

PHYSICS COMMUNITY

Physicists Learn from Budget Battle at City College of New York

For much of the past year the physics department and the administration at the City College of New York have been locked in a pitched battle over proposed cuts in faculty and budget. For now, at least, the two sides have reached a truce: The department has agreed to a \$500 000 reduction in its \$2.8 million annual budget and a permanent staff cut from 39 to 32 by next September. The administration, for its part, has backed down from a threat to slash the department's faculty by half.

The recent crisis comes on the heels of a slower and quieter erosion of the department's resources. Even before the recent difficulties, the faculty had dropped from 45 professors six years ago, and technical and other support staff and graduate teaching slots had been lost as well.

The administration maintains that fiscal constraints, and nothing else, dictated the cuts. "It is certainly not our intent to diminish the vitality or strength of the department," said Charles DeCicco, a CCNY spokesperson.

Nevertheless, what's happened to CCNY physics has both puzzled and troubled many in the physics community. Since the late 1960s, when the PhD program was started under the chairmanship of Harry Lustig (now treasurer of the American Physical Society), the department has emerged as one of the country's finest. An external review in late 1994 declared that "the Department is now everywhere recognized in the profession as a strong place to do as well as to study physics." In the latest study of US PhD programs, the National Research Council ranked City University of New York physics—of which CCNY is the major component—in the first quartile, and within that category, the leader in the production of minority and women PhDs (see *PHYSICS TODAY*, November 1995, page 67). Three of CCNY's physics professors are members of the National Academy of Sciences (including Myriam P. Sarachik, one of the few women members), thirteen are fellows of the American Physical Society, and eight hold the rank of distinguished professor.

Things are bad all over

To be sure, fiscal cutbacks have hit all of the ten senior colleges, six community colleges and various other opera-

What happened here could happen elsewhere, says CCNY's Joel Gersten. Physicists should regard this as a "national issue."

tions that make up the CUNY system, of which CCNY is the flagship school. Last February, following Governor George Pataki's announcement that state funding for CUNY would be cut drastically, the CUNY board of trustees declared a "state of financial exigency," which among other things permitted the firing of both untenured and tenured faculty. Tuition was hiked and financial aid cut—with the unsurprising result that student enrollments this year are down 3 percent. An early retirement program has led to the departures of 472 senior faculty members—about 8% of the teaching staff—who are not being replaced by full-time professors. The university has closed 44 academic programs, targeted 22 others for closure and suspended 25 indefinitely. In many departments, graduate student support has evaporated, teaching loads have sharply escalated and professors have even been asked not to make outside phone calls.

And worse may lie in store. In her budget request for the coming year, CUNY chancellor W. Ann Reynolds mentions that the state has asked the university "to consider reductions that may rival in size those already sustained in the current year." Additional layoffs of full-time staff are not ruled out. And the governor's proposed budget released on 15 December would cut state funding for CUNY's senior colleges by 6.1%.

A protracted battle

Shortly after the state of exigency was declared last February, retrenchment committees at each CUNY campus began looking for potential cost savings. According to Joel Gersten, head of the CCNY physics department, details of the committee proceedings that leaked out revealed considerable hostility directed toward the department from various sectors of the college community.

In the administration's calculations, the main funding criterion became the ratio of "full-time equivalent" undergraduate students to faculty, which proved low for the science and engi-

neering departments because it essentially ignored campus-based doctoral teaching, mentoring, research and grant overhead returns to the college. The CCNY retrenchment committee eventually proposed that the physics department be cut by 7 (out of 39) to produce a budget savings of \$500 000. Gersten and his predecessor, Frederick Smith, were then asked to show how they would make those cuts. Over the summer and into the fall, they came up with various cost-cutting schemes that would allow a more gradual downsizing, over four or five years instead of one. They pointed out that the department's \$3.7 million in external grants brought in \$550 000 for the college. Each proposal was rejected. At one point deliberations took an even nastier turn as the administration threatened to cut the CCNY physics faculty to 18.

As word spread of the crisis at City College, members of the physics community rallied in protest. "We have little doubt that the outpouring of letters from our colleagues around the world played a significant role in averting the threatened catastrophe," Gersten told *PHYSICS TODAY*. In a letter dated 18 October 1995 to City College president Yolanda T. Moses, APS's Lustig voiced his concern: "You are not only destroying a department that has, largely through its own efforts, good sense and leadership, become the jewel in the crown of the College, but you are harming education and science in the national and international area. You should stop."

By the beginning of December, the administration had more or less agreed that the department's reductions came close enough to the \$500 000 it had been asked to cut. "It's been a protracted battle," Gersten said. "If things continue to go along as they appear to be, then it's resolved." But he added that at least one of the major researchers at CCNY has received an offer to go elsewhere and several others have "feelers" out. "The real damage may yet unfold," he observed.

A departmental how-to

"I believe this is a national issue in the sense that a lot of things we faced are generic to departments across the country," Gersten said. Indeed, last

year James Madison University decided to eliminate its physics department, only to reverse that decision several months later (see PHYSICS TODAY, March 1995, page 81, and October 1995, page 57).

Just before Thanksgiving the University of Rochester announced it would drop its PhD program in mathematics and cut the math faculty from 21 to 10. According to Joseph Neisendorfer, head of the math department, representatives of the American Mathematical Society have since met with university leaders and a number of prominent physicists have also protested the action. So far the administration has refused to budge.

As an aid to departments that find themselves similarly threatened, several City College physicists compiled the following suggestions:

▷ Try to make the administration realize that there are always fluctuations in the economic and political climate. A good department takes a long time to build, but it can be fractured in a very short time if radical measures are implemented.

▷ Unity within the department is essential. A coherent and well-thought-out response to challenges must be presented. All attempts at creating rifts between old and young, researchers and teachers, tenured and nontenured must be combatted. The full intellectual power of the faculty can be focused as a united front on repelling threats to the department.

▷ Publicity is a potent persuader: Inform other physicists about what is going on and invite colleagues at other institutions to write letters of support. This puts the administration under public scrutiny and causes it to think carefully about the wisdom of its proposed actions.

▷ Make sure that the data, qualitative and quantitative, being fed to administrative committees and to the upper echelons of the university are correct. Data can often be incorrect or presented in ways that prove to be misleading.

JEAN KUMAGAI

Few Changes So Far in National Labs' Physics Workforce

Over one-fifth of all PhD physicists who work in physics in the US do so at a national lab. But the uncertain future of the Department of Energy and of research funding generally has raised questions about the continuation of the national labs as a major employer of physicists.

In a study of the physics workforce

at 29 federally funded research and development centers, conducted by the American Institute of Physics last year, about 4500 PhD physicists were reported to be doing physics at the national labs, with 3450 of them holding permanent positions, 600 having post-doctoral appointments and the remainder being visiting scientists or otherwise temporary employees. The figures for 1994 and projections for 1996 were similar to last year's, the study found.

So far the budget and personnel cuts have disproportionately affected support staff and early retirements, explained Jean M. Curtin, who conducted the study with Christine Cassagnau. "In the future we expect they will hit the population we're looking at—PhD physicists." Indeed, when respondents were asked to comment on the short-term future of their labs or units, "the majority... indicated that the most they could hope for is to maintain the status quo," the study report stated.

The gross turnover of permanent PhD physicists was 4.3 percent in 1994, with 150 positions to fill and about 50 slots that the labs were not permitted to fill; a turnover rate of 4.6% was expected in 1995. The retirement rate was 4.3% in both 1993 and 1994, with about half of the retirees accepting offers of early retirement. Although a retirement rate of 3.7% was projected for both 1995 and 1996, the study report cautioned that the actual rate may be higher.

"The purpose of the study is to give us baseline data, so that we'll be able to see any changes in the future," Curtin said. AIP plans to continue the study biennially. Only those PhD physicists whose work involves physics—about 70% of all PhD physicists at the national labs—were included in the data, which were based on telephone interviews conducted between February and April 1995 with managers at the labs.

Copies of the 1995 *National Laboratory Workforce Report* are free. Contact: Christine Cassagnau, American Institute of Physics, Education and Employment Statistics Division, One Physics Ellipse, College Park, Maryland 20740-3843; phone 301-209-3071, fax 301-209-0843.

Bertsch Replaces Pines as RMP Editor

For the past 65 years *Reviews of Modern Physics* has offered scholarly review articles on a wide range of topics. For one-third of those years David Pines of the University of Illinois at Urbana-Champaign served as the journal's editor. This fall he turned the

reins over to George F. Bertsch of the University of Washington.

As editor Pines introduced the "Perspective" article, written by researchers at the forefront of a field and sometimes incorporating recent unpublished results. Pines also broadened the coverage to include applications of physics, mathematical physics, complex systems and most recently, quantum optics. Eight associate editors were added during Pines's tenure, and the length of the journal itself roughly tripled, to about 300 pages per issue.

Bertsch, the new editor, previously served as an associate editor of *RMP* and as a nuclear physics editor of *Physics Letters B*. He earned his PhD in physics from Princeton University in 1965 and remained on the faculty there until 1971, when he joined Michigan State University. Three years ago he became a professor of physics at the University of Washington and a senior fellow at the Institute for Nuclear Theory there. His research has focused on the application of many-particle quantum theory to nuclei and other systems, especially collective nuclear excitations and heavy ion collisions. He also does work in fields other than nuclear physics and has published in four of the five sections of the *Physical Review*.

As editor of *RMP*, Bertsch says he would like to see more articles that present developing areas of physics and that are accessible to graduate students. He plans to start a new section of the journal to publish occasional lecture notes from advanced-topic summer schools.

Clardy is Elected Vice President of ACA

Jon C. Clardy is the newly elected vice president of the American Crystallographic Association. On 1 January he succeeded Carol P. Huber, who is now ACA's president.

Clardy, the Horace White Professor of Chemistry at Cornell University, holds a BS in chemistry from Yale University and PhD in chemistry from Harvard University. Prior to joining Cornell in 1978, he was a professor of chemistry at Iowa State University. Clardy's research involves isolating and determining the structure of biologically active metabolites and understanding how these molecules interact with their biological targets.

In other results of the ACA elections, George Ferguson, a professor of chemistry at the University of Guelph in Ontario, was chosen to be the Canadian representative to ACA.