

## NIST will fund new DNA-diagnostics program

The new NIST program represents a significant step by the Clinton administration toward forging an explicit industrial policy.

WASHINGTON, D.C.—This spring the U.S. Department of Commerce's National Institute of Standards and Technology (NIST, Washington, DC) announced that it would begin supporting five new "focused areas of technology," with one of these efforts involving a five-year, \$145 million program to develop tools for DNA diagnostics. This new effort in biotechnology, part of NIST's Advanced Technology Program (ATP), is aimed at leveraging research and development (R&D) investments being made by U.S. companies working in this area. More broadly, the expanding ATP represents a significant step by the Clinton administration toward forging an explicit industrial policy, one that funnels federal funds into companies developing selected technologies, technologies that, in turn, are expected to benefit the U.S. economy.

NIST's ATP, which was established in 1990, has sponsored several workshops, inviting company

representatives, and others, to submit white papers recommending areas of technology in which new funds could best be put to use. From a harvest of some 550 such white papers touting many different high-risk technology areas for potential ATP support—most of which were outside of biotechnology—officials winnowed the harvest to 150 technology areas. From there, they identified five areas of technology deemed useful to U.S. industry on which to focus ATP funds. Besides DNA diagnostics, the other chosen areas of technology include information infrastructure for health care, composite structures, component-based software, and computer-integrated manufacturing for electronics. Altogether, officials anticipate that the ATP will invest \$745 million in these areas over the next five years. The ATP has budgeted \$25 million for DNA diagnostics for fiscal-year 1994, expecting spending in this area to total \$145 million over the full five-year period, de-

pending, of course, on what Congress appropriates.

NIST officials view the new ATP focus on the development of tools for DNA diagnostics as "accelerating the payoff of the human genome project by supporting the development of low-cost DNA-sequencing and DNA-recognition tools and techniques that would help create commercial opportunities in the diagnostic and therapeutic arenas." Indeed, NIST officials cite industry estimates that the U.S. market for DNA diagnostics will grow to \$6 billion by 2005, comprising 15 percent of the overall U.S. *in-vitro* diagnostics market of \$40 billion.

"That's where ATP's focus comes in. Reaping the full potential of the human genome project will require new methods and data-handling protocols. DNA analyses will have to be sped up by a factor of 10, and costs will have to fall to one-tenth to one-hundredth of the present price tag of about \$100 per test," notes a NIST official. —Jeffrey L. Fox

BIO/TECHNOLOGY  
*is on*  
**Internet**

gopher to [gopher.internet.com](http://gopher.internet.com)  
or telnet to [gopher.internet.com](http://gopher.internet.com)  
and login as enews