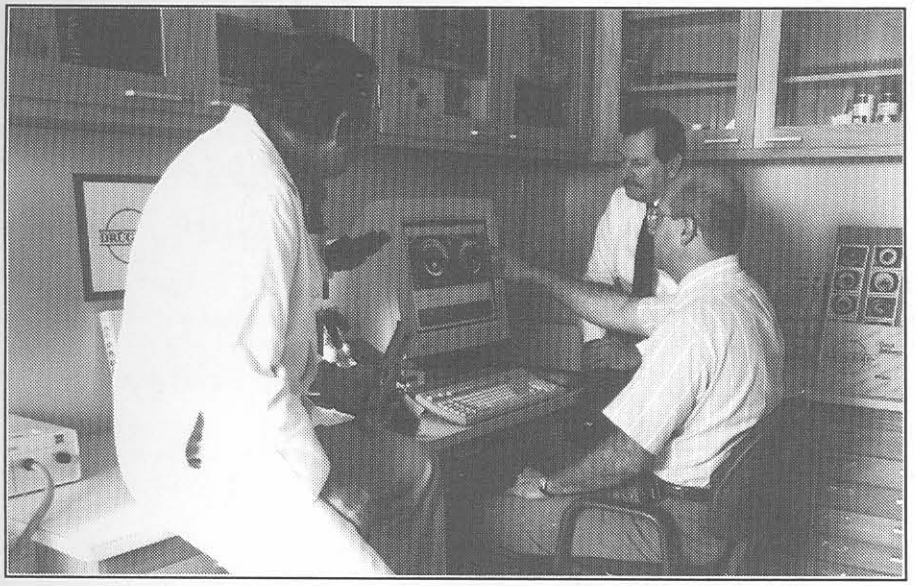
DRUGFIRE READS FIREARMS 'FINGERPRINTS'



By Eleanor Schenk
Metro-Dade Police Department

In its infinite quest for the best, the Metro-Dade Police Department's Crime Laboratory has adopted a remarkable new system of reading firearms "fingerprints." An FBI-developed computer program, dubbed DRUGFIRE because of the tie-in between drugs, gangs and firearms, has Metro's forensic experts elated with its capabilities and with the rapid success rate evidenced in its first few weeks of operation.

Dr. William Hartner, MDPD Crime Lab Commander and a leader in the effort to bring the computer system to Florida, said, "Once again the Department has placed a valuable tool in the forensic investigator's handbag. DRUGFIRE will greatly extend our capabilities and expand the crime-solving role of the forensic laboratory."

DRUGFIRE uses computers in a manner that forensic specialists claim has revolutionized the handling of firearm evidence. By facilitating the matching and analysis of firearm shell casings, the program enables examiners to link cases of repetitive shooting offenses. "When a firearm is discharged, it leaves a distinguishing mark, much like a fingerprint," explains Jim Carr, supervisor of MDPD's Forensic Identification Seciton. "These marks can be microscopically compared and positively associated with the gun that fired them."

The traditional method of evaluating shell casings have been cumbersome and tedious. Most police departments have, since 1925, been matching up ballistics evidence in the same manner, by manually examining reams of photographs of shell casings and comparing them under a microscope in search of a match. Through DRUGFIRE'S computer magic, hundreds of work hours have been reduced to mere minutes.

DRUGFIRE is storage and comparison software that allows for quick retrieval and display of casing images These images are captured through the ballistics comparison microscope and then tranferred onto a disk held in the computer's storage medium. The material placed in storage can be searched by distinguishing characteristics, making it easier to locate and compare shell casings. The system, by dramatically trimming the number of hours spent of firearms analysis, is expected to solve an untold number of gun attacks from semiautomatic (the drug dealers' weapons of choice) and automatic firearms.

MDPD Director Fred Taylor, who serves on the Florida Crime Laboratory Council, said of the newly-installed system. "The implementation of this state-of-the-art technology is a giant step forward in firearms investigations. DRUGFIRE could change the face of crime fighting. We are particularly proud of the fact that Florida is at the forefront, being the first and only statewide network to adopt the system."

The FBI's stated objective for DRUGFIRE is: (1) To promote the collection and interagency sharing of forensic data and imagery; (2) To link the firearms evidence from unsolved cases to similar evidence in other unsolved cases, and firearms associated with suspects or groups.

The key is "linkage"

The success rate in the MDPD Crime Lab? According to Jim Carr, "Our examiners made seven linkings within the first three weeks - a better thatn 100% improvement over the old method!"

How DRUGFIRE works:

- High-definition images of shell casings found at crime scenes are collected as they appear through the microscope.
- Images are stored in a database network.
- Firearms examiners review up to 24 images on a single screen.
- When markins appear to match they are examined under a microscope for confirmation.