DHS Science and Technology Directorate
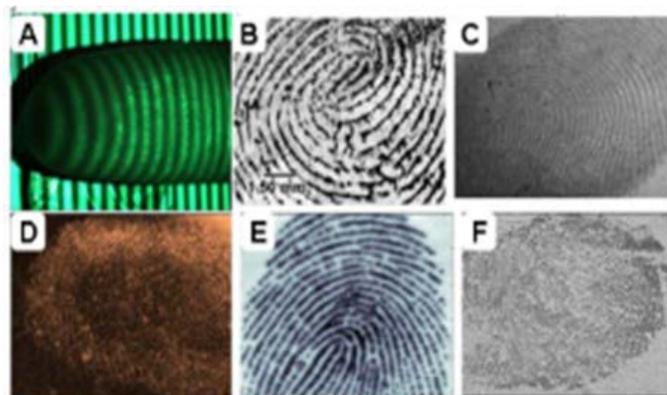# Port-of-Entry Forensics and Investigations

Problem: U.S. Customs and Border Protection (CBP) and U.S. Immigration and Customs Enforcement (ICE) have the need to share, query and analyze law enforcement information to continue to effectively combat transnational crime, investigate child exploitation and human trafficking and process aliens. The Department of Homeland Security (DHS) continues to expand its capability to collect and analyze forensics evidence from cargo and cargo containers to enforce trade law, and increase its ability to support the prosecution of illegal activity.

Solution: The Port-of-Entry Forensics and Investigations project seeks solutions that will provide law enforcement entities access to near, real-time data to enhance investigation and interdiction of illegal activity. This project provides CBP and ICE with the capability to detect and prosecute illegal activity through the analysis of open source data or forensic analysis of material collected from suspicious packages and cargo.

Impact: Improved tools and methods to validate cargo and enforce trade compliance will increase the availability of forensic evidence, enabling enhanced trade compliance enforcement. Improved enforcement of trade law will increase the collection of millions of dollars of currently uncollected tariffs and duties to support the U.S. economy. Integrated and timely access to investigation's data can further aid in the detection and interdiction of illicit activity associated, with human trafficking, child exploitation, and illegal immigration.

Biometric identification using fingerprints

Current and Future Investments

- **Igloo User Interface.** This project enhances the correlation and analysis of open source and historical data to identify persons engaged in illegal activities such as human trafficking, smuggling and drug trafficking. Currently much of the work is performed by hand which is time consuming. This effort will: (1) research advanced machine learning algorithms for pattern recognition and anomaly detection; and (2) develop user friendly software, particularly the graphical user interface (GUI), by which a law enforcement officer interacts with the system.

- **Enabling Law Enforcement Investigations.** This project enhances the ability of DHS components to share, query and analyze law enforcement information/data to enable law enforcement investigations (e.g. human trafficking, alien processing, immigration data, geolocation). The project's goal is to make actionable law enforcement data available to ICE and CBP agents, in near real-time, to enhance the investigation and interdiction of illegal activity.

- **Intellectual Property Protection.** This project seeks to improve the security and protection of U.S. intellectual property, while ensuring the competitiveness of U.S.-made products. The project's goal is to increase the ability and effectiveness of DHS agents to balance national security and export competitiveness when it comes to intellectual property and the enforcement of U.S. export control regulations.

DHS Law Enforcement operations

To learn more about this topic, contact us at: sandt.bordersmaritime@hq.dhs.gov