

USDA downplays closing of biotech advisory programs

In January, the U.S. Department of Agriculture (USDA, Washington, D.C.) convened the Agricultural Biotechnology Research Advisory Committee (ABRAC) for the last time and subsequently closed its Office of Agricultural Biotechnology (OAB). Although officials are putting a happy face on the shut-downs, saying that they achieved their objectives in these programs, the abruptness of the closures and the focused intervention of the U.S. Congress in this decision-making suggest that someone wanted to pull the plug on OAB and ABRAC ahead of schedule. Just who remains a mystery.

USDA established OAB in the mid-1980s, partly in response to critics who said the department's research programs were missing out on the biotechnology revolution, and that a modernized, better-coordinated approach to studying agricultural problems was vital. Meanwhile, the controversial debate over regulating the environmental release of engineered organisms switched forums several times. By 1988, the newly established ABRAC took on the debate involving agricultural applications of the emerging technology, modeling itself on the Recombinant DNA Advisory Committee (RAC) of the U.S. National Institutes of Health (NIH, Bethesda, MD).

"I said it would take ten years to integrate biotechnology into USDA," recalls OAB's now-former director, Alvin Young, who says

he was asked at that time to bring regulatory officials and agricultural researchers closer together on disagreements over biotechnology within the department. "Over the past eight and a half years, things worked well and we addressed a lot of major issues."

Young points out that past hostility to biotechnology among USDA scientists has all but vanished, with many traditionally trained investigators now teaming up with those coming from the newer molecular school of research. (Members of ABRAC drafted and published several sets of research guidelines for the deliberate release of engineered organisms.)

OAB was also a focal point for public inquiries about biotechnology, as a coordinating arm between USDA and other state, federal, and international agencies on regulatory issues affecting biotechnology.

OAB and ABRAC were scheduled to close down in 1997, according to Young and other USDA officials. "We were planning to zero out the budget, recognizing that we'd be done next year," he says. The "real surprise" came when Congress eliminated the biotechnology advisory programs by zeroing out the appropriation for them a year early.

The explanations offered for this decision by Congress are not convincing. For example, some congressional staffers say they were "sad" to see OAB and ABRAC go, noting that, while their risk assessment and

coordinating functions have been valuable, they were probably sacrificed in favor of other programs. Other insiders dismiss any suggestion that this move reflects on the value of the programs and insist that eliminating OAB and ABRAC was a fiscal, not a political, decision.

But the annual allotment of about \$500,000 (some of which came from other programs within the department) for these programs is a small amount in the department's budget, and the decision, ordinarily, would be left to the discretion of USDA officials. Some observers suggest that Congress was seeking to eliminate advisory programs, although the move against OAB and ABRAC seems too narrow to contribute significantly to that broad goal.

"USDA expressed no interest, and nobody came back and said it's a bad idea to eliminate these programs," notes a staff member from a House of Representatives appropriations subcommittee. "Nothing happened because nobody cared." Some observers thus suggest that USDA left it to Congress to accelerate this symbolic move away from biotechnology toward other priorities such as agricultural sustainability.

Nonetheless, USDA officials say there is "no major shift away from biotechnology" and that important components of programs once overseen by OAB will be continued.

Jeffrey L. Fox

Sickles to ploughshares and market shares



Of all the former-Soviet Union (FSU) states, Kazakhstan stands the best chance of developing biotechnology successfully, a recent report¹ suggests. According to the report's author, Tony Rimmington of the Center for Russian and East European Studies at the University of Birmingham (Birmingham, U.K.), Kazakhstan is building one of the most significant biopharmaceutical industries in the FSU.

Two key indicators of Kazakhstan's intent are its stated program, "Utilization of Biotechnological and Genetic Engineering Methods in Medicine, Agriculture, and

Industry," launched in November 1993, and its National Center of Biotechnology (NTsB), located jointly in Almaty, Stepnogorsk, and Gvardeiskii. Importantly though, Kazakhstan can back its good intentions in biotechnology with two essential elements—money and technology.

Kazakhstan is relatively rich. Its substantial reserves of gas and oil, in the south and west of the country, are now being exploited through recent deals with companies in the U.S. and Canada. It also has extensive reserves of coal and rare minerals.

The hub of the country's biotechnology program—and the first stop for any would-be collaborators—is the NTsB. It encompasses three clusters of companies and organizations: one in Almaty, with Biocombine, the MA Aitkhozin Institute of Molecular Biology & Biochemistry, and the Institute of Physiology, Genetics & Bioengineering of Plants; another at Stepnogorsk, which accommodates Biomedpreparat, the manu-

facturing company, Progress, the Medico-Biological Institute, and the Institute of Pharmaceutical Biotechnology; and a third at the Scientific-Research Agricultural Institute in Gvardeiskii.

Many of Kazakhstan's technological resources have their basis in a somewhat murky recent past. The Baikonur Cosmodrome in Tyuratam, the launch site of all Soviet manned space flights, for instance, forms a focus for research on the effects of zero gravity on plant and plant-cell development. There are several associated projects at the National Academy of Science's Institute of Space Research and at the MA Aitkhozin Institute, one of the world's leading research centers for plant biotechnology, says Rimmington.

Kazakhstan was also home to many of the FSU's military microbiological facilities, and many of the institutes display the vestiges of that past. The Almaty Biofactory, part of the NTsB, produces an extensive range of vac-