

Humanitarian DNA Identification Database (HDID)
An Update

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Situation at the US-Mexico Border

- Migration numbers are up from Mexico, Central and South America
- Bodies found along the border face identification challenges
- Identifiers found on body often false (fake ID's)
- No fingerprints on record, or skeletal remains
- Lack of dental or medical records
- Lack of reference samples for DNA identifications

Identification of Migrant Remains

- Offender hits may be found in the national database, but the arrest may have been made under a false identity
- Families in foreign countries don't have access to U.S. CODIS searches

There is a need to have family reference profiles (FRP) in a DNA database to compare to remains DNA profiles

Family Reference Samples

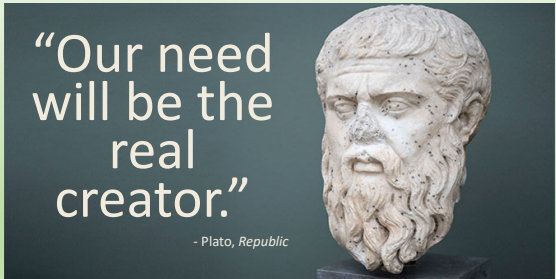
- Where to get family reference DNA profiles (FRP)?
 - Consulates within the US
 - Reference DNA profiles developed by laboratories in other countries
 - Laboratories must demonstrate use of a QMS
 - Demonstration of proper SOPs and Quality Checks
 - Accreditation is preferred
 - References collected with specific consent to search in foreign DNA databases
 - Reference DNA profiles collected by NGOs and developed by private DNA laboratories in the U.S.
 - (see above)

Humanitarian DNA Identification Database (HDID)

- As deaths increase at the southern U.S. border a solution to this tragedy becomes more and more important.
- We have the tools (DNA databases)
 - how can we take advantage of it to identify these persons?



Humanitarian DNA Identification Database (HDID)



“Our need will be the real creator.”
- Plato, Republic

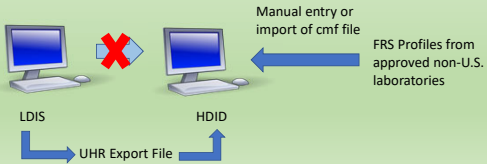
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Bureau of International Narcotics and Law Enforcement (INL) Grant

- Grant received by UNTCHI in 2017
- One goal is to assist in developing Forensics, specifically DNA and DNA databases in Central America, as well as assisting in creating legislation for these databases
- This put UNTCHI into a unique position from which to achieve the goals of migrant identification

Humanitarian DNA Identification Database (HDID)

- Discussions in 2018 began between the Center for Human ID and the FBI Laboratory
- Concept of a separate, standalone CODIS server that would satisfy the privacy and confidentiality needs of foreign governments and their citizens



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graph LR; LDIS[LDIS] -- "UHR Export File" --> HDID[HDID]; HDID -- "Manual entry or import of cmf file" --> HDID; HDID -- "FRS Profiles from approved non-U.S. laboratories" --> HDID;
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Humanitarian DNA Identification Database (HDID)

- Talks with Non Governmental Organizations and DNA labs to determine their needs relative to DNA profile storage and searching in the U.S.
- Separate policies and procedures drafted and formalized


Privacy

Security

Accountability

Humanitarian DNA Identification Database (HDID)

- MOU established between FBI and UNTCHI in 2019
- Pilot program to attempt to identify migrant remains using family reference DNA profiles developed in approved laboratories from other countries
- A couple of informative publications

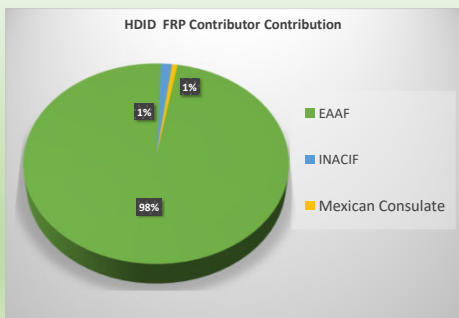


Humanitarian DNA Identification Database (HDID)

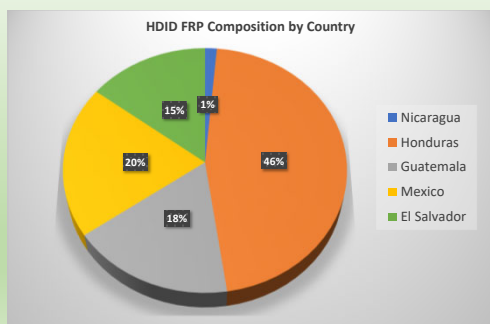
- Software set up at UNTCHI
 - Standalone, air-gapped server containing CODIS 9 software
- Unidentified remains profiles developed at UNTCHI were entered into HDID server
- First 4 FRPs received in February of 2023, post COVID shutdowns
- Pedigree trees created and first searches occurred

Initial search of first 4 pedigrees produced a rank!

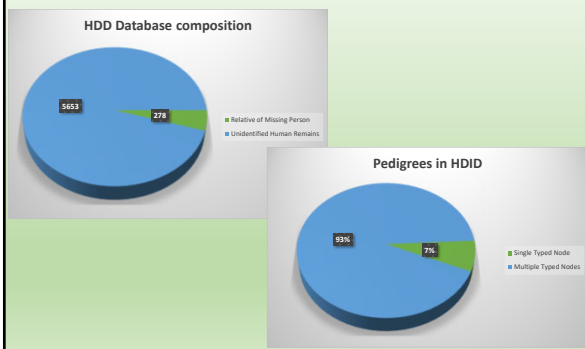
Current Status of HDID



Current Status of HDID



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Current Status of HDID

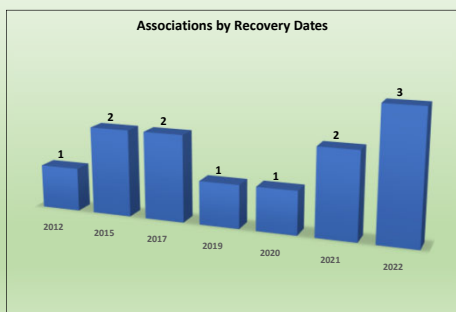
➤ Associations reported since February of 2023:

12

➤ Associations pending reporting (waiting on additional information prior to reporting):

2

Current Status of HDID



Future Steps

- Continue to receive and search family reference profiles from non-U.S. labs
- Work with additional partners (NGOs and other laboratories in Central and South America) to expand submissions of family reference profiles
- Explore the possibility of a pilot program to receive additional unidentified human remains profiles from other CODIS participating labs on or near the U.S. Border

Summary

- Family reference profiles are needed to identify deceased migrants
- The Humanitarian DNA Identification Database at the UNTCHI in conjunction with the FBI provides a way to compare these references to unidentified remains
- The INL grant has given us the opportunity to assist laboratories in Central America with improved testing and sample collection practices
- These two entities (HDID and INL Grants) dovetail nicely to identify remains in the U.S.