FRANCE

Biologist Wins Battle Over Bureaucratic Fungus

Betty Felenbok applied her passion for social justice to vanquish purchasing rules that were strangling French researchers

ORSAY, FRANCE—As a molecular biologist, Betty Felenbok spends her days trying to understand the soil fungus *Aspergillus nidulans*. But for many years she has also battled the creeping fungus of French bureaucracy. Felenbok's tireless lobbying efforts have helped loosen stringent purchasing rules that were tying the hands of her colleagues around the country (*Science*, 15 March, p. 1993). "Betty has done a great job getting us out of this mess," says molecular biologist Patrick Forterre, a colleague at the Institute of Genetics and Microbiology on the Orsay campus of the University of Paris, where Felenbok, 64, has worked since 1969.

A respected scientist whose group is trying to decipher the genetic mechanisms that allow *A. nidulans* to use ethanol as a nutrient, Felenbok is a seasoned campaigner for many scientists' causes. She believes that "science is a social and cultural activity, with an important role to play in society." She launched her latest drive about 3 years ago, after the finance ministry cracked down on public research agencies such as CNRS, France's giant basic research agency, for ignoring the rules on purchasing lab supplies.

The rules required agencies to put out competitive bids for items as mundane as test tubes and pipettes at the beginning of each fiscal year and also mandated that all orders over about $600 had to receive special authorization from the agencies' central administration. The crackdown paralyzed many labs. Especially hard hit was the biomedical agency INSERM, which had failed to complete its competitive bidding for that year and whose labs rapidly ran out of supplies (*Science*, 12 March 1999, p. 1613).

A longtime member of the executive commission of the National Union of Scientific Researchers (SNCS), Felenbok, along with her colleagues, quickly collected more than 5000 signatures on a petition that opposed what she called "a Kafkaesque domain of irrationality [and] wastage of time and money." Some scientists even had to hire full-time staff to process their purchase orders. "We were in a state of permanent blockage," Felenbok says. It still took many months of tireless campaigning to lift some of this burden.

The stalemate was not entirely the fault of the central government, however. An aide to Research Minister Roger-Gérard Schwartzenberg says that CNRS and other research agencies initially balked at decentralizing their purchasing procedures, a necessary step in giving lab directors greater control over their operations. "The ministry was willing to soften the rules, but not the agencies," says the aide, who praises Felenbok for getting the research agencies to modify their internal rules. Felenbok agrees that both sides needed to compromise.

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Victory procured. Betty Felenbok helped bring together scientists and government officials to make purchasing rules more flexible.

Partisan politics also lent a hand. On 21 April, Socialist Prime Minister Lionel Jospin will square off against incumbent conservative President Jacques Chirac in the first round of the presidential election. And because French scientists have historically felt that the Socialist party is more sympathetic to research, they are a constituency that Jospin is loath to antagonize. As the date neared, Felenbok says, she began to find increasingly sympathetic ears in Jospin's research and finance ministries.

The new rules, announced earlier this month, drop the $600 limit and allow lab directors to spend nearly $80,000 annually on any single type of product without special permission. This means researchers won't be twiddling their thumbs while a request for lab supplies works its way through multiple layers of bureaucratic delay. And Felenbok's colleagues say that the victory wouldn't have been possible without her determined effort. "She believes fervently that things can be better," says Richard D'Ari, a molecular microbiologist at the Jacques Monod Institute in Paris. "And she works heart and soul to bring it about."

The roots of Felenbok's social activism go back to her childhood in Nazi-occupied France. Her parents, Polish Jews living in Lithuania, emigrated to France in 1930. But German tanks rolled across the country just 2 years after her birth in 1938, forcing the family to flee Paris for the southern city of Limoges. Felenbok's father joined the resistance and her mother went into hiding, while Felenbok and her sister found refuge in a group home for children. Her immediate family was reunited after the war, although relatives were arrested and died in Auschwitz.

Her interest in biology was kindled by courses she took at the Sorbonne from Jacques Monod, who would later share a Nobel Prize for his groundbreaking work on gene regulation. "We were witnessing the birth of molecular biology," she says. "A lot of us got involved, thanks to the enthusiasm that Monod passed on to us." Felenbok was also fortunate to come of age at a time when budding scientists were in great demand, winning a lifetime position at CNRS at the tender age of 24.

Felenbok worked on a number of model organisms before turning to *Aspergillus*, with thousands of well-characterized mutant forms. Recently, for example, her lab has helped figure out how certain proteins, called transcriptional activators, control the genes that code for alcohol dehydrogenase, an enzyme that breaks down alcohol. Although *A. nidulans* itself is not pathogenic, other species of *Aspergillus* can cause serious respiratory illness under certain conditions. Understanding its inner workings could eventually help asthmatics and others suffering from fungal allergies.

Despite making steady progress on that work, Felenbok will probably be best remembered for fighting the good fight against the French bureaucracy. Says SNCS secretary-general Jacques Fossey: "Her principal quality is to never abandon her convictions, even if she is alone against everyone."

—MICHAEL BALTER