"It's going to be an important resource for physicists and for encouraging girls to go into physics," Herzenberg predicts.

The site currently contains citations for about 50 women, and the plan is to add about 100 more, with hypertext links to the actual research papers, says Betty Anderson, a UCLA historian who is the project's research associate. She and other contributors are also preparing essays that will "tie the women's stories together and give the bigger picture." One essay she is working on will discuss the affects of the Nazi rise to power on women physicists in Germany and Austria during the 1920s and 1930s (Peter Galison's article, on page 42, describes the ordeals of one of those women, Marietta Blau).

The success of the CWP Web site has inspired the APS committee on minorities to commission a similar site for minority physicists. George Ofori-Boadu of Hampton University is now gathering biographical information on African-American, Native American and Hispanic American physicists for possible inclusion in such an on-line archive.

JEAN KUMAGAI

Physics and Politics Mix on Capitol Hill

What do x-ray lithography, cloning, groundwater contamination and Mikhail Gorbachev have in common? They are all topics encountered by the four physicists serving as Congressional Science Fellows this year. The American Institute of Physics (AIP) and several of its member societies—the American Physical Society (APS), the American Geophysical Union (AGU) and the Optical Society of America (OSA) jointly with the Materials Research Society (MRS)—each sponsor scientists to spend a year working on Capitol Hill. More than 30 professional societies participate annually in the fellows program, which is run under the auspices of the American Association for the Advancement of Science.

One of the suits

"My impressions keep changing as I go," comments Steve Hagen, a biological physicist who worked on protein folding at the National Institutes of Health before accepting AIP's 1997 fellowship. In his staff position with the Senate Banking, Housing, and Urban Affairs Committee, Hagen has been involved in oversight of the banking industry and exploring how encryption technologies, privacy issues and the year 2000 computer problem could affect electronic banking. He finds it "interesting to see how public pressure drives Congress." Although banking issues are his primary focus, Hagen found himself on more familiar ground when constituent concerns prompted the committee chairman, Alfonse D'Amato, a New York Republican, to have staffers investigate reports of tritium leakage thought to be from a spent fuel storage pool at Brookhaven National Laboratory. At the same time, Hagen found it disconcerting to be viewed by the Brookhaven scientists as one of the "suits from D'Amato's office."

S. HAGEN

The APS fellow for 1997, Joseph Michels, serves as a staffer for Joseph Lieberman, a Connecticut Democrat and a founding member of the bipartisan Senate Science and Technology Caucus. Michels helped to plan the caucus's first roundtable discussion, at which ten guests from academia, industry and government shared their insights on how government can encourage technological innovation. Lieberman is also on the subcommittee that authorizes military R&D, and Michels reports that Department of Defense officials caught the attention of the subcommittee members with testimony that cutbacks in defense research were imperiling the military's technology base. (Both the House and Senate subsequently called for increases in DOD's funding of basic and applied research.) Michels has found his doctoral work in experimental condensed matter physics at the University of Oxford invaluable in convincing others on Capitol Hill of the potential of technologies such as x-ray lithography.

J. MICHELS

Michal Freedhoff could not have expected her 1997 OSA/MRS fellowship to lead to an encounter with Mikhail Gorbachev. She works in the office of Representative Edward Markey, a Massachusetts Democratic and a founder and cochair of the House Bipartisan Task Force on Nonproliferation. Charged with finding a speaker for the inaugural meeting of the task force, she scored a coup when a spur-of-the-moment phone call she made resulted in Gorbachev's acceptance. Prior to her fellowship, Freedhoff, a physical chemist from the University of Rochester, helped develop "Physics Success Story" flyers for AIP. In Markey's office, in addition to working on nuclear nonproliferation issues, she has tackled issues of high-level nuclear waste disposal, Superfund cleanup of hazardous waste sites and electric utility deregulation. She also has had the thrill of seeing a quote from a floor speech she wrote for Markey, in which he ridiculed the furor over the United Nations' designating certain US na-

M. FREEDHOFF

tional parks as World Heritage sites, appear in the *Washington Post*: "For reasons that make about as much sense as those used to put forth the theory that little green men are communicating telepathically with US government officials in order to conquer planet Earth, we are asked to believe that the United Nations is engineering the takeover of the United States through a carefully orchestrated infiltration of our National Park Service."

AGU's 1997 fellow, Jack Herring, found himself in uncharted territory when he was asked to assist his boss, Representative Vern Ehlers—a Michigan Republican who is the only PhD physicist in Congress—prepare a bill to ban research on the cloning of humans. Herring, previously an atmospheric chemist at the Geophysical Institute of the University of Alaska, Fairbanks, was more in his element examining the data behind the Environmental Protection Agency's controversial new clean air standards. He expresses fascination at how both opponents and advocates of the standards attempt to use scientific arguments to justify their positions, but adds, "If one more lawyer tells me what constitutes good science, I'm going to scream."

J. HERRING

A need for scientific voices

The four fellows say it's been enlightening to discover that science is a factor—though only one factor—contributing to policy decisions made on Capitol Hill. "Scientific arguments don't necessarily settle an issue," notes Hagen. "I think many scientists feel the role of the government is to keep the money coming. They don't realize there are other issues where [science and government] come in contact." Michels adds that "the perspective on the Hill is radically different from [that in] the laboratory." Senators have so many issues to contend with—ranging from China's trading status to abortion to national security—that "the science community has to learn to present a coherent case for why science funding is significant, without overstating its case." Two of this year's fellows say that once their terms end, they hope to extend their stays in Washington or even pursue full-time careers in science policy.

New faces

Replacing Hagen as the AIP fellow in January will be Kathryn Clay. She managed a Ford Motor Co project studying fast-charging techniques for electric cars while finishing her PhD in applied physics at the University of Michigan. In addition, she spent the summer of 1996 as a visiting scientist in the State Department's Office of Global Change, and two months in 1994 at the University of Cape Coast in Ghana, where she helped develop laboratory experiments for the university's new laser physics center. Peter Rooney, who for the last few years has directed National Research Council studies for the Space and Naval Studies Boards, will take over the APS fellowship banner from Michels. AGU has selected Julie Moses, an astronomy research associate at the University of London's Queen Mary and Westfield College, as its incoming fellow, and Brian Holloway will start his term for OSA/MRS after he completes his doctorate in mechanical engineering at Stanford University.

Most societies select fellows in the spring for one-year terms beginning in the fall. Further information is available by phone from the sponsoring societies: AIP (301-209-3094); APS (202-662-8700); AGU (202-462-6900); and OSA/MRS (412-779-3004, ext. 501).

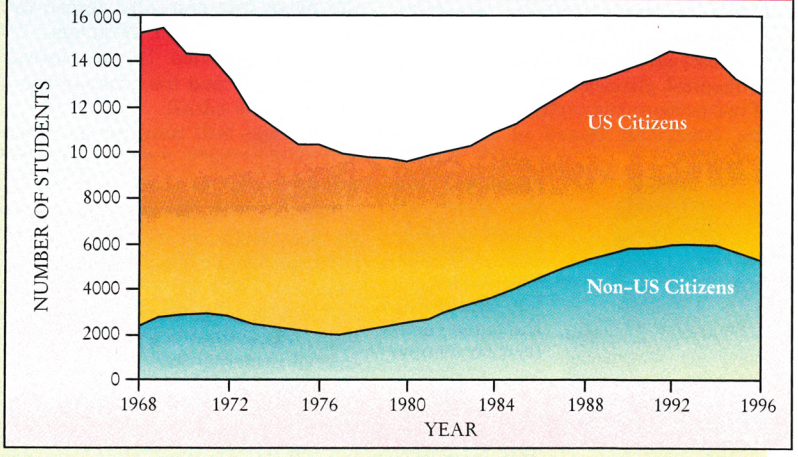
AUDREY LEATH

Scientists Immigrating to US Dropped Sharply in 1994

The number of foreign scientists and engineers granted permanent residence in the US fell by 26% between 1993 and 1994, the most recent years for which the National Science Foundation has compiled statistics. The 1993 figure was nearly double the stable, pre-1990 rates, a result of the 1990 Immigration Act, which let highly skilled workers enter the country as permanent residents, according to an NSF report (available on the World Wide Web at http://www.nsf.gov/sbe/srs/databrf/sdb97311.htm). That increase was bolstered by the 1992 Chinese Student Protection Act, passed after the 1989 massacre in Beijing's Tianamen Square and aimed at letting Chinese students who were temporarily in the US obtain permanent resident status. The drop in immigration in 1994 is attributed to adjustments following this swell and to less demand by employers.

Despite the overall decline, the number of incoming scientists and engineers from the newly independent states of the former Soviet Union and

Enrollment in US Physics Graduate Programs, 1968–96



Of the 12 600 graduate students who were enrolled in the 262 US physics graduate departments during the 1995–96 academic year, 43% were foreign citizens, according to a recent survey by the American Institute of Physics. Citizens of China continue to make up the largest proportion of foreign students (22%), nearly matched by those from the former Soviet Union and Eastern Europe (21%, up from only 3% in 1990). Condensed matter physics is still the predominant area of graduate study, chosen by 22% of physics doctoral students; the next most popular is particles and fields, with 14%. There were 1438 physics doctorates and 959 master's degrees conferred in the US in 1995–96. The *1996 Graduate Student Report* contains these and other data and is available free of charge from AIP, Education and Employment Statistics Division, One Physics Ellipse, College Park, MD 20740; e-mail stats@aip.org; phone 301-209-3070.