taken such steps, and a dozen postdoctoral associations have sprung up to negotiate better working conditions and raise postdocs' visibility.

The academy hopes its guide will move this process along. Discussion of a draft ranged from tips on setting up a central postdoc office to questions of whether performance appraisals are an important management tool or a waste of time. But it was pay and working conditions, especially in the life sciences, that brought emotions to a boil. "The issue is one of basic fairness," said immunologist Jack Bennink of the National Institute of Allergy and Infectious Diseases, speaking about the 2800 postdocs on the National Institutes of Health (NIH) campus. "If we don't pay them a living wage, in 10 years [U.S. science] will be hurting for talent."

Many participants professed surprise that institutions follow the scale for NIH's National Research Service Award fellows, which starts at $26,252. "We couldn't get approval for anything under $35,000," said Massachusetts Institute of Technology electrical engineer Mildred Dresselhaus, a COSEPUP member who chaired the workshop. And even that amount may be low: NASA's Jet Propulsion Laboratory and the National Institute of Standards and Technology pay in the mid- to upper $40s, representatives noted, while Eli Lilly's Jean Labus said the Indiana drug company starts its life science postdocs at $42,000. And although

Work in progress. Proposed guide hopes to stimulate debate on role of postdoctoral scientists.

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