A92 Science as a Human Right: Using DNA to Identify Missing Migrants

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After attending this presentation, attendees will understand how DNA science and technology can be used to support the identification efforts of undocumented migrants that die attempting to cross the United States-Mexico border.

This presentation will impact the forensic science community by highlighting alternative strategies for the positive identification of unidentified remains.

Since the year 2000, the Colibrí Center for Human Rights, in collaboration with the Pima County Office of the Medical Examiner (PCOME), has collected missing person reports from nearly 3,000 families of those who have disappeared attempting to cross the United States-Mexico border. Also during this time, the remains of more than 2,800 people have been discovered in southern Arizona. Despite the efforts of dedicated forensic professionals, consular officials, and others, 30% to 40% each year are not identified, adding up to a cumulative total of more than 1,000 unidentified human remains cases.

Due to the aridity of the Sonoran Desert and the remote paths migrants take to cross the border, the remains of the dead are difficult to identify without DNA. Even after a strong circumstantial comparison or identification hypothesis is made between an unidentified set of remains and records for a missing person, it is common for DNA to still be required to confirm or refute the match; however, many families of missing migrants cannot utilize the typical mechanism in the United States for investigating missing persons, which depends on reporting to United States law enforcement. Because families of missing migrants live in the United States as undocumented immigrants, or in Mexico or Central America, they are either afraid to contact police, or they are turned away when they attempt to file a report because their case is seen as out of jurisdiction. The more socially marginalized a family is, the more obstacles they face in obtaining information about their missing loved one.[1] The results of a genetic study of human remains examined at the PCOME indicated that those with indigenous backgrounds are less likely to be identified than those with more European ancestry.[2] This indicates that innovative approaches to human identification are needed that focus on macro-level structural conditions of access to the benefits of scientific progress rather than only on micro-level laboratory methods. Families are afraid of or unable to access these systems and wait for news for decades when the remains of their loved ones languish in cemeteries along the border.

The purpose of this presentation is to report the results of a new initiative by the Colibrí Center for Human Rights to bring the science and technology of DNA to the underserved population of Latin American immigrants in the United States. The program is designed to lower the obstacles to care for families of the missing by building sanctuary around the process of submitting DNA. Previous research in public health and medicine has demonstrated that undocumented Americans face challenges to accessing care due to a combination of fear of deportation, poverty, and isolation.[3-6]

The Colibrí Center's DNA Program addresses each of these challenges strategically to make the process of submitting DNA as easy as possible for families. Colibrí hosts DNA collection clinics throughout the United States. These are held in undisclosed sanctuary churches in major cities. Colibrí representatives partner with foreign consulates, a private genetic laboratory, and medicolegal officials, but do not allow United States law enforcement, press, or onlookers into the space during DNA collection clinics.

This presentation will report on two years of results for this initiative. Colibrí has collected Family Reference Samples (FRS) from 315 participants, representing 150 missing person reports. Results to date include 12 positive identifications achieved in collaboration with the PCOME and 26 additional strong genetic matches needing follow-up in the form of further FRS collection. Many of the identifications achieved through this project pertain to cold cases in which the individual died and was examined years ago. This initiative demonstrates the need for approaches to the application of DNA science and technology that are informed by public health literature relevant to the population being served.

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