# ScienceScope

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Searching for roots. Researchers hope to find genetic link for diabetes in West Africa.

# Genome Study on Diabetes in Africa

This spring, U.S. and African researchers are beginning an unusual effort to link up labs on two continents in the first attempt to trace the genetic source of diabetes among black Americans to its possible roots among the people of West Africa. Adult-onset (type II) diabetes is of particular concern, because it affects about one in 25 African Americans, taking a heavier toll than among white Americans.

Researchers are looking for clues to inherited factors in Africa because intermarriage with other racial groups is less common there; thus, it may be easier to pick out uniquely African genes that contribute to the disease. Also, West Africans consume fewer calories than do Americans and are less likely to be overweight, a factor that confounds studies of diabetes in the United States.

The new project, sponsored by the National Human Genome Research Institute (NHGRI) and Howard University in Washington, D.C., involves two competitively selected hospitals in Ghana and three in Nigeria. Physicians and scientists there hope to find 75 pairs of siblings, both with type II diabetes. They will draw blood from the subjects and ship it to Howard and NHGRI for genetic analysis. If all goes well, the project, funded at \$175,000 this year, will later expand to include 400 sibling pairs.

Omobosola Akinsete, a Nigerian physician and project director at Howard, notes that involving West African teams may help avoid cultural difficulties U.S. researchers often have, for example, with obtaining patient consent. And NHGRI director Francis Collins, who has spent two working vacations in Nigeria, calls the joint project "a very exciting model" that may help strengthen research in West Africa as well as improve diabetes care on both continents.

## Japan Sets Up Center at U.S. Lab

The Institute of Physical and Chemical Research (RIKEN) in Tokyo is putting a new twist on its international collaborations by launching a research center at New York's Brookhaven National Laboratory (BNL) to study spin physics. RIKEN announced last week that the RIKEN-BNL Research Center, funded at \$2 million in 1997 with expected future increases, will open this fall under the direction of Columbia University physicist and Nobel Prize winner T. D. Lee.

The idea originated 2 years ago when nuclear physicists at RIKEN recognized that the \$500 million Relativistic Heavy Ion Collider (RHIC) being built at Brookhaven—an accelerator that will collide gold ions to form a dense, high-energy state of matter-could be an ideal vehicle for investigating the spin, or intrinsic angular momentum, of quarks and gluons and how they are arranged in nucleons. RIKEN put up \$20 million to add magnets and detector capabilities to RHIC, and is now taking the additional step-a first for RIKEN-of setting up a research center outside Japan. Masavasu Ishihara, chief scientist of RIKEN's Radiation Laboratory, says "The object was to set up the best possible facility and staff to study spin physics." The center's 30 to 40 research staff will be recruited from around the world.

A theoretical team is to start work this fall, and an experimental group will be assembled a year later, in time to begin experiments when RHIC opens in 1999.

# Renewed Fight Over Gene Patent Policy

An old dispute over whether parts of genes can be patented is coming to a boil again within the government. Officials at the National Institutes of Health (NIH) have fired off two letters taking issue with the U.S. Patent and Trademark Office's (PTO's) policy of allowing such patents, arguing that it would hinder research by restricting the flow of genetic data among scientists. But, so far, PTO is standing firm.

The controversy, now 5 years old, resurfaced in February after Deputy PTO Commissioner Lawrence Goffney gave a speech in which he said that the patent office was prepared to issue patents on human gene fragments known as expressed sequence tags (ESTs) (Science, 21 February, p. 1055). On 21 March, Jack Spiegel, NIH's chief patent attorney, sent Goffney an eight-page letter crammed with legal arguments for not patenting ESTs. However, Spiegel added, if the PTO does allow patents on ESTs, it should strictly limit their scope. To allow broad claims on related DNA sequences, Spiegel warned, might create "submarine" patents that vanish from sight and then reappear, wreaking havoc by competing with later patent applications.

NIH director Harold Varmus followed up on 25 March with a two-page letter to PTO Commissioner Bruce Lehman. "As a scientist and public health official," Varmus wrote, "I am deeply concerned" about the PTO policy. And he warned that it "will once again call into question whether scientists can reasonably be asked to share early sequencing data."

That argument doesn't sway PTO officials, however. Goffney says he "understands" why researchers might be upset but that, "philosophically, we are not in tune." Adds John Doll, director of the PTO section that handles biotechnology applications, "I can assure you that there has been no change in policy."

#### **New French Law to Boost Scientist-Entrepreneurs**

France has been working overtime to convince its scientists that their research should benefit the nation's economy, and now the government is making it easier: It has proposed a law that would encourage publicly funded researchers to create their own businesses.

At a press conference announcing the new law, adopted by the Council of Ministers on 2 April, France's secretary of state for research, François d'Aubert, pointed out that at present "if a researcher wants to start up a business, he is blocked at every turn." For example, a would-be entrepreneur must give up his or her government post. The new law would give agency and university scientists 4 years to make the transition to industry, during which they would still be paid either by the government or by their new company. In addition, public-sector researchers could own up to 10% of a company's stock. The law, expected to be passed by Parliament later this year, would also streamline conflictof-interest rules to encourage researchers to work as industry consultants. D'Aubert said France hopes to emulate the United States, "where there is a close overlap between [public] laboratories and industry."

The proposal is drawing plaudits from scientists. "[This] will encourage people to take their chances" in business, says cell biologist Jean-Paul Thiery of the Institut Curie in Paris. And Philippe Kourilsky, a molecular immunologist at the Pasteur Institute in Paris, notes that money isn't the only attraction of industry. "You can do things that are difficult and expensive in public research," Kourilsky says.