## Hitachi FMBIO<sup>®</sup> User's Group Meeting March 1999

By Cecelia Crouse, PhD
Palm Beach County Crime Laboratory
West Palm Beach, Florida
crousec@pbso.org

The Second Annual Advanced Fluorescent-STR Megaplex Technology Workshop was held on March 21–23, 1999, on Hilton Head Island, South Carolina. Promega Corporation, Hitachi Software Engineering Company, Ltd., and The Bode Technology Group sponsored the workshop, and the Palm Beach County Sheriff's Office and the Virginia Division of Forensic Science organized the program content. This workshop was specifically designed for experienced forensic DNA analysts familiar with the *GenePrint*® PowerPlex™ STR Systems and the Hitachi FMBIO® Fluorescence Imaging System for allele detection. Attendance nearly doubled from the 1998 workshop to over 90 participants, due in large part to the wealth of practical experience shared by all regarding the validation, implementation and initiation of fluorescent STR megaplex systems on forensic casework evidence.

To kick off this year's meeting, a welcome dinner was held at the Palmetto Plantation Country Club on Sunday evening with Paul Ferrara presenting an historical prospective of STR development in the United States. Randy Nagy from Promega Corporation, Lenny Klevan from Hitachi Genetic Systems and Tom Bode from The Bode Technology Group officially welcomed all the participants. This year, twelve states were represented.

Beth Amiott of Promega Corporation provided participants with the status of fluorescent STRs in the international and national forensic community and product updates. Prior to the meeting technical leaders from each of the laboratory systems were asked to complete a comprehensive survey outlining many details of their laboratory's STR program. This information was summarized and presented during the workshop. Jeff Ban from the Virginia Forensic Laboratories presented detailed reviews of STR interpretation guidelines, especially as it relates to complex biological mixtures. In addition, recommendations for analyzing microvariants, null alleles and obtaining relevant allele peak height data were discussed.

Efficient DNA STR database profiling and high throughput data were presented by Deborah DiPierro from The Bode Technology Group. The appropriate use of statistics for forensic DNA profiling was reviewed by Kevin McElfresh, also from The Bode Technology Group. The presentation on the Combined DNA Indexing System (CODIS), new CODIS software developments and CODIS networking capabilities was organized by Sue Rogers of Alabama and George Li of Virginia. There was a significant amount of courtroom experience shared at the workshop as well as advice on presenting STRs at admissibility hearings. Dayse Silva, a visiting scientist from Rio de Janeiro, Brazil, outlined her *GenePrint*® PowerPlex™ 2.1 population data for three Brazilian populations and three Palm Beach County population databases where she is conducting her research. Todd Bille of the Indiana State Police outlined the DNA Advisory Board Recommendations and Crime Laboratory Accreditation Programs. One of the highlights of the workshop was the full-day Technical Leader meeting where every aspect of the DNA profiling process was reviewed for everyone's laboratory. Many exciting projects were discussed, as well as information regarding how to streamline STR data review.

The workshop was successful, not only in the number of attendees, but also in the tremendous cooperation exhibited by representatives from Promega Corporation and Hitachi Software Engineering Company, Ltd., to meet the needs of the forensic community. Plans for the Year 2000 Advanced Fluorescent Workshop are already in progress.

GenePrint is a trademark of Promega Corporation and is registered with the U.S. Patent and Trademark Office. PowerPlex is a trademark of Promega Corporation.

FMBIO is a registered trademark of Hitachi Software Engineering Company, Ltd.

**Upcoming Meetings** 

#### 2ND LATIN AMERICAN SYMPOSIUM ON HUMAN IDENTIFICATION

June 9–12, 1999 Belo Horizonte, Brazil Internet: www.promega.com/geneticsympla2/

#### 10TH INTERNATIONAL SYMPOSIUM ON HUMAN IDENTIFICATION

September 29–October 2, 1999 Lake Buena Vista, Florida, USA Internet: www.promega.com/geneticsymp10/

### INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES

August 22–28, 1999 Los Angeles, California, USA Internet: www.criminalistics.com/iafs-1999/

# 18TH CONGRESS OF THE INTERNATIONAL SOCIETY FOR FORENSIC HAEMOGENETICS

August 17–21, 1999 San Francisco, California, USA Internet: www.criminalistics.com/isfh-99/index.htm