

SOUTHWESTERN NEWS

Contact: Susan A. Steeves
(214) 648-3404
or E-mail: ssteev@mednet.swmed.edu

UT SOUTHWESTERN OFFERS FREE LICENSING ON MACHINE TO HELP MAP THE HUMAN GENOME

DALLAS — May 23, 1997 — Researchers at UT Southwestern Medical Center at Dallas are offering free licensing agreements on a machine that makes bits of manmade DNA used to locate new genes. The MerMade Oligonucleotide Synthesizer, designed and built at UT Southwestern, is available at no fee to other nonprofit institutions involved in the Human Genome Project.

"We're giving the information away to other nonprofit institutions to conduct Human Genome research," said Dr. Skip Garner, UT Southwestern professor of biochemistry. "Our motivation is to give the genome laboratories another tool to complete the mapping and sequencing of human genes. So, for the good of the Human Genome Project, we are offering it basically for free to the labs participating in the project."

Garner and his fellow researchers recently held a workshop for scientists from seven other laboratories, including one each from Israel and Germany, to explain how MerMade works and how to obtain an instrument. Garner is associate director of Genome and Science Technology Center (GESTEC), UT Southwestern's National Institutes of Health (NIH)-funded lab devoted to work on the Human Genome Project.

Dr. Glen Evans, director of GESTEC and of UT Southwestern's Eugene McDermott Center for Human Growth and Development, suggested that Garner and his team design such a machine after a potential licensing agreement for similar equipment through another organization fell through. Evans holds the Eugene McDermott Distinguished Chair for the Study of Human Growth and Development.

Garner designed and built MerMade because it was important that sequencing of genes be as fast, cheap and error-free as possible. One way to accomplish this, he said, was to have a plentiful supply of inexpensive oligonucleotides available to aid in the process of DNA sequencing.

"Groups that do not have abundant, cheap oligos can't do this," said Garner, who holds the Philip O'Bryan Montgomery Jr., M.D. Distinguished Chair in Developmental

(MORE)

HUMAN GENOME — 2

Biology. "We have done everything to make MerMade available to other institutions and we held the workshop so they can make an informed decision about whether they want to license it."

Previously, the researchers had to purchase oligonucleotides from other companies for as much as \$15 each. But Garner and Dr. Simon Rayner, GESTEC senior research associate, believed they could design an oligonucleotide synthesizer that would make the bits of DNA much faster and at a much lower cost.

Since GESTEC's first MerMade made its first oligonucleotide in August 1996, the machines have produced 10,000 of the DNA probes and saved the center \$100,000. Three MerMades are now on line. The latest one began production in March.

The first group to license MerMade is the Advance Center of Genomic Technology at the University of Oklahoma. One of the center's researchers, Steve Kenton, senior systems support programmer, attended the workshop.

"I think MerMade will make a major change in our sequencing strategies," Kenton said. "It will now only cost us about 10 cents an oligo, and it will be much faster. It used to take us all night just to make a few."

The Oklahoma scientists were so impressed with the results UT Southwestern scientists were achieving that they ordered a MerMade sight unseen before they came to the workshop. "We have complete confidence in UT Southwestern researchers," Kenton said.

The institutions eligible to get MerMade through the agreement are those involved in the Human Genome Project that receive Department of Energy and/or NIH funding. The labs can either build the machine or the equipment assembled and delivered by a company called Avantech for a cost of about \$54,400. Other groups, both profit and nonprofit, can license the machine through commercial agreements with UT Southwestern.

Garner said the Human Genome Project group at the Argonne National Laboratory in Argonne, Ill., also is planning to license one of the machines, which will have to be customized for them. It takes four to six weeks to get the machine after the licensing agreement is signed.

###

(PHOTO AVAILABLE UPON REQUEST)