

THE DNA SHOAH PROJECT- USING DNA AS A MEANS TO REUNITE FAMILIES SEPARATED AS A RESULT OF THE HOLOCAUST

Barbara B. Fransway¹, Matthew E. Kaplan¹, Lynn Davis², Erika Noebel², Syd Mandelbaum³ and Michael Hammer⁴

¹Human Origins Genotyping Lab, Arizona Research Laboratories, University of Arizona

²DNA Shoah Project, University of Arizona

³DNA Shoah Project, Project Headquarters, Cedarhurst, New York

⁴Arizona Research Laboratories and the Department of Ecology and Evolutionary Biology, University of Arizona

The DNA Shoah Project is a humanitarian effort launched in 2006 which aims to build a genetic database of individuals who lost family during the Holocaust. The database will serve as the first-ever genetic information repository specifically for individuals affected by the Holocaust. Ideal project participants include Holocaust orphans, Holocaust survivors and their descendants (commonly referred to as 2nd and 3rd generation survivors) and any individual who is missing family members as a result of the Holocaust. This genetic database will potentially serve to reunite living family members who were separated as a result of the Holocaust, by determining kinship among living project participants. Additionally, the database will be available to assist in matching project participants to remains not yet uncovered in Europe. Since the majority of Holocaust victims were buried not cremated, their remains exist today in unmarked or mass graves scattered throughout Europe. These remains are being inadvertently uncovered as economic prosperity leads to infrastructure development and expansion in the region. Recent advances in genotyping technologies have improved the success of testing degraded DNA from human remains, and the likelihood of obtaining useful DNA from tooth and bone will continue to develop and be further refined. However, there exists only a short window of time to collect DNA samples directly from Holocaust survivors so there is an urgency to educate the public about The DNA Shoah Project.

The DNA Shoah Project also has an educational goal to teach the historical record of this event in a science curriculum. We aim to integrate popular interest in forensics with educational standards of all levels to provide curricula that broach the Holocaust, and other mass disasters, from a scientific prospective. Perhaps the single greatest outcome of this project is the legacy that is born when a Holocaust Survivor shares their story with others. By participating in the DNA Shoah Project those who were affected directly by the Holocaust can trust that their testimony, both genetic and personal, will be remembered by future generations.