## 2022

# DNA FAMILY REUNIFICATION PROJECT: PRO-BÚSQUEDA'S HISTORY OF REUNITING FAMILIES





HUMAN RIGHTS CENTER UC Berkeley School of Law

### DEDICATION



This manual on the history of reunifying families in El Salvador is dedicated to our colleague and mentor, Cristián Orrego Benavente. Cristián Orrego Benavente January 31, 1944 Santiago, Chile -December 12, 2018 San Salvador, El Salvador

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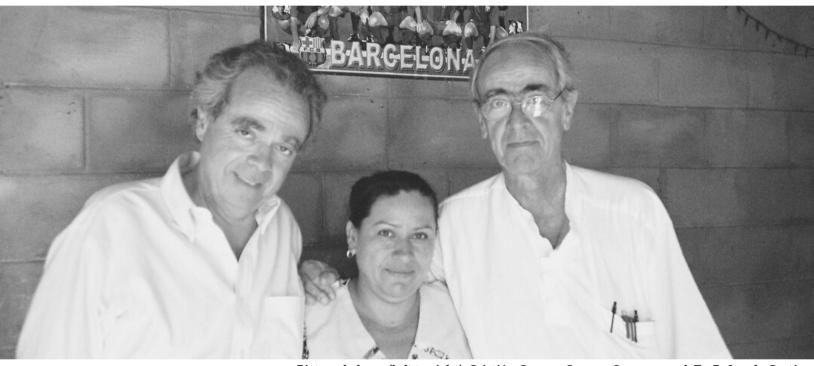
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### I. ACKNOWLEDGMENTS

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Pictured above (left to right): Cristián Orrego, Suyapa Serrano and Fr. P. Jon de Cortina.

### **II. ACRONYMS & ABBREVIATIONS**

Below are summarized in alphabetical order acronyms and other abbreviations introduced and defined in this chapter and the following chapter and used throughout this manual.

**AFSHRI:** The Alliance of Forensic Scientists for Human Rights and Humanitarian Investigations

Alliance: Same as AFSHRI

**DNA:** Deoxyribonucleic acid (the biological substance that encodes genetic information and transmits it from parent to child; abbreviated ADN in Spanish)

**FAFG:** Fundación de Antropología Forense de Guatemala; Guatemalan Forensic Anthropology Foundation

FMLN: Farabundo Martí National Liberation Front

HRC: Human Rights Center

ICMP: International Commission on Missing Persons

NGO: Nongovernmental organization

PHR: Physicians for Human Rights

**Pro-Búsqueda /Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos:** Organization in Search of the Disappeared Children

UC Berkeley: University of California, Berkeley

UCSF: University of California, San Francisco

**UN:** United Nations

US, USA: United States of America

## **III. FOREWORD**

My name is Jana Leigh Woodiwiss, formerly Sandra Patricia Martinez Hernandez, prior to my adoption from El Salvador in the late 1980s. I'm one of what's known as "los desaparecidos," or, "the disappeared." This is language with which I myself have only recently become familiar. Ten years ago I started a quest to find my biological family. I began by contacting Eric Stover at the Berkeley Human Rights Center about their ongoing DNA Reunification Project. He connected me with the organization Pro-Búsqueda, whose history you will read in the following pages, to complete a DNA test and submit my adoption documentation. After six years of waiting, hoping, and giving up a few times, I was reunited with my biological mother. After years as an only child, I found that I had two brothers and a sister. I even had nieces and a nephew! Finally, I found my biological family.

The moment I saw my biological mother, I felt like I was home. Not because I was able to go back to my birthplace, but because I found the woman I owe my life to. As the mother of three beautiful children myself, I feel like my kids are my heart running around outside of me. I prayed she felt the same about me. I felt God's wisdom and humor when we met in person for the first time and realized that out of all my siblings, I look the most like our mother. The love and acceptance my family has shown me makes me feel so full and so blessed.

I want to take a moment and acknowledge my adoptive parents as my parents. They raised me, love me, love their grandchildren, and have supported me through this reunification journey with patience and

humility. For that I will always be so grateful.

I started a new season of my life when I met my mother, and so did she. It is my hope that as we continue these lost and found relationships, that we can also continue to be part of the community encouraging mothers and children to request reunification support from Pro Busqueda and send their DNA to be analyzed.

Sharing stories, connecting with families that share this experience, and submitting DNA to begin the process of re-locating those that were disappeared is work that must be done together. I am grateful to this community for having gone through this process, and am honored to provide the introduction to what may be a first step in family reunification for the person reading this manual now.

Many thanks to Pro-Búsqueda, Eric Stover, and the Human Rights Center.



Pictured above: 2022. Jana L. Woodiwiss reunited with her biological mother in El Salvador.

Jana L. Woodiwiss

## **IV. HISTORY AND GOALS**

This project started with a desire to assist families of the disappeared in El Salvador to find their disappeared loved ones. The project is unique in that it utilizes scientific advances in genetic tracing to help resolve longstanding human rights abuses, facilitate family reunification, and seek accountability and justice. The project is a partnership among the Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos (Pro-Búsqueda), a nongovernmental organization (NGO) based in San Salvador, El Salvador; The Alliance of Forensic Scientists for Human Rights and Humanitarian Investigations (Alliance or AFSHRI), based in the United States; and the Human Rights Center (HRC) at the University of California, Berkeley (UC Berkeley).

In this manual, we refer to the strategy of "genetic tracing" in order to identify persons disappeared as children. Genetic tracing primarily involves two components, the first being the analysis of a DNA sample to yield an individual and unique genetic profile, which occurs in the laboratory. The second component is the process of determining kinship through complex statistical analysis, meaning the process of comparing genetic profiles to find out if it can be reasonably concluded that two people are, in fact, related. The latter is often referred to as "kinship determination or kinship calculation". These two components of genetic tracing are discussed at length later in this manual.

Forced disappearances, extra-judicial executions, civilian massacres, torture, and death squad assassinations were commonplace during the armed conflict in El Salvador, from 1980 through 1992. In an effort by the government in power and the military to suppress a growing leftist rebellion, approximately 75,000 were killed and 8,000 were "disappeared" by the military, some of whom were children.

Under pressure from the United Nations (UN) and other international stakeholders, the Salvadoran government and the leftist group, Farabundo Martí National Liberation Front (FMLN), entered into peace talks, resulting in the Chapultepec Peace Agreement signed on January 16, 1992. It called for the establishment of the Commission on Truth to "investigate serious acts of violence that have occurred since 1980 and whose impact on society urgently demands that the public should know the truth".<sup>1</sup>

On March 15, 1993, the Commission published its report, "From Madness to Hope: The 12-year war in El Salvador". Three days later, President Alfredo Cristiani signed into law the "General Amnesty Law for the Consolidation of Peace," providing, essentially, a blanket amnesty to all those who engaged in political crimes between 1980 and 1992. The law remained in effect until 2016 when it was annulled by the Sala de lo Constitucional. However, the investigation and prosecution of many crimes that occurred during the war have not yet been possible.

Shortly after the signing of the peace accords, a Jesuit priest named Father Jon Cortina began to hear stories from parishioners who suffered abuses at the hands of the military during the war. Father Cortina had a parish in Guarjila, Chalatenango, an area in the north that witnessed heavy fighting. He was particularly struck by stories of government soldiers who had snatched people's children, sometimes from their very arms. Others recounted seeing their abducted children flown away on military helicopters.

<sup>1</sup> Commission on the Truth for El Salvador: "From Madness to Hope: The 12-year war in El Salvador. UN Document S/25500, p. 18 (1993).

## **HISTORY AND GOALS**

In August 1994, together with families of the disappeared, Father Cortina founded the Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos (Organization in Search of Disappeared Children, known as Pro-Búsqueda). Its mission is to locate children who were forcibly disappeared as a result of the armed conflict and to seek government accountability and justice for families of the disappeared. To help find the disappeared, Father Cortina contacted Eric Stover, who at the time was head of Physicians for Human Rights (PHR), which is based in Boston, Massachusetts, and who had earlier been instrumental in bringing forensic scientists to Argentina to identify children disappeared by the military during its "Dirty War," from 1976-1983. In response, Stover and a team of forensic scientists went to El Salvador to meet with Father Cortina and families of the disappeared. As a result of this contact the use of genetic tracing as evidence in the reunification of families was initiated by Pro-Búsqueda as part of a vigorous outreach and educational campaign that includes public talks, community meetings, radio programs, coordination with local and international organizations, and an informative website. This has resulted in 1,016 requests for assistance, of which 455 cases have been resolved, with many achieving a family reunion between the disappeared person and his/her biological family; 561 cases remain unsolved.<sup>2</sup> It's estimated that hundreds, if not thousands, of children were disappeared and/or forcibly adopted during the armed conflict.

Pro-Búsqueda receives requests from both families seeking to find their disappeared children and from adoptees seeking information on their biological families. Adoptees who had been disappeared by the military or otherwise separated from their families under duress have over the years since 1994 been found not only in Salvadoran orphanages, but also in Salvadoran military households and internationally in Honduras, Guatemala, the United States, France, Italy, Spain, the United Kingdom, Belgium, and the Netherlands.

In 2003, the Alliance offered to help Pro-Búsqueda find those who had been disappeared as children by establishing a DNA family reference database and by training Pro-Búsqueda personnel how to operate and maintain it. The Alliance is a volunteer group of forensic scientists and mathematicians with ties to the Jan Bashinski DNA Laboratory of the State of California Department of Justice. In 2004 and 2005, the partnership began to systemically collect DNA samples from families of the disappeared in El Salvador and to analyze those samples. PHR and UC Berkeley's HRC also assisted in this effort and helped to procure resources necessary to conduct the genetic tracing. The database, which was launched in 2006, contains DNA samples from all family members searching for their disappeared loved ones who have requested assistance from Pro-Búsqueda. The database contained nearly 1240<sup>3</sup> family reference samples as of 2019, which included samples analyzed in the Richmond lab as well as in the Chromosomal Laboratories in Phoenix.

To achieve this ambitious goal, the partnership (Pro-Búsqueda, the Alliance, and UC Berkeley's HRC) received two 3-year awards from the US Department of State's Bureau of Democracy, Human Rights and Labor starting in 2007. The main purpose of these grants was to increase the forensic capacity of Pro-Búsqueda to employ genetic tracing to identify persons disappeared as children. The goal has been to enable Pro-Búsqueda to conduct as much of the genetic tracing in-country as possible, with the US-based partners providing support and technical review as needed.

<sup>&</sup>lt;sup>2</sup> These figures were documented in May 2014.

<sup>&</sup>lt;sup>3</sup> December 2019.

## **HISTORY AND GOALS**

With these funds, Pro-Búsqueda hired a half-time geneticist who would be trained as custodian of the DNA database as well as an investigator to help manage cases and a social worker to assist in facilitating family reunions. The funds also allowed the Alliance to provide the new Salvadoran geneticist with extensive training and material support required to conduct genetic tracing. Further, the grants also enabled HRC to hire a project manager and to assist with the investigation of cases involving transnational adoptees, particularly those in the United States. For several years, the California Department of Justice graciously allowed the Alliance to utilize its state-of-the-art facility at the Jan Bashinski DNA Laboratory in Richmond on weekends and during weekday non-work hours to conduct the DNA analysis. Since 2009, DNA analysis has been conducted by a private lab, Chromosomal Laboratories in Phoenix, Arizona, USA, which generously agreed to donate its services for the analysis of the first 250 samples submitted to its laboratory. The Alliance continues to provide technical oversight, review of sample analysis, and preparation of kinship reports. Since 2012, the DNA laboratories of Fundación de Antropología Forense de Guatemala (FAFG) in Guatemala City, International Commission on Missing Persons (ICMP) in Sarajevo and later in The Hague, Bode Technology (headquartered in Lorton, Virginia, USA, and in early 2012 having acquired Chromosomal Laboratories) and the National Institute for Health and Welfare (THL) in Helsinki, Finland have been added to the list of internationally accredited labs for submission of Pro-Búsqueda samples.

The purpose of this manual is to articulate and preserve the procedures and protocol developed and employed by the partnership to operate the project and to share this information broadly. We try to answer the following questions:

- How is the project set up and who is responsible for which tasks?
- How are cases investigated?
- How are DNA samples taken? How are samples analyzed and how are kinship determinations made?
- How are biological families, adoptees, and adoptive families engaged?

We hope that the story of our project will assist other NGOs and governmental agencies in regions emerging from armed conflict to locate the disappeared living, to reunite families, and to seek accountability for crimes. The contents of the manual are limited to our experiences and how we carried out our work.

After the introduction and discussion of the partner organizations in chapters I and II, chapter III discusses which cases are accepted for investigation and how they are investigated; chapter IV addresses genetic tracing, both DNA testing or analysis and kinship determination; chapter V explains database and recordkeeping; chapter VI looks at psychosocial support where kinship has been found and a family reunion is being considered; chapter VII addresses family reunifications; and chapter VIII shares some lessons we learned.

### **V. ORGANIZATIONAL PARTNERS**

Below are descriptions of the three primary organizational partners who made and make this ongoing project possible.

The Alliance of Forensic Scientists for Human Rights and Humanitarian Investigations (referred to hereafter as the Alliance), strengthens the scientific capacity of human rights and humanitarian organizations. The Alliance provides independent technical advice in forensic investigations, particularly in forensic genetics, to nongovernmental human rights and humanitarian organizations devoted to the protection of life, access to justice, and the right to identity.

Human rights organizations are increasingly aware that the forensic sciences provide powerful investigative tools for the documentation of human rights abuses and the presentation of evidence in courts. Until now, these organizations have necessarily depended on government institutions or private laboratories for forensic expertise and analysis. This dependence has left them without appropriate input into investigations, without the ability to assess the soundness of analyses and conclusions, and without appropriate influence on decisions related to the presentation of such evidence to courts of law. Without in-house forensic expertise, human rights organizations are excluded from vital aspects of investigative processes that they have initiated.

To address this deficiency, the Alliance was made up of practicing forensic scientists and administrators who volunteer their time and knowledge by offering independent expertise to human rights organizations. Support included:

- DNA and kinship analysis in investigations of missing or disappeared persons.
- Technical review of forensic reports obtained or prepared by third parties.
- Training of staff in relevant areas of forensic investigation.

The Alliance was most active in supporting human rights organizations in the implementation, maintenance, and expansion of DNA databases of family references according to forensic norms of quality assurance and best practices. With the ultimate purpose of strengthening scientific capacity at the level of human rights organizations, the Alliance makes its work known via presentations at human rights forums and at professional and scientific meetings, via publications in scholarly journals, and by holding international training courses and workshops.

Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos<sup>4</sup> is an association in the human rights movement that carries out the search for children who disappeared as a result of the 1980-1992 armed conflict in El Salvador. This nonprofit entity promotes human rights, awareness of the truth, and access to justice so as to complete reparations for disappeared people and their families.

## **ORGANIZATIONAL PARTNERS**

**The Human Rights Center at the University of California**, **Berkeley**,<sup>5</sup> promotes human rights and international justice worldwide and trains the next generation of human rights researchers and advocates. Based at Berkeley Law, the Human Rights Center draws on multiple disciplines and leverages the resources of the university to support legal, advocacy, and media organizations to advance rights, truth, and justice.

HRC is an independent research and training center established in 1994 that applies innovative technologies and scientific methods to investigate war crimes and other serious violations of human rights. Based on findings, HRC recommends specific policy measures to protect vulnerable populations and hold perpetrators accountable. HRC's research has been provided to the International Criminal Tribunal for Rwanda, the International Criminal Tribunal for the former Yugoslavia, and the International Criminal Court. The center trains advocates around the world and provides them with the skills and tools necessary to document human rights abuses and turn this information into effective action. It has conducted major human rights investigations in more than a dozen countries, including the United States, Iraq, Rwanda, Uganda, Burma, and the former Yugoslavia.

The core goals that guide the HRC's activities are:

- Pursue accountability for mass atrocities.
- Ensure that the needs of survivors are heard.
- Strengthen the research and advocacy capacities of local and international human rights organizations.



Pictured on the left: May, 2004. Pro-Búsqueda trained by volunteers from the Alliance of Forensic Scientists with the support of the Human Rights Center, Berkeley and Physicians for Human Rights. Nicole Inacio presents training materials to Pro-Búsqueda staff, Fr. Jon de Cortina is in attendance.

<sup>5</sup> For more information visit humanrights.berkeley.edu.

This chapter discusses how cases are investigated, meaning the process by which kinship may or may not be determined between an adoptee and their biological family. The topics focused on are the criteria employed to decide whether an inquiry should be investigated, the types of investigatory tools employed, and establishment of contact with the people involved.

Genetic tracing, the use of DNA to establish kinship, is one of the investigatory tools used. Investigating cases is very time-consuming and labor-intensive and requires meticulous recordkeeping, patience, diligence, excellent interpersonal skills, and frequent communications with the anxious searching party.

### A. SELECTION CRITERIA

Before engaging in the reunification project, Pro-Búsqueda established criteria to determine which inquiries are investigated and which are not. These criteria are based on the organization's mission and goals and are available to the public.

The purpose of having criteria is for Pro-Búsqueda to focus its efforts on the inquiries that will further the organization's objectives. By disclosing the criteria, the organization ensures transparency in case selection and prevents any bias, discrimination, or preferential treatment. In addition, since investigations concerning disappearances are very personal, the organization protects itself from generating resentment and antipathy in the community by clearly stating the selection criteria upfront. If individuals interested in opening a case understand the rules beforehand, they are less likely to feel hostile toward the organization if their inquiry is rejected.

Pro-Búsqueda only investigates cases that fit three criteria:

- The disappearance occurred during the armed conflict of 1979-1991.
- At the time of the disappearance the child was aged 13 years or younger.
- The disappearance is a consequence of the armed conflict (abduction, relinquishment under duress, etc.).

These criteria were decided upon because, together, they best target adoptions affected by the armed conflict while excluding situations that resulted from voluntary choices. Initially, given the large volume of requests that Pro-Búsqueda received to investigate adoption cases, the organization had to reject some cases that fell outside of this criteria. However, due to the same demand for those cases in later years, Pro-Búsqueda began accepting cases in which children were given up for adoption due to extreme economic distress exacerbated by the armed conflict. Additionally, this experience demonstrated that among these cases, some were directly related to the conflict and fit the criteria.

These criteria—time frame, age range, and outcome of an occurrence—are but a few examples of criteria that could be used by diverse human rights and other organizations to select the cases they will investigate concerning missing persons and other victims of human rights abuses. The important thing is to establish clear and specific criteria to select cases and to make the information available to the public.

Cases are opened for investigation by Pro-Búsqueda either by family members in the local country looking for disappeared persons or by adoptees either in-country (i.e., within El Salvador) or in a foreign country who are looking for their biological families in their country of origin. At Pro-Búsqueda, inquiries are made in person, over the telephone, or via e-mail. Cases have also been received through the consular offices of some countries.

For inquiries made by transnational adoptees (Salvadorans adopted by families in countries other than El Salvador), UC Berkeley's Human Rights Center fields and screens inquiries in coordination with Pro-Búsqueda and provides information about the project (for more information see Section A.3 of this chapter).

### 1. Cases Opened by Families in the Local Country

Families looking for their disappeared children comprise the majority of Pro-Búsqueda's cases under investigation to date. With the end of the war, surviving family members began to search desperately for the children who were forcibly separated from them or whom they had to relinquish under duress.

To open a case, families tend to approach the organization directly and seek to establish a personal relationship with staff members. They use their local networks to find out about organizations and people who may be able to help them locate their missing relatives. As a result, they generally learn about the organization's work through friends and family, religious institutions, NGOs, the media, and other local contacts.

#### 1.1 What information is collected from families?

Pro-Búsqueda has developed an intake questionnaire, which a staff member will review with a family seeking their disappeared child. Specifically, during an interview, a staff person or case investigator will gather information about:

- The missing person: Name, date and place of birth, personal characteristics and photographs.
- *The disappearance*: Date and place where the missing person was last seen, people involved, witnesses, and a narrated account of the disappearance.
- *Family members*: Name, relationship to the missing person, age, and contact information (address and phone number).
- Person(s) opening case: Name, contact information, personal identification number and signature.

To see a sample of an Intake Form used for family interviews, refer to APPENDIX 1 A-1.1: Intake Form for Family Members and Local Adoptees (Spanish).

#### 1.2 How many family members are interviewed per case?

The number of family members interviewed depends on the specific case, but on average five people are interviewed per case. These individuals can be close relatives of the missing person (mother, father, siblings, grandparents, aunts and uncles) or family members who were present at the time of the disappearance (for example, a third-degree cousin who was escaping with the missing person when captured).

A good rule of thumb or guideline to determine when to stop interviewing family members is when the information provided is repetitive and is not contributing new facts or leads to the investigation.

#### 1.3 Where do family interviews take place?

Interviews can take place at the organization's offices or at a family's residence. In instances where family members live in close proximity to each other and the organization's office is far away, it is easier for family members to gather at a relative's home. Likewise, if the interviewees are elderly and/or ill, it is sensible for the case investigator to conduct a site visit. In contrast, when family members live in different locations, the organization's headquarters is a good meeting point.

Coordinating interviews can be challenging given people's work and study schedules, travel time, and the long distances between residences and the office. In Pro-Búsqueda's experience, it is best to schedule field visits on Saturdays, when most people are at home and families are together.

### 1.4 What forms do family members need to fill out?

Family members, with the help of the investigator, need to fill out and sign the Intake Form authorizing the organization to use the information provided to search for the missing person. The form is important for legal purposes because it demonstrates that the search is being conducted with the consent and cooperation of the family members. For persons who are illiterate or are unable to write, a thumbprint functions as a signature. (See APPENDIX 1, A-1.1).

### 1.5 How are family interviews tracked?

In investigating cases to determine kinship, it is extremely important to carefully record and store all information gathered because there may be a time lapse between when the information is gathered and when it may be used to determine kinship. Also, there may be many pieces of information collected from disparate sources.

At Pro-Búsqueda, each family interview (that is, the set of interviews from 1-5 or more individuals pertaining to one disappeared child) is given a code that begins with E####. Later on, when these same family members provide DNA samples, each individual sample will share the same interview code E####, to indicate that this information is supporting the same case. In the event the family reports the disappearance of more than one family member, that is, more than one child, each disappearance receives its own interview code (E####). This is appropriate as the circumstances of the disappearance might not necessarily be the same for both children. Therefore, DNA samples from the family in question will be

associated with more than one E#### number. An interview code can include the narration on the disappearance of a child by two or more family members who may have been interviewed simultaneously on the circumstances of the loss of the child. However, subsequent interviews of additional family members on the loss of the same child are included under the same initial E#### originally assigned.

#### 2. Cases Opened by Adoptees in the Local Country

During the war children were also adopted by Salvadoran families, many associated with the military. Several youths have approached Pro-Búsqueda inquiring about their biological families.

#### 2.1 How are inquiries from local adoptees handled?

Given that the adoptee is taking the initiative to establish contact with his/her biological family, a process that is difficult and emotional, it is vital that the organization responds in a way that is welcoming and reassuring. Adoptees are made aware by their adoptive families of their adoption, or have inquired about this possibility, given that they do not share similar physical traits. Therefore, DNA testing to prove that they are indeed adoptees and not the biological children of the adoptive parents is not required. To best serve adoptees, Pro-Búsqueda adheres to the following guidelines:

#### **INQUIRY GUIDELINES**

#### Communicating with the Adoptee or Family

1. Thank the adoptee or adoptive family for contacting Pro-Búsqueda and praise them for their interest in searching for his/her biological family.

2. Clearly explain the process to search for a birth family. Describe how the investigation is conducted, the role of DNA, and the possible outcomes for a case.

3. For adoptees or adoptive families outside of El Salvador, provide the Intake Form and describe what it entails (APPENDIX 1, A-1.2: Intake Form for Transnational Adoptees and Adoptive Family Members). For families and persons found in El Salvador, the investigator conducts interviews with them (APPENDIX 1, A-1.1).

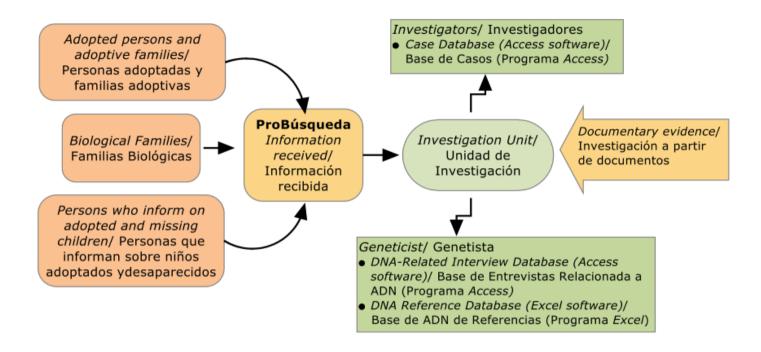
4. Offer the adoptee or family further assistance and let them know you are there to answer questions, provide resources, and support them.

#### Documentation and Investigation

1. . Check the Interview Database to make sure the case has not been registered already. If it is not, record the adoptee or family's information with the appropriate date. There is another database of cases proper which is maintained by the researchers in the Investigation Unit. (For a more complete description of all the databases involved in Pro-Búsqueda's work, see Figure 1 and Chapter V, Databases and Recordkeeping).

2. Initiate an investigation. Start by contacting witnesses and accessing public records, including birth certificates, adoption papers, and court records.

3. Keep the adoptee or family informed about the progress and the information collected.



#### FIGURE 1. DATABASES MAINTAINED FOR SEARCH AND IDENTIFICATION OF MISSING CHILDREN/ADULTS

#### 2.2 What information is collected from adoptees in the local country?

To initiate an investigation the researchers conduct the interview and enter the information on an Intake Form to gather as much information as possible. A similar Intake Form is used for transnational adoptees (APPENDIX 1, A-1.2). In that case the adoptee is asked to fill out the interview himself or herself, and additional information might be entered subsequently by the researcher by means of phone interviews.

The interview Intake Form gathers the following:

- *Personal information:* Name and surname, contact information (address, telephone, e-mail), date and place of birth if known, distinguishing physical marks acquired before adoption (scars, birthmarks, moles, illness), biological name if known, and name(s) of biological parent(s) name if known.
- Adoption information: Date of adoption, name of lawyer or notary in charge of the adoption, name and address of orphanage (if adoptee spent time in an orphanage prior to adoption), and adoption agency or other institution involved in the adoption.
- Memories: Any memories of the adoptee's life in the country before the adoption.
- *Documents*: Photographs of adoptee as a child as well as present-day, adoption papers, and birth certificate if available.

By signing the form, the adoptee certifies the information is correct and gives his/her consent that the information can be used by the organization to conduct a search for his/her biological family.

#### 2.3 What forms do local adoptees need to fill out?

Local adoptees sign the consent form for sample donation during the interview process authorizing the organization to use the information provided to search for the birth family while the researcher fills out the Intake Form. As mentioned above, the form asks the adoptee to provide personal information, adoption information, memories, and documents.

### 3. Cases Opened by Adoptees in Foreign Countries

Many adoptees in foreign countries want to learn about their biological families. They generally learn about Pro-Búsqueda's work through friends, media, or the Internet and as a result contact the organization by phone or e-mail. Sometimes the adoptee himself or herself will initiate the inquiry, while in other instances the adoptee's adoptive parents or the adoptee's spouse may make the initial contact.

#### 3.1 How are inquiries from transnational adoptees handled?

As mentioned earlier, it is a difficult and courageous decision for an adoptee to start an investigation in search of his/her birth family. This is an emotional process that requires a lot of support from the investigators. Cases involving transnational adoptees require special attention to cultural differences, language barriers, and disparities in family expectations. For these reasons it is good practice to have multilingual, multicultural, and culturally sensitive staff in the organization, especially for those dealing with transnational adoption cases.

The partnership between HRC and Pro-Búsqueda was partially established to facilitate investigating cases of Salvadoran youth adopted in the United States. Pro-Búsqueda has partnered with other organizations in Italy and Spain to help locate adoptees in those countries. Partnering with local organizations is a good way to ensure that the needs and expectations of transnational adoptees are handled by staff who understand the cultural and socio-economic environment.

For most Salvadoran youth adopted in the United States interested in locating their biological Salvadoran families, HRC is their first point of contact. To best serve transnational adoptees, HRC adheres to the following guidelines below:

#### INQUIRY GUIDELINES FOR TRANSNATIONAL ADOPTIONS

#### Communicating with the Adoptee

1. Thank the adoptee or the adoptive family or both, as the case maybe, for contacting HRC and/or Pro-Búsqueda in light of their interest in searching for their biological family.

2. Provide the adoptee with a brief description of the project and more information about the organizations involved in the project. If available, provide the adoptee with the links to the organizations' websites.

3. Clearly state the selection criteria (given at the start of this chapter) for investigating cases so that the adoptee understands that his/her case may not be investigated. This ensures transparency and minimizes the potential for adoptees to feel frustrated with the organization.

4. Provide the adoptee with the Intake Form and briefly describe what it entails. Encourage the adoptee to complete the form and send it to the appropriate person.

5. Offer the adoptee further assistance and let them know you are there to answer questions, provide resources, and support them.

6. Follow-up with the adoptee 15 days later and after that as needed.

#### Documenting

7. Register the adoptee's given name(s) and last name, contact information (e-mail, phone, address), and any other pertinent information for the case in a database. Each communication with the adoptee needs to be recorded in the database with the appropriate date.

These guidelines provide a general framework for handling initial inquiries from transnational adoptees. It is important to be mindful of the language used and the way in which information is framed. Being courteous, diplomatic, transparent, and honest with adoptees has yielded positive results.

#### 3.2 What information is collected from transnational adoptees?

To initiate an investigation and to determine whether the case falls under the case acceptance criteria, investigators provide the adoptee with an Intake Form to gather as much information as possible. This is a similar Intake Form to the one used for adoptees in El Salvador. For a description about what the Intake Form gathers, see Chapter V, Section B.2., and APPENDIX 1, A-1.2.

#### 3.3 What forms do transnational adoptees need to fill out?

Transnational adoptees need to fill out and sign an intake form that asks the adoptee to provide personal information, adoption information, documents, and memories. This form also authorizes the organization to use the information provided to search for his/her biological family.

#### **B. INVESTIGATORY TECHNIQUES**

Pro-Búsqueda uses many different types of investigatory methods to determine kinship. As noted earlier, genetic tracing is the most accurate and scientifically objective tool employed.

Investigators traditionally rely initially on what is known as field research to determine kinship—investigation of public records including birth certificates, adoption certificates, and court records.

Investigators also rely on eyewitness testimony and photographs. Photographs depicting strong family resemblances can serve as powerful evidence of kinship. In searching for transnational adoptees, online applications to search for people, including Zaba.com. and Yellowpages.com, followed up with letters, e-mails, or telephone calls, have proven helpful.

Genetic tracing may be used to complement some of these investigatory techniques; in other cases, where scant evidence of kinship is available, DNA may be the only way in which kinship can be determined. Genetic tracing is discussed further in Chapter IV.

### C. ESTABLISHING CONTACT WITH AN ADOPTEE OR ADOPTIVE PARENTS

Once an adoptee or adoptive parents are located, the challenge remains to communicate the finding of kinship with a biological family to them when it occurs, provide them with the support needed to make decisions that are in their best interest, and eventually facilitate a family reunion or meeting with the adoptee's biological relatives. However, this process may be fraught with deep and often conflicting emotions and may take anywhere from months to years to achieve.

### 1. Establishing Contact with an Adopted Person

#### 1.1 How is an adopted person contacted?

Establishing contact with an adopted person is a multi-phased process. Taking into consideration family dynamics and ethical issues, Pro-Búsqueda developed a protocol composed of four steps to contact transnationally adopted persons:



Pictured on the left: Margarita Zamora (Pro-Búsqueda) conducts field work by interviewing relatives of missing children.

1. Send letter of introduction to adoptive parents. The

letter of introduction explains to the adoptive parents that the adoptee's biological family is looking for him or her. It provides information about the organization conducting the reunifications and the purpose of reconnecting the adoptee with his/her biological family and also offers resources for the family to learn more about the project as well as how to access support mechanisms (see APPENDIX 2 for a sample letter).

Sending a letter on the organization's official letterhead is the preferred method of contact because it gives the family time to process the information. It also provides institutional legitimacy by clearly stating the organization's contact information as well as the signature of a staff member.

#### **Contact Guidelines**

1. Send letter of introduction to adoptee's adoptive parents.

2. Call adoptive parents.

3. Send letter of introduction to adopted person.

4. Call adopted person directly.

The adoptee's parents are the first point of contact in an acknowledgement of the primacy of the family bond and the important role the adoptive family can play. In addition, the adoptive family is contacted first in the case that the adoptee has not been informed of his/her adoptive status. The aim is for parents to relay the message to the adoptee because they are intimately involved, and in many cases are better equipped to share the news. By including the adoptive parents in the process, family dynamics are respected and adoptive parents are less likely to feel threatened by the fact that the biological family is looking for the adoptee.

**2. Call adoptee's adoptive parents.** When the letter to adoptive parents is returned or unanswered, it is time to call the adoptive parents. Again, the rationale is that adoptive parents know best how to relate to the adoptees. The advantage of a telephone conversation is that the parent can ask questions to better understand the purpose and process of family reunifications. As a result, it is critical that the investigator has as much information about a case as possible, especially details regarding the circumstances of disappearance and adoption and the names of biological relatives.

**3. Send letter of introduction directly to adoptee.** If an adoptee's adoptive parents are unreachable or uncooperative, it is time to send the letter of introduction directly to the adoptee. It is our belief that as an adult (because the war ended in 1992 all adoptees are of majority age by now) the adoptee has the right to decide whether she or he wants to re-connect with her/his biological family. Thus, when adoptive parents are preventing the adoptee from learning about her/his biological family, we contact the adoptee directly. Again, the preferred method is an official letter so that the adoptee has time to digest the information and make a decision on whether she or he wishes to pursue the case further.

**4. Call adoptee directly.** When the letter to the adoptee is returned or unanswered, it is time to call the adoptee. This is perhaps the hardest call since the news is delivered directly to the adoptee, who may not know about his/her adoption. Because the news comes as a shock to most adoptees, the investigator needs to be prepared to deal with the adoptee's contradicting emotions and to answer difficult questions in a sensitive way.

In summary, our experience has taught us that it is preferable to make the initial contact with the adoptive parents in an acknowledgement of the importance of their relationship to the adoptee and to do so by letter, which allows the family an opportunity to think about the news privately before reacting.

**1.2 What are the most frequent challenges when contacting an adopted person or adoptive family?** The most frequent challenges when contacting the adoptee's adoptive family or the adoptee are summarized in the box and discussed below.

**1. Disbelief and skepticism.** The initial reaction of many adoptive parents when they learn that the adoptee's biological family is looking for their child is disbelief. Since at the time of adoption parents were told little, nothing, or untruths about the circumstances of adoption and about the child's biological family, parents tend to dismiss the news of kinship. They are also skeptical about the intentions of the organization and are afraid the biological family may interfere with their family relationship. Adoptees, too, may share this skepticism.

### **Frequent Challenges**

- 1. Disbelief and skepticism
- 2. Language and cultural barriers
- 3. Privacy concerns
- 4. Ambivalence

To address this issue, it is important to provide adoptees and their adoptive parents with as much information about the adoption as possible. Sharing specific information such as the name of the adoption agency, the age and biological name of the adoptee, and the circumstances of the adoption is important. Providing adoptees and their adoptive parents with resources where they can confirm the work of the organization is also very helpful. Such resources can be the organization's webpage, news articles, personal contacts, and connecting them to adoptees and/or adoptive parents who have experienced the reunification process.

**2. Language and cultural barriers.** Language and cultural barriers also pose a challenge, especially for transnational adoptees. Most transnational adoptees do not grow up learning the language spoken by their biological families and do not know much about their country of origin. They may not be aware of the cultural differences that exist, especially regarding family relations and expectations.

Some cultural differences that may exist are family size, regard for elders, religious views, and political affiliations. Notably, American (i.e., USA) families tend to be smaller than Latin American families, especially rural families. For example, when adoptees learn that they have six siblings, 20 first cousins, and 35 distant relatives, many feel overwhelmed and anxious. They may not want to establish contact with the entire family at once, whereas the entire family is eager to get in touch with the adoptee. The birth family may feel insulted that the adoptee does not want to connect with all the relatives, while the adoptee may feel that his/her birth family is being insensitive. When this occurs, Pro-Búsqueda and/or the HRC talk to the relevant parties and explain the cultural differences to avoid cultural misunderstandings.

Another challenge arises from the frequent vast socioeconomic differences between the biological family and the adoptee, particularly for transnational adoptees raised in North America and Europe. These challenges may arise as adoptees begin to establish contact with their biological families and learn more about their families. They are also evident when adoptees want to communicate with their biological families and are unable to do so without the help of a translator.

The best way to mitigate cultural and socioeconomic barriers is to be straightforward with the adoptee and his/her adoptive family about the differences that exist. It is important to request feedback and inform the adoptee that his/her biological family is also aware of such differences. Both parties need to respect one another's customs and values and find common grounds on which to establish a relationship. Adoptees may be shocked to learn that their biological families live modestly or are impoverished and feel guilt. Biological families may expect transnational adoptees to provide financial assistance and gifts. Expectations need to be clarified early on in a gentle and respectful but straightforward fashion.

As the mediator between adoptees and their biological families, staff at the organization should be bi/multilingual and culturally sensitive in order to help adoptees and families overcome any issues.

**3. Privacy concerns.** Privacy concerns have to do with information sharing. Some adoptees or their adopted families may share information with the investigator that they don't want the investigator to disclose to the biological family. The investigator needs to honor their request even if the information concerns the biological family.

In other instances, the adoptee may want certain pieces of information about his/her biological family to remain confidential. This means that the adoptee does not want to share the information with his/her adoptive parents. This situation is especially difficult when the adoptive parents are supportive, are interested in being part of the process, and are in direct communication with the investigator.

HRC has addressed this issue by referring to its policy that states that information about the biological families is the proprietary information of the adoptees. As a result, investigators are required to share the information about an adoptee's biological family first and foremost with the adoptee. Although the Project greatly values the contributions and support of adoptive families and clearly recognizes that in many cases family reunifications would not be possible without their support, it recognizes and respects that the information about biological families is private.

**4. Ambivalence**. In some instances, the adoptive family and the adoptee receive the news of kinship with ambivalence. The adoptee may have long felt abandoned by his/her biological family and has little interest in meeting them or the adoptee is consumed by his/her life in the adopted country and it is not a priority to establish relations with his/her biological family in another country. In some instances, speaking to adoptees or adoptive parents who have already participated in a family reunion may be helpful. To this end, Pro-Búsqueda has tried to develop a network of reunited adoptees who are willing to serve as informal "mentors" to those who find themselves at such a crossroads.

There are many challenges that may arise when trying to communicate with adoptees or adoptive families. Some of these challenges may be addressed by providing additional resources of information and support, by giving people the space and opportunity to explore their feelings and make their own decisions on their own timeline, and by demonstrating the legitimacy of the project. However, in some cases, these challenges cannot be overcome and the case may need to be set aside and re-approached at a later time when circumstances have changed.

### 2. Establishing Contact with a Biological Family

#### 2.1 How is a biological family contacted?

Pro-Búsqueda tells the news of kinship to families in El Salvador in person; Pro-Búsqueda conveys this news by telephone in the case of a family or person found living outside of El Salvador. A home visit allows staff at Pro-Búsqueda to explain the situation better and gauge the response of family members.

In general, family members in El Salvador have received the news of the identification of their disappeared child with elation; however, in instances where the family is skeptical and in disbelief, having a face-to-face conversation allows staff to provide the birth family with as much information about the adoptee as possible. Sharing specific information such as the age, adoptive name of the adoptee, country of residence, and the search process is important. When the news is shared over the phone, it is important to ask questions that allow the family member to share his/her feelings and thoughts.

#### 2.2 What are the most frequent challenges when contacting a biological family?

In cases where the kinship search has been initiated by the adoptee, communicating news of kinship to the family has presented fewer challenges. Some issues that may arise involve disbelief and who holds the power of decision-making.

Like adoptees and their adoptive parents, sometimes birth families have a difficult time believing that a disappeared person is looking for them. This may occur when the birth parents of the disappeared person have died and surviving relatives do not know about the existence of the disappeared person. During the war many Salvadoran families were forced to separate and relocate in different parts of the country. This caused family members to lose track of one another and be uninformed about new births as well as about disappearances of family members.

When Pro-Búsqueda contacts the only surviving relative of the disappeared person—an uncle, for example —and lets him know that his nephew is looking for him, the uncle's initial reaction may be one of disbelief because, first, he did not know his sister survived the war and, second, he did not know his sister had a son. In such cases, taking a DNA sample from the uncle to determine kinship is the best mechanism to address the uncle's skepticism. While the DNA results are being obtained, Pro-Búsqueda provides psychosocial support to the uncle and the adoptee (see Chapter VI).

Another challenge that occurs is about who holds the power of decision-making. Sometimes family members want an immediate family reunion that includes large numbers of relatives while adoptees want to move at a slower pace and meet immediate family members first and less immediate family members later. According to evolving theories on open adoptions, the adoptee holds the power of decision-making (with ample room for discussion and compromise, of course) and, in general, we have urged consistency with this principle.

## **VII. GENETIC TRACING**

### A. GENETIC TRACING

Genetic tracing in projects such as Pro-Búsqueda's uses DNA testing or analysis to determine kinship between a minimum of two people and to reunite these two people who may have been separated by armed conflict or natural disasters. DNA (deoxyribonucleic acid) is the genetic blueprint that determines the biological characteristics of a person such as hair and eye color, stature, etc. DNA is found in the cells of the human body. Half of an individual's DNA is inherited from the mother and the other half from the father. For this reason, a person's unique combination of DNA matches DNA from his/her biological parents.<sup>6</sup> Thanks to this basic principle, forensic scientists are able to determine kinship between disappeared persons and their biological families, based on statistical calculations that support in quantitative terms the strength of the conclusion of familial relatedness.

Genetic tracing is a technique employed by forensic scientists to help identify individuals based on their DNA. This technique is used for crime scene investigations, identifying catastrophe victims, matching organ donors with recipients, establishing paternity and other family relationships, and additional purposes. In the context of this project, genetic tracing is the most accurate and powerful tool used to determine kinship and reunite disappeared persons with their biological families.

### **B. HOW DNA TRACING WORKS: THE THREE-STEP PROCESS**

Genetic tracing to establish kinship between a disappeared person and his/her biological family is a threestep process, as described in detail below. In brief, the process begins by collecting a sample of a person's inner cheek (buccal) cells (blood and saliva are among other possible sources) and extracting the DNA from the cells. Then the DNA sample is analyzed to reveal the individual's genetic profile or the unique DNA sequence. Finally, a kinship analysis is conducted in which the genetic profile of the disappeared person is compared against the genetic profiles of potential family members, or against the profiles in an entire database of candidate families and their respective family references, to determine if kinship exists. In summary, genetic tracing consists of basically three steps:

- Collecting DNA samples.
- Obtaining genetic profiles from the DNA samples.
- Conducting kinship analyses.



Pictured on the Left: Margarita Zamora (Pro-Búsqueda) taking a DNA sample from a relative of a missing child.

<sup>6</sup> Glossary of Blood Related Terms Blood And Hematology Dictionary (http://www.bloodbook.com/glossary.html#D).
 <sup>7</sup> http://en.wikipedia.org/wiki/DNA\_testing.

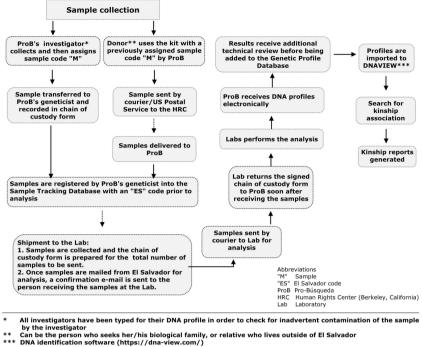


FIGURE 2. PRE AND POST-DNA ANALYSIS ACTIVITIES

Samples from relatives and adolescents searching for their family make up Pro-Búsqueda's increasing base of genetic profiles. They are also obtained locally by investigators. Although the majority of samples from abroad are from adolescents, many relatives who migrated also send samples to El Salvador. Generally, Pro-Búsqueda will send a kit including everything necessary to take the sample to the address provided by the adolescent or the relative. This is then sent to be collected at the Human Rights Center at the University of California, Berkeley until they can be mailed to Pro-Búsqueda.

Once registered, it is kept under safe custody until the number of samples necessary to be sent for analysis is collected. They are then sent through a courier company; the tracking number is recorded for the chain of custody form. Otherwise, they may be transported by a person who travels to the laboratory carrying with them the chain of custody form. After the samples are delivered to the courier, the laboratory is notified via email, along with a list of samples, and the type of analysis required for each. When the package is received, both the courier and the laboratory notify Pro-Búsqueda and the laboratory will send a signed chain of custody form.

Currently, analyses are carried out with different autosomal genetic markers through Globalfiler or Versaplex and Investigator HDplex. The analyses for maternal lineage are requested through mitochondrial DNA, or paternal lineage with markers for the Y chromosome, or the Argus kit for genetic markers on the X chromosome, relative to each case. The current laboratories partnered with ProBusqueda are Bode Technology (USA), Fundación de Antropología Forense de Guatemala (Guatemala), the National Institute for Health and Welfare (Finland), and the International Commission on Missing Persons (The Hague).

The results are sent electronically to Pro-Búsqueda via secure websites; this format facilitates the technical review that Pro-Búsqueda carries out prior to entering the genetic profiles into the DNA database. Once the

genetic profiles are added to the database, they are imported into the DNAVIEW program where a massive comparison is carried out between all the relatives and adolescents who are looking for their families. From these results, probable cases of association can be confirmed, or new identifications can arise, which leads to the elaboration of the respective affiliation reports.

#### **1.** Collecting DNA Samples

Although the biological material for DNA extraction and analysis can be collected from blood, saliva, and other body fluids and tissues, we recommend using a buccal swab, because it is simple and non-invasive and reduces the possibility of contamination.<sup>7</sup> Individuals providing samples gently rub the buccal DNA collector against their inner cheek to collect cheek cells (see section B.1.3 of this chapter for further details).

#### 1.1 From whom are DNA samples collected?

DNA samples are collected from the close, biological relatives of the disappeared person. These samples are known as family reference samples and stored together constitute a DNA Reference Database. Once the candidate or apparent disappeared person is located, a DNA sample is taken from her/him as well. A geneticist needs to work with the investigators to determine the number of family samples required for accurate kinship analysis given that each case is unique. In general, the more distant or remote the kinship relationship, the more familial samples are required.

Determining the number of DNA samples to collect from each family is roughly based on a point system.<sup>8</sup> Each category of relative (parent, sibling, aunt and uncle, half-sibling, grandparent) is worth a different number of points, which depends on the degree of kinship. Closer degrees of kinship receive more points. For example, a parent of a disappeared person (worth 10 points) receives a higher score than the disappeared person's grandparent (worth 2 points) because the disappeared person shares more DNA with his/her parent than with his/her grandparent (Table 1). When collecting DNA samples, investigators aim for 10-15 points worth of familial references, with 15 points being preferable to ensure higher statistical confidence in the conclusions regarding kinship analysis.

Relative	Points per person
Parent	10
Sibling	5
Aunt, uncle, half-sibling	1.5
Grandparent	2
Bonus for all 4 grandparents	4

TABLE 1. POINT SYSTEM FOR FAMILY RELATIVES

Thus, the number of samples needed for a case depends on which family members are alive, their degree of kinship to the disappeared person, and whether they are able and willing to provide DNA samples. The point system is a useful tool for investigators when determining the number of samples needed for a specific case. It is important to keep in mind, however, that additional samples should always be taken if available, even if both parents are alive and have donated samples. This precaution is taken in case the disappeared child turns out to be biologically related to only one of the parents even though the parental couple might have reported full maternity/paternity of the child.

<sup>8</sup> According to rules developed by Project Advisor Charles Brenner (www.dna-view.com) with precedent in a similar point system established by Brenner jointly with the ICMP.

Availability of pa	rents Collect samples from	No. of samples
	Father	Stop after 6
Father and mother available	Mother	samples
	Twin	
	Other children with the same parents (100% siblings)	
	Other children with the same mother (50% siblings)	
	Other children with the same father (50% siblings)	•
	Father	Stop after 6
Father available.	Twin	samples
	Other children with the same parents (100% siblings)	
mother not	Mother's mother (maternal grandmother)	
available	Mother's father (maternal grandfather)	
	Other children with the same mother (50% siblings)	
	Mother's sisters and brothers (maternal aunts and uncles)	↓
	Mother	Stop after 6
	Twin	samples
Father not	Other children with the same parents (100% siblings)	
available, mother	Father's mother (paternal grandmother)	
available	Father's father (paternal grandfather)	
	Other children with the same father (50% siblings)	
	Father's sisters and brothers (paternal aunts and uncles)	+
	Twin	Stop after 8
	Other children with the same parents (100% siblings)	samples
	Mother's mother (maternal grandmother)	
Eath an mat	Father's father (paternal grandfather)	
Father <u>not</u> available, mother <u>not</u> available	Father's mother (paternal grandmother)	
	Mother's father (maternal grandfather)	
	Other children with the same mother (50% siblings)	
	Other children with the same father (50% siblings)	
	Mother's sisters and brothers (maternal aunts and uncles)	
	Father's sisters and brothers (paternal aunts and uncles)	+

#### TABLE 2. SAMPLE COLLECTION RECOMMENDATIONS DEPENDING ON PARENTAL AVAILABILITY

Table 2 above sows the samples needed for each case. This tool is used by Pro-Búsqueda staff in the field.

#### 1.2 What happens when there are not enough living relatives to reach 10 points?

If investigators are unable to achieve 10 points worth of familial references because there are not enough relatives available to provide samples, investigators need to try to collect DNA samples from the following:

If the disappeared person is a male:

- A full brother.
- Or if this is not possible,
- An uncle from the father's side of the family (paternal uncle), plus an aunt from the mother's side of the family (maternal aunt).

If the disappeared person is a female:

• A full sibling.

Or if this is not possible,

• A half sibling from a shared mother or an aunt from the mother's side of the family (maternal aunt).

If investigators cannot determine who among those available will provide the best genetic information, the geneticist at Pro-Búsqueda has a tool that can help guide them. The geneticist can determine the best samples to collect using a software program called DNA View, developed by forensic mathematician Charles Brenner. DNA View is a multi- function software tool that is used for this project to test for kinship, meaning how members of a family are related to one another. The software calculations show which of the available relatives are best to collect samples from or will provide sufficient genetic information to match a family with a disappeared person. The geneticist can instruct the staff member which family members to collect from and how many members will be needed.

#### 1.3 What are the procedures for collecting DNA samples?

DNA contains some of the most private and intimate information about the composition of life and background of a particular person; therefore, taking and handling DNA samples requires special care to ensure integrity and privacy, and to prevent exploitation and tampering. Before a sample is taken, the donor must clearly understand for what purposes the sample will be used, where it will be stored, and who will have access to it. Like all forms of evidence, the samples must be carefully registered, tracked, and monitored at all stages of analysis to prevent loss, error, and tampering. Procedures regarding taking and handling DNA samples must therefore be transparent, clearly articulated, and strictly adhered to. For an example of a consent form, see A-3.1 and A-3.2 in APPENDIX 3: Buccal DNA Collection Kit.

In our Project, there are three steps for collecting DNA samples, as described below.

#### Explaining the DNA process and obtaining consent. The first

step is to explain fully the process of DNA testing, its implications, what the DNA will be used for, and privacy concerns in order to obtain informed consent from the donor. Investigators need to be trained to convey DNA testing in simple language that can be easily understood by a layperson. In addition, investigators collecting DNA samples need to be able to obtain samples successfully and to coach individuals in using the buccal swab collection technique effectively.

1. Explain the DNA testing process to donors.

2. Complete three required DNA collection forms.

3. Collect DNA samples.

**Completing forms.** Secondly, a donor completes two required DNA collection forms and a witness fills out one form. Signatures or thumbprints are required on all forms.

The Donor Information Form collects the donor's demographic and identity information (APPENDIX 3, A-3.3: Buccal DNA Collection Kit Donor Information Form). The Informed Consent Form (A-3.1 and A-3.2 in APPENDIX 3) ensures donors agree to the terms of the DNA testing process and the nature of the procedure to collect and analyze their DNA sample. Donors keep one copy of this form for their records and provide another copy with their sample. In addition, an individual present at the time when the DNA sample is collected completes the Witness Information Form (A-3.4 in APPENDIX 3: Buccal DNA Collection Kit Witness Information Form). This person serves as a witness to ensure the DNA procedures are fully respected. These forms and procedures may be modified to adapt to a variety of cultural and socioeconomic situations.

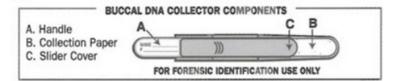
**Collecting DNA.** Finally, a staff person or donor collects the DNA sample. The staff or donor swabs the inner cheek to collect a sample of cells from which to extract DNA. The Buccal DNA Collection Kit Instructions clearly depict (Figure 3) the seven-step process and the care taken not to contaminate the sample with someone else's DNA, particularly Pro-Búsqueda staff or a witness.

### Buccal DNA Collection Kit Instructions

Specimen Identification: Prior to obtaining your DNA sample, adhere code (M#) to the buccal collector where indicated with letter A (NAME). Please do not touch the collection paper with your hands exposed, AT ANY MOMENT, during the collection of the sample.

wrap

indicated



#### Step 1:

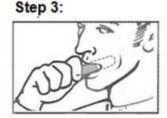
Open







Without taking your gloves off, hold the Buccal DNA Collector with thumb on the area marked "Thumb" on the back of the collector.



Open your mouth and place Buccal Collector with paper side flat against inside part of the cheek.



With collection paper pressed against inside of cheek, drag it firmly toward lips and out of the mouth. This causes a bulge that can be observed during the collection.

#### Step 5:

collector, as



plastic

containing the Buccal DNA

Collector; use the new pair

of gloves provided in each

kit to prevent sample

contamination, and discard

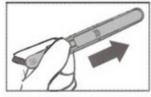
plastic wrapper. Adhere

code (M#) onto the buccal

above. Move slider cover back, if necessary, to fully expose the collection paper.

Repeat this action 7 more times. Please, DO NOT rub the buccal collector back and forth against cheek like a toothbrush (this will cause destruction of the paper). Note: It is important for a witness to observe subject pressing 'collection paper' flat against cheek and dragging collector the right way during the 8 movements of dragging.

Step 6:



Slide collection cover towards the tip of the collector, covering the collection paper completely.

Step 7:



You will find a sealed plastic bag with two desiccants in the Transport Pouch. Open it and place the desiccant bags in the Transport Pouch along with the buccal DNA collector. After you have done this, seal the Transport Pouch. Discard the gloves.

Submitting specimen: Place sealed Transport Pouch, which contains DNA sample and the two desiccants, into the preaddressed return envelope provided, along with the forms.

#### FIGURE 3. BUCCAL DNA COLLECTION KIT INSTRUCTIONS

At this stage, barcodes instead of names are used to identify the sample to preserve the privacy of the donor. The DNA sample is given a "sample code" beginning with the letter M (M for muestra, meaning "sample" in Spanish) followed by a series of numbers (M####). This code is unique to each sample and is associated with the individual's personal information. For example, María López's sample (ex.: M###1) will have a different code than Linda López's sample (ex.: M###2) even though they are relatives and are providing DNA for the same disappeared person (see APPENDIX 4: Pre-DNA Analysis Activities). Should it be necessary or desirable to collect and analyze a second sample from an individual, a distinct M#### code is assigned.

After the DNA sample has been collected it is placed in a special envelope with desiccant, which preserves the sample by keeping it dry. The investigator then joins the sample to its chain of custody form along with the other forms, all to be handed over to the Pro-Búsqueda geneticist for further processing. The investigator has also documented its Pro-Búsqueda code (PB####) in order to have a record of who assisted in the collection of the sample should there be any questions about inadvertent contamination of the sample during the collection event. The PB code is given to identify each staff member at Pro-Búsqueda in order to identify the staff members who conducted the interview and collected the DNA samples. A code is important to distinguish among staff when handwriting may be illegible or initials are similar. In addition, the DNA profile of each member of the staff involved in collection of samples is known, which permits inquiries into the possibility of sample contamination, should there be any reason to suspect that it has occurred via inadvertent contact of the buccal DNA collector with the interviewer.

For the cases where the donor is providing a sample remotely, the package is sent to the organization handling DNA samples or directly to the DNA Laboratory. In these cases the adopted person is informed about the process of the analysis of her/his sample in each step (APPENDIX-5: Communications with an Adopted Person).

#### 1.4 What are the procedures for transporting DNA samples?

After an investigator collects DNA samples, these samples are registered, stored, and then transported to the DNA Laboratory.

- **Registering samples**. To keep track of the DNA samples collected, ensure integrity, and prevent tampering, Pro-Búsqueda registers DNA samples in a book and/or digital database and uses a chain of custody. The organization has appointed one staff member as the custodian of the DNA samples.
- 1. **Register** DNA samples.

2. **Store** DNA samples in a cool and secured place.

3. **Transport** DNA samples to the Laboratory.

The chain of custody is a form that documents who has handled a sample and who has taken custody of it. This form records name(s), signature(s), date(s), place(s) of initial and subsequent transfers of custody, as well as the PB code of the original investigator who assisted in the collection of the sample (APPENDIX 3, A-3.5: Buccal DNA Collection Kit Chain of Custody of DNA Sample). It is one of the most important forensic tools used because it tracks movement of DNA samples. The chain of custody form needs to be signed by any person who comes in contact with a DNA sample at any given time. Monitoring the chain of custody ensures transparency and accountability when handling DNA samples.

Appointing one staff member as the custodian of the DNA samples allows Pro-Búsqueda to monitor and track DNA samples better. The custodian of the DNA samples is responsible for receiving the sample(s), signing the chain of custody form acknowledging the transfer, and registering the sample(s) in a centralized digital database and in a hand-written sample reception book. Although it is advisable that each staff member collecting samples should also maintain a record of samples collected, the custodian's role is to create and manage a single database that contains a record of all the DNA samples. This database is referred to as the Sample Tracking Database (APPENDIX 4: Pre-DNA Analysis Activities). The custodian is also responsible for keeping the samples in a safe and secure place until they are sent to the laboratory for analysis.

At Pro-Búsqueda, the geneticist is the primary contact person with the Laboratory, where the samples are analyzed at an accredited forensic genetics laboratory in the United States, Guatemala, or Europe. The geneticist signs the chain of custody and is the ultimate custodian of the DNA samples. It is important to note that if the organization does not have a geneticist on site, another staff member can perform the role of custodian.

The custodian of the DNA samples records the following information for each DNA sample in the DNA Reference Database (Chapter V: Databases and Recordkeeping):

- Interview code (E####): Code given by Pro-Búsqueda's investigators to the interviews of the family members of the disappeared person. The Interview code is the same for all samples collected from a family member related to a disappeared person from that family. It should be remembered that another Interview code will be assigned to information gathered on another family member lost to disappearance from the same family. In that case, all samples (M#### codes) from that family will be connected and recorded as pertaining to two Interview codes. For more information see Chapter III, Section A.1.5: How are families interviews tracked?
- Name of missing person.
- Name of family member providing the DNA sample.
- Kinship of family member to missing person (mother, sibling, uncle, etc.), otherwise known as the Family Tree (Chapter V, Section A.2.2: Family Tree).
- Sample code (M####): Code given to a DNA sample when it is collected. The letter M stands for muestra, meaning "sample" in Spanish. The code is unique to each sample and is associated with the individual's personal information. For more information see Chapter IV, Section B.1: Collecting DNA Samples.
- Sample Lab code (for example, ES####, where ES stands for El Salvador): Unique code given to a DNA sample when it is sent to the DNA analysis laboratory.
- Genetic profile of each sample. For more information see Chapter IV, Section B.2: Determining Genetic Profiles.

The genetic profile of each sample will be added to the Database after the Laboratory completes the DNA analysis, obtains a profile, and sends the data to Pro-Búsqueda and the technical review of the profile has been performed prior to its acceptance (a checksheet for the technical review is found in APPENDIX 6).

The key is for the organization to appoint one person as the custodian of the DNA samples and to centralize the DNA recordkeeping. The custodian of the DNA samples is responsible for registering the samples in one database, administering the database, and keeping the samples in a secure place until they are sent to the Laboratory. Also, the custodian will coordinate the reception of the samples back from analysis once completed by the Laboratory.

**Storing samples.** Once registered, DNA samples are stored until there is a sufficient number, or large enough batch, to send to the DNA Laboratory.<sup>9</sup> DNA samples need to be stored in cool and dry places to preserve their integrity and prevent degradation of the DNA. They are damaged if stored in humid conditions. Good places to store samples include safety boxes, file drawers, and closets.

Because of privacy and security concerns, it is critical that the place where DNA samples are stored is locked and secure and that the person who has access to the samples is an authorized person. To avoid losing or misplacing DNA samples, it is preferable that only one staff member or authorized person, the Custodian of DNA samples, has routine access to the storage location and is responsible for storing and transporting the samples.

Transporting samples. Transporting a batch of DNA samples to a remote Laboratory involves making sure that all the information and codes are transcribed correctly, shipping the samples as appropriate, and communicating with the DNA Laboratory staff that samples have been shipped.

Before sending the batch of DNA samples to the laboratory, the custodian of the DNA samples checks and rechecks that the following information is included and correct:

- Every DNA sample has a unique sample code (M####).
- Each DNA sample is linked to an interview code (E####).
- All forms are filled out correctly.
- A photocopy of the chain of custody is included with the sample shipment.
- The sample information has been transcribed (to a computer and/or a notebook).

In most cases a batch of samples is shipped to the Laboratory. It is imperative that a secure mailing system be used. From experience we recommend FedEx, which operates internationally and offers various ways to track packages successfully.

On a few occasions, an authorized person<sup>10</sup> who is traveling to the country where the Laboratory is located can transport a batch of samples. We recommend that the person traveling carry a signed letter on official letterhead from the organization explaining the project, what the samples are, and where they are going.

<sup>&</sup>lt;sup>9</sup> Pro-Búsqueda usually gathers about 10-30 samples before mailing them to the Lab.

<sup>&</sup>lt;sup>10</sup> An authorized person can be staff from the organization, staff from other human rights organizations, and/or volunteers.

The laboratory uses the ES#### code for sample-tracking purposes. The code is shared with Pro-Búsqueda's geneticist, who adds it to the DNA Reference Database in order to link it with all the information pertaining to each DNA sample and interviews.

Pro-Búsqueda, the Alliance, and HRC developed a protocol to communicate when a sample is sent and when it is received. The person mailing samples sends a notification e-mail that informs the staff receiving the samples when the samples were sent, which service organization (for ex., FedEx) and mode (3-day delivery, overnight, etc.) were used, and any specific instructions. Similarly, the person at the Laboratory sends a receipt e-mail confirming the receipt of all the samples. This email notifies Pro-Búsqueda of the day the samples were received, the number of samples in the package, and the condition of the samples (unopened, opened) and that the Lab recipient signed the chain of custody form and registered each sample. For examples of the confirmation emails see APPENDIX 7: Communication Protocol for Transporting DNA Samples.

#### The Entire Sample and Analysis Process

In sum, to collect and transport DNA samples Pro-Búsqueda, the Human Rights Center, and the Alliance follow 6 steps. First, Pro-Búsqueda or the HRC explains the DNA testing process to adoptees and the biological families to obtain informed consent from the donors. Second, the donors complete and sign the Donor Information Form, which collects the donor's demographic and identity information, and the Informed Consent Form, which ensures donors agree to the terms of the DNA testing process. In addition, an individual present at the time when the DNA sample is collected completes the Witness Information Form. Once this is done, investigators collect a buccal DNA sample from donors, the third step in the process. Each DNA sample is given a unique "sample code" (M####).

Once DNA samples are collected, the fourth step is to give the samples to Pro-Búsqueda's geneticist, who is the custodian of DNA samples. The geneticist registers the samples in the DNA Reference Database and signs the chain of custody form acknowledging receipt. Also, the geneticist assigns the unique sample lab code (ES####) each sample. The custodian then stores the samples in a cool and dry place to preserve their integrity until there is a large enough batch to send to the DNA Laboratory. The final step is to mail or transport the samples to the remote DNA Laboratory with the appropriate documentation. When the Laboratory receives the DNA samples, the Lab registers each DNA sample by ES#### code. The DNA samples are now ready for analysis. Refer to APPENDIX 4: Pre-DNA Analysis Activities to see the entire process outlined in a diagram. Nevertheless, the activities pre DNA analysis has been updated since 2013.

# 2. Determining Genetic Profiles

# 2.1 What are genetic profiles?

Once DNA samples are collected and are received at the Laboratory, scientists analyze each sample to obtain an individual's genetic profile (see next section for more details on what a genetic profile obtained in this Project actually consists of). The genetic profile allows the scientists to infer the genetic make-up of an individual in order to compare it with another individual's genetic make-up. Unless two persons are identical twins, it is extremely unlikely that any two individuals will have the same genetic make-up.

However, because half of an individual's DNA is inherited from his/her mother and the other half from his/her father, a person's unique genetic profile is a composite of the profiles of the biological parents and is similar to the profiles of other relatives. Thanks to this basic principle, forensic scientists are able to determine kinship between missing persons and their biological families. We know that there are two important exceptions to inheritance of 50% of the DNA from each parent. The Y chromosome comes only from the father and is passed only to sons and the mitochondrial DNA (mtDNA), which is extra-chromosomal, and it is inherited only from the mother. Pro-Búsqueda has used this evidence since 2012 in the first case and in the last 5 years for mtDNA.

# 2.2 How are genetic profiles determined?

Obtaining a genetic profile is a complex and highly technical process. Scientists (with the use of advanced robotics) extract DNA from the cells and subsequently isolate specific regions of the individual's DNA that are then analyzed to obtain the DNA profile. In this type of analysis, we are looking at only a small fraction of anyone's total DNA (21 nuclear loci and the sex chromosomes). The greater the fraction examined, the lower the probability that any two individuals (except identical twins) will have the same profile. The DNA profile is often is referred to as a "DNA Fingerprint". The DNA profile is reported as a series of numbers with the exception of a region in the sex chromosomes, which are used to distinguish males (X,Y) from females (X,X) (Figure 4).

The figure below shows two hypothetical DNA profiles from two unrelated persons, Individual 1 and Individual 2. The STR (short tandem repeat) Markers D3S1358, VWA, FGA, etc. are sections of the genome that repeat. Through a process called kinship analysis, further described in Chapter IV, Section B.3: Conducting Kinship Analysis, 21 STR markers are compared to see if Individuals 1 and 2 are related. As can be noted in the figure below, completed genetic profiles are stored in a "DNA Reference Database (see Chapter V, Section A.2.1: Genetic Profiles Database to learn more about the composition of the database.

STR MARKER	Individual 1	Individual 2
D8S1179	9,13	8,14
D21S11	29,30	30,30
D7S820	10,11	11,12
CSF1PO	10,13	10,12
D3S1358	17,18	14,15
TH01	6,9.3	7,7
D13S317	12,12	11,13
D16S539	11,12	9,10
D2S1338	17,19	17,18
D19S433	13,14	14,14
VWA	18,19	16,17
TPOX	8,11	8,8
D18S51	15,17	12,16
D5S818	10,12	11,11
FGA	22,23	22,27
D10S1248	14,15	13,15
D12S391	15,22	18,21
D1S1656	12,17	17,17.3
D22S1045	15,16	16,16
D2S441	11,11.3	10,1
AMEL**	X,Y	X,X

# Hypothetical DNA profiles from two unrelated individuals\*

\*The alleles<sup>1</sup> described by numbers in the second and third columns are known to exist in the human population.

\*\* This is not an STR marker but reveals gender: XX=female, XY=male.

### FIGURE 4. EXAMPLE OF TWO GENETIC PROFILES

# 2.3 What software program is needed to develop a genetic profile?

The DNA Lab, as well as the project, use a software program called GeneMapper (Applied Biosystems). It is a validated system, meaning that scientists have tested the system and are confident in the DNA profile results generated from the software. GeneMapper has undergone a series of evaluations and rigorous testing to ensure it is a reliable system. Regardless of which software program is used, it is important to confirm that it has been evaluated and validated.

<sup>11</sup> Alleles, the alternative possibilities for a gene or genetic locus (Fundamentals of Forensic DNA typing, John M. Butler, 2010, Elsevier Inc.

### 2.4 Are genetic profiles reviewed to ensure accuracy?

All DNA analyses undergo a technical review and a data review by a vetted scientist who is not involved in the initial analysis. The technical review entails examination of the experimental results (including such parameters as negative and positive controls and size standards) that are generated during the course of producing the DNA bands or peaks that are identified with specific alleles reflective of each DNA sample. This examination is done to make sure the DNA analysis was conducted accurately and the results obtained are reliable. Typically, results generated by the genetic analysis software (GeneMapper for this Project) are independently reviewed by Pro-Búsqueda (that is, independently of the technical review of the Lab) and the numbers are checked to ensure they match (see APPENDIX 6). Sometimes additional samples may need to be collected to obtain a DNA profile.

GeneMapper® ID-X Software is the last version of GeneMapper. The new multiplex STR amplification systems uses this version. The high cost of the License has been a problem for the project. Therefore, beginning in 2015 Pro-Búsqueda has paid a technical review in a different lab from the lab that does the analysis.

The data review is a quality check review and is part of the Post-DNA analysis activities (APPENDIX 9). Scientists review the genetic profiles reported to check for errors and to verify that the sample reported on is the sample that it is purported to be (i.e., to ensure that a sample switch has not occurred). This step is very important and necessary to ensure the data are sufficient and of "good quality." Scientists make sure the genetic profile obtained from DNA analysis is correct before it is put into a database and results are shared with individuals.

# 2.5 What information is extracted from a genetic profile?

The information that is extracted from a genetic profile is a person's unique pattern of DNA. It is the genetic make-up of an individual or their genetic fingerprint that makes them unique. The profile in any given project refers to the collection or totality of traits at the sections of the genome studied.

### 2.6 Are there cases when a genetic profile cannot be generated from a DNA sample?

Yes. Typically, when a genetic profile cannot be generated from a DNA sample it is because insufficient DNA exists in the sample. This can occur if there was a problem with the collection, handling, or storage of the sample. For this reason, it is crucial to use a collector, a tool used to collect DNA samples, that is simple and easy to use and consistently produces good-quality results. Examples of collectors are a sterile cotton tipped swab or, as used for this project, a manufactured collector with a plastic applicator and sterile cotton paper. This type of collector is used for the project to ensure DNA samples are collected properly and consistently. DNA samples need to be handled carefully to avoid contamination and need to be stored in a cool dry place.

When a genetic profile cannot be generated from a DNA sample, the scientists will attempt to extract more cells and thence DNA from the sample and reanalyze it. If a second analysis does not yield a complete genetic profile, then a second sample must be collected. It is important to ensure that the person collecting the DNA sample is using the collector properly in order to obtain as many inner cheek cells as possible.

### 2.7 How long does it take to generate a genetic profile?

The turnaround time from DNA extraction to generating a DNA or genetic profile can be as short as 3 days. However, in the context of this Project, which has depended up to now on the support of professional volunteers, it takes scientists approximately 2 to 3 months on average to generate a DNA or genetic profile since the samples are received in the lab. This is assuming that the first sample yields enough DNA to develop a genetic profile . If re-sampling is necessary, then the process takes much longer (APPENDIX 8: Process from Sample Collection to Result). Generally, scientists working on human rights projects are few and many of them work as volunteers. This means they typically will analyze the hundreds of DNA samples after working their regular daily hours.

### 2.8 Does the type of Laboratory matter?

Yes. When deciding on a Laboratory to conduct the DNA analysis it is important to ensure that the laboratory has high standards of quality and clear protocols and procedures so that the DNA analysis and results can stand trial.

Before selecting the Chromosomal Laboratories (see Chapter I), the HRC project director and two scientists from the Alliance met with the executives of the company, interviewed staff scientists, toured the lab, and reviewed all their quality control procedures, their shipping and receiving facilities, their data management system, and their refrigeration system. Analogous assessments were carried out of other laboratories subsequently deemed suitable for analysis of samples from Pro-Búsqueda (see Chapter I). When possible, we recommend that forensic scientists working with or consulting with your project conduct a thorough site visit to any prospective DNA Lab under consideration.

We strongly advise that you enter into a written contract or Memorandum of Understanding with any DNA lab before you start sending samples to them. Such a contract would articulate the parameters of DNA analysis, how the information should be reported, how many attempts should be made to develop a genetic profile, the security of the data transfer, the turnaround time for developing a DNA profile, and how to handle problematic samples.

# 3. Conducting Kinship Analyses

# 3.1 What needs to be considered before conducting a kinship analysis?

Before conducting a kinship analysis, it is important to evaluate how the family members are related to one another and confirm their biological relationships. The available DNA profiles can be analyzed and evaluated using the software program DNA View (see Chapter IV, Section B.1.2: What happens when there are not enough living relatives to reach 10 points?).

First, the family relationships are evaluated to determine for each relationship whether the social relationship, or the relationship given to the investigators by the family, agrees with the results from the genetic testing, meaning their actual biological relationships. If a mother, father, and full sibling of the disappeared person provide DNA samples, the geneticist can evaluate their DNA profiles using DNA View to verify that they are related as stated. It is possible, for example, that a full sibling may not know that he

or she is only a half-sibling. This means this sibling shares the same mother as the missing person but has a different biological father. If the relationships are proven, this means the family is related as they stated; thus, the software can be used to determine if the available family members will provide enough genetic information to positively identify a missing child.

If the family is not related as they believe to be then the next step is to determine if more family members are available from whom to collect DNA samples. The investigators at this point may contact the family members interviewed to clarify relationships, or schedule additional family members for DNA collection. This is a highly sensitive subject, and it will be up to the discretion of Pro-Búsqueda to decide if they should disclose whether a family member is not related as they believe. It may be best to request additional samples to verify identity and not disclose the result, unless specifically requested. In some cases, all available family members will have been exhausted and no more DNA information can be obtained. In this case, identity may rely more heavily upon non-DNA information collected by the investigators.

### 3.2 What is kinship analysis?

Kinship analysis requires evaluating a potential match of a missing person to a given family using both DNA and non-DNA information. Non-DNA information is collected during the investigation. It may include but is not limited to the following: an estimate of the total population of children that disappeared as a result of the war, the sex of the disappeared person, the age when he or she disappeared, geographical data, any memories of the event when they were separated from their family, unique physical characteristics, and any supporting documentation including photos (Chapter III, Section A.1.1: What information is collected from families?).

Kinship analysis involves three steps. First, the genetic profiles of the persons who looks for their family in the Database are compared with family reference profiles. Family reference profiles are the genetic profiles of the family members searching for their disappeared relatives. By comparing the profile of a specific person who looks for her or his family against the family reference profiles, potential biological families can be ascertained.

The second step in kinship analysis is to determine if a disappeared person (who is looking for their family) can be statistically linked to a putative family through comparison of their genetic profiles and non-DNA information collected during the interview. Once a potential family has been isolated the non-DNA information is verified to determine if it is compatible with the proposed kinship. Individual kinship analysis is then conducted to determine if identity to the disappeared person can be confirmed using all available information.

The geneticist will evaluate individual kinship with DNA View using a statistical calculation called a likelihood ratio. The likelihood ratio is the statistical calculation used to determine whether a person is related or unrelated to a putative family. This calculation determines how many times more likely the missing person is related to the putative family than unrelated. For example, if a likelihood ratio is 1,000 this means that the missing person is 1,000 times more likely to be related given the family relationships than unrelated to the putative family.

The final step involves writing a report documenting the kinship evaluated between the disappeared person and a putative family and whether it is confirmed or rejected. For this Project, kinship is accepted when the statistical calculations indicate a probability of identity of at least 99.9 percent. The probability of identity is reached using both the statistical likelihood ratio calculation and the non-DNA information that may presumptively associate a disappeared person with a family.

The report includes both DNA and non-DNA information supporting a statement of identity.

1. **Compare the genetic profiles** from missing persons against the profiles from the families.

2. **Determine kinship** between a missing person and a putative family.

3. **Write** a final report confirming or rejecting kinship

The DNA information includes:

- Genetic profiles from the disappeared person and family members.
- A family tree mapping out the family relationships to the disappeared person (Chapter V, Section A.2.2: Family Tree).

The non-DNA information includes:

- Background information.
- Field investigative data.

The statistical calculation results and a statement of identity are recorded to show how the analyst came to his or her conclusion of identity.

The report is written by the geneticist and is reviewed by a qualified forensic scientist or another geneticist to ensure accuracy. The scientist reviewing the report repeats all calculations. When the report draft has been finalized, after the two separate analyses and interpretations, it will undergo a third and final technical review by a geneticist or forensic mathematician to ensure the accuracy of the statistical calculations. The findings of the report are shared with both the disappeared person and the family members. The report is then archived at Pro-Búsqueda, the organization handling the case (see APPENDIX 10: Example of Final Report).

# 3.3 Who conducts kinship analyses and what software programs are needed?

The Alliance and the geneticist at Pro-Búsqueda conduct the kinship calculations. The Project uses DNA View, but any type of kinship software program can be used. Sometimes labs will develop their own internal kinship software program. Regardless of which software program is used, it is important to confirm that it has been validated.

### 3.4 Are kinship analyses reviewed to ensure accuracy?

Yes. In our Project, DNA profiling and kinship analysis undergo several levels of review.First, DNA analysis undergoes an internal quality control at the Laboratory. The DNA analysis of the Lab is then technically reviewed by one forensic scientists of the Alliance or by the geneticist at Pro-Búsqueda.

The kinship analysis is also reviewed. If the geneticist at Pro-Búsqueda conducts the kinship analysis, then the calculations are reviewed by the Alliance. If an Alliance member does the kinship analysis, then another qualified Alliance member reviews his or her work.

The geneticist reviews all the data and re-examines the background information that associates a missing person with a family, writes a draft of the final report where kinship between the missing person and a potential relative is confirmed or rejected. A scientist from the Alliance reviews the report to ensure the information is accurate. Finally, a forensic specialist or forensic mathematician examines the technical component of the report (the kinship calculations) and verifies the results.

### 3.5 What are the possible outcomes of a kinship analysis?

There are four possible outcomes of a kinship analysis:

 COLD HIT - A kinship determination that is not expected or predicted by field investigatory methods and could have only been determined through the use of DNA. A possible family is identified as linked to a missing person who was not previously known by the information gathered from the field investigation. Cold hits are not as frequent and have occurred in 9 cases overall (out of approximately 900 cases).

This is an example of a cold hit:

"A young man who grew up in a Salvadoran military household recently learned that he was adopted. Without the knowledge of his adoptive family, he approached Pro-Búsqueda to learn of his biological origins. Curiously, his genetic profile was highly similar to the profiles of family members who had been searching for two girls but no boys. Upon further discussions with the family, Pro-Búsqueda learned that indeed a boy, along with two girls, had been lost when the military attacked their village, but they had assumed that the male infant had been killed along with his mother, who was holding him at the time of the attack. This young man turned out to be the family's disappeared child. Family members had no hope of recovering him and had not even mentioned his existence to Pro-Búsqueda.<sup>12</sup>

• WEAK HIT – There is an association of a missing person to a family but the probability of identity to anyone known to have disappeared from that family is less than 99.9 percent.

<sup>&</sup>lt;sup>12</sup> Children and Transitional Justice: Truth Telling, Accountability and Reconciliation. Chapter 8 "Disappeared Children, Genetic Tracing and Justice" Harvard University Press, 2010, pg. 317.

Because this ratio is insufficient to establish kinship, scientists further investigate the case to determine if the association is a coincidence or if it is a true family confirmation. DNA samples from other family members are requested as well as more background information. Furthermore, additional genetic markers may be typed to confirm or disprove kinship.

In our Project, the Alliance scientists closely look at evidence gathered in the field. If other investigatory evidence will support the weak hit, then they may evaluate the evidence taken as a whole and make a finding of kinship.

Weak hits may occur when rather distant relatives (aunt or uncle, grandparent, cousin) of the missing person have provided the DNA samples. This will give a weak association because a person has more DNA in common with his/her closest relatives (parents, siblings) than with more distant relatives. Thus, the association needs to be verified by investigation and DNA analysis of more family members otherwise kinship cannot be established.

• NO HIT-There is no kinship association between a missing person and a putative family member.

When a no hit occurs, the scientists need to confirm the basis for the no hit result, which appears to mean that the disappeared person is not related to the putative family. In some cases, a no hit may result when a putative family member believes or has been led to believe that he/she is related to the disappeared person, when in fact he/she is not. This may notably occur in the instance of a putative father: A man may have been led to believe that he is the father of a disappeared person when in fact he is not biologically related. Thus, the no hit result is only exposing the fallacy of this particular relationship. In this case, additional family references must be sought. The issue of paternity must be addressed delicately and great thought should be given as to whom, by whom, and how this finding is relayed. In general, in our Project, communications with family members and with the persons believed to be disappeared are left to Pro-Búsqueda.

No hits also emerge when the DNA Reference Database is searched with a sample of a missing person and there is no association to a family. This means that of all the families in the database none are related to the missing person. In this case, the genetic profile of the disappeared person is compared against the DNA Reference Database frequently as the database grows and new genetic profiles are entered.

# 3.6 Why are confirmation samples requested?

Confirmation samples are additional DNA samples obtained from an individual who already submitted a sample and for whom a potential kinship has been established. In this case, confirmation samples are requested from the person found in order to ensure that no inadvertent sample switch has occurred.

# 3.7 How long does it take to conduct a kinship analysis?

On average, it takes the scientists 2 to 3 months to conduct a kinship analysis, which includes first, the discussion of the specific case with the team of Investigation Unit, review the evidence, genetic and non-genetic. Typically, this is a long process if more samples need to be analyzed (APPENDIX A-8: Process from Sample Collection to Result).

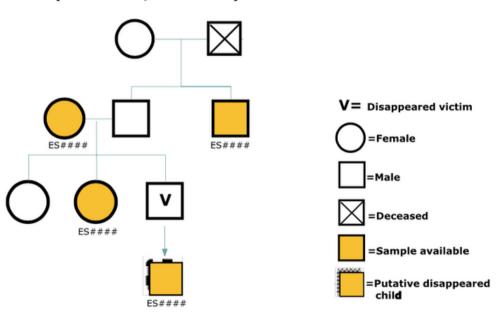
### 3.8 Who generates final reports and when are they generated?

In our Project, the staff geneticist hired by Pro-Búsqueda and the team of forensic scientists working on a particular case write the final report. The geneticist writes a draft of the final report where kinship between the missing person and a putative relative is confirmed or rejected. An Alliance scientist then reviews the analysis and edits the report to ensure the information is accurate. Finally, a forensic specialist (forensic mathematician) examines the technical component of the report (the kinship calculations) and verifies the results. The final report is written when all the documents and analyses pertaining to a case have been generated and reviewed and there is consensus among the team regarding the case results.

### 3.9 What are final reports and what do they entail?

Most importantly, the report indicates the probability of kinship between the disappeared person and the putative family member(s). Based on the information from the field investigations and the genetic analysis, the final report explains how the result was determined. The report presents the list of individuals related to the case (i.e., the missing person and relatives), the background information about the case, and the mathematical calculations showing the probabilities of kinship. It concludes by stating the exact likelihood ratio of kinship and recommending that the identification be accepted or rejected.

Pro-Búsqueda's geneticist draws a family tree to be included in the report using a program called Smart Draw based on the information collected from the interviews. Figure 5 is an example of a family tree, also known as a pedigree:



# Case (Entrevista/Interview) Number

FIGURE 5. EXAMPLE OF A FAMILY TREE

The circles in the diagram represent females, the squares represent males, and an "X" means the person is deceased. For this example, we know that the disappeared person (marked with a V) is male and has two sisters.

As shown, some circles and squares are orange while others are white. The orange circles and squares indicate family members who provided a DNA sample and from which a genetic profile was successfully obtained. The Lab code of each sample (ES####) is written below each symbol. In contrast, the white symbols are other family members related to the disappeared person who have not provided DNA samples because they have not been available or it has not possible contact them. In the example above, one of the disappeared person's sisters provided a DNA sample while the other did not. If additional genetic information is needed to determine kinship, the scientists will request a DNA sample from the sister who did not provide a sample.

Family Tree diagrams are important because they help scientists determine who the best person is to collect a DNA sample from and, if additional genetic information is needed, it records who is deceased and who is available but has not yet donated a sample. However, sometimes is not possible have a complete genealogical tree because the family don't give information about the own family, in other cases, the "other side" of the disappeared person's family is unknown.

### 3.10 Where are final reports archived?

Final reports are archived at Pro-Búsqueda and at the Alliance in an electronic format. In addition, Pro-Búsqueda keeps two printed copies of final reports: One is kept in the missing person's file and the other is kept in a file cabinet of final reports.

The following section focuses on the management of genetic evidence. Because of the highly personal and confidential nature of this information, it is important that organized and secure systems of data management are maintained.

### A. DATABASES

### 1. Interview Database

The Interview Database records information obtained from all of the family interviews in relation to a missing person as well as DNA samples collected from relatives. In our Project, a family interview occurs between a Pro-Búsqueda staff member and a family member of the disappeared. During the family interview, background information is gathered which will provide details about and characteristics of the disappeared person, the circumstances surrounding his/her disappearance, and information regarding the disappeared person's family tree. The interview code (E###) is assigned at this time.

The family interview is extremely important because it gives field investigators an idea of where and how to start collecting information to determine the location and identity of the disappeared person and it gives the geneticist information about from whom and how many DNA family reference samples may be required for reliable kinship analysis. Pro-Búsqueda created the Interview Database in Access, but any other database program such as Excel can be used. The database is managed by Pro-Búsqueda and it captures the following information (see Figure 6):

- Name of the missing person.
- Information about the disappearance.
- Physical characteristics of the missing person.
- Information about other missing relatives of the missing person.
- Contact and kinship information of living family members who may be willing to provide DNA samples. Most often, DNA samples are taken during the interview.
- List of family reference DNA samples, noting from whom and the date when each sample was taken.
- Name of the person interviewed.
- Name of the investigator interviewing the family member.

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		<b>^</b> ←
	A1) Nombre(s)	<i>→</i>
	A2) Apellidos	+
	A3) Sexo	
	A4) Fecha de nacimiento (dd-mmn-aa)	B
	A5) Lugar de nacimiento	-
ón	A6) Número de cédula de identidad (DUI)	
vegac	A7) Alcaldia donde fue asentado(a)	
Panel de navegación	A8) Iglesia donde fue bautizado(a)	
Panel	A3) Fecha de la última vez que fue visto(a) (dd- mmm-aa)	
	A10) Lugar dönde fue visto(a) por última vez	
	A11) Existencia de antecedentes del posible paradero de la persona buscada. (Describir)	
	A11a) Persona encargada o responsables	
	A11b) Instituciones a las que fueron llevadas	
	A12) Observaciones	

FIGURE 6. SCREENSHOT OF INTERVIEW DATABASE

# 2. DNA Reference Database

Pro-Búsqueda's DNA Reference Database is in Excel and is managed by Pro-Búsqueda's geneticist and the Alliance. The Excel database is comprised of several worksheets separating family DNA profiles from profiles of the disappeared persons for searching purposes.

# 2.1 Genetic Profiles Database

The Genetic Profiles Database contains all of the DNA profiles generated from the disappeared persons and family members who were sampled and typed. It records the following information:

- A master file that contains all the DNA profiles analyzed.
- An employee file that includes all of the staff DNA profiles from Pro-Búsqueda.
- A file of only family DNA profiles.
- A file of only Persons Found DNA profiles.
- A file of duplicate DNA profiles from persons found, for confirmation purposes when needed (referred to as confirmation samples).
- A file for duplicate family reference DNA profiles, when needed.

The genetic profile allows the scientists to compare one individual with another to evaluate kinship and, when possible, determine identity of a disappeared person as a member of a putative family. Pro-Búsqueda documents and records the genetic profiles of disappeared persons and family members plus the duplicate genetic profiles from both disappeared persons, and, when necessary, family members in order to confirm identity and to ensure that no inadvertent sample switch has occurred. In addition, Pro-Búsqueda maintains an employee reference DNA database. This facilitates sample tracking and maintaining sample integrity.

# 2.2 Family tree

The DNA Reference Database (Figure 6) documents the relationship between a missing person and his/her living and deceased relatives (includes relatives that gave their sample before they died). The family member's name, associated sample number, laboratory number, and relationship to the disappeared person are each recorded. The information is captured to show the family relationships to the disappeared person using a family tree diagram. It should be pointed out that this Family Tree registers only those relatives for whom actual samples have been possible to obtain. Other existing relatives not yet sampled are to be found in the Interview Database and family tree thereof, entered during the initial interview of a member from a particular family. When a sample is needed to increase the kinship index ,this person is looked for and asked for their sample.

The DNA Reference Database contains at a minimum the following information for each case and DNA sample collected:

- Date of entry of the case.
- A comment section.
- If family tree data has been documented (Yes or No).
- Interview code (E[EP3] ####). For information on the Interview Code, see Chapter III, Section A.1.5: How are families interviews tracked?
- Total number of samples collected for each case.
- Name of missing person.
- Sample code (M###): Code given to a DNA sample when it is collected. The code is unique to each sample and is associated with the individual's personal information. For information see Chapter IV, Section B.1: Collecting DNA Samples.
- Lab code (ES####): Unique code given to a DNA sample when it arrives at the Laboratory and is registered. For more information see Chapter IV, Section B.1.4: What are the procedures for transporting DNA samples?
- Relationship of each family member to the missing person (mother, uncle, sibling etc.), otherwise known as the family tree (see next section).



• Name of each family member providing a DNA sample.

Pictured on the left: July, 2006. Ceremony held for the first version of the Bank with approximately 650 DNA profiles from Pro-Búsqueda. From left to right: Mario Sánchez (Pro-Búsqueda), Stefan Schmitt (Physicians for Human Rights), Lance Gima (Alliance), Rachel Shigekane (HRC)

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	Associated with E0###				Name missing person	Sample 1	DOJ		Name donor sam	ple 1 Sar	ple DOJ	Relationship sample 2		2 Sam	ple DO	

### FIGURE 7. SCREENSHOT OF DNA REFERENCE DATABASE

# **B. DOCUMENTS**

This section reviews all the forms that are used to administer our Project. We encourage organizations to document procedures and to develop organizational forms so that the work can be conducted in a consistent and systematic manner. This secures the institutional integrity of the work and ensures continuity in the event of staff changes.

# 1. Selection Criteria for Cases

As mentioned in Chapter III, Section A: Selection Criteria, it is important for the organization to establish criteria that will determine which cases are investigated and which are not. Hence, step one is to produce a document that lists the selection criteria for cases and explains the rationale behind each criterion. In the event that there are no selection criteria, the organization should also document and publicize this decision. By disclosing the criteria, the organization ensures transparency in case selection and prevents any bias, discrimination, or preferential treatment.

# 2. Forms for Family Interviews and Local and Transnational Adoptees

Intake forms are a way to document systematically the information gathered about a case. Developing intake forms is useful because they serve as guidelines for investigators to collect the relevant information for a case. It ensures investigators do not overlook specific information and allows them to identify easily any missing data.

Pro-Búsqueda has two different intake forms: one for family interviews (with family members of the disappeared) and local adoptees and one for transnational adoptees and adoptive families. Intake forms for family interviews record information about the missing person, family members, the disappearance, and the person opening the case. Intake forms for transnational adoptees gather information about the adoptee, the adoption, any memories of the adoptee before the adoption, and important documents. Refer to A-1.1 and A-1.2, respectively, in Appendix 1 for Intake Form for Family Members and Local Adoptees and Intake Form for Transnational Adoptees and Adoptive Family Members. The content and number of intake forms will depend on the type of cases the organization handles. Nevertheless, below are general tips to keep in mind when developing intake forms.

# Tips to Develop Interview Forms

- Ask the right questions. Make sure your questions gather all the information you need to conduct an investigation.
- Use clear and simple language. The intake form should be self-explanatory.
- Define terms on the intake form if needed.
- Request signature, or thumbprint if the person is illiterate, to validate the information provided.
- Opt for a plain design. The design should help the user navigate the form.
- Number the sections and/or questions to ease navigation.
- Leave enough blank space following each question to be able to complete the intake form without needing additional paper.
- Include the name, logo, and contact information of the organization (address, phone numbers, fax, e-mail, webpage).

# 3. DNA Collection Kit

The HRC and Pro-Búsqueda developed a DNA Collection Kit that is given to DNA donors. Investigators at Pro-Búsqueda use this Kit when they collect a family member's DNA sample as a reference sample and when they collect an in-country adoptee's sample. They also send this Kit to transnational adoptees, who collect their DNA samples on their own.

The purpose of the DNA Collection Kit is to inform individuals about the process, explain how they should proceed to collect their DNA, and provide them with the necessary forms to complete. At the beginning the DNA Collection Kit contained the following 10 items:

1) Donor Information Form. (Provides demographic and identity information of donor.)

2) *Informed Consent Form* (two copies). (Explains the terms of the process and the nature of the procedure to collect and analyze a DNA sample.)

3) Witness Information Form. (Provides demographic and identity information of the witness.)

4) *Buccal DNA Collection Kit Instructions*. (Outlines in seven steps exactly how to collect a sample of DNA from a person's cheeks; see Figure 2.)

5) Gloves. (Used to prevent contamination of the DNA sample.)

6) Buccal DNA Collector. (The instrument used to collect the DNA sample.)

7) Buccal DNA Collector Transport Pouch. (Pouch with dessicant where the DNA sample is placed, sealed, and transported.)

8) *Six Identical Barcodes.* Six adhesive labels with the same sample code (M####) to paste on the Buccal DNA Collector, the DNA Collector Transport Pouch, and the forms.

9) *Chain of Custody Form.* Form that will be signed by every person who has contact with the sample, beginning with the donor.

10) Timeline. Outlines each step in the process and how long each one may take.

Refer to APPENDIX 3: Buccal DNA Collection Kit to see an example of each of the first nine items and APPENDIX 8 for an example of the last item.

Pro-Búsqueda found that the forms 1 and 3 were not easily filled out by the donors and therefore are no longer part of the kit. The information once gathered in forms 1 and 3 (related to the donor and the witness) is now obtained through direct communication with the investigator of the case.

# 4. List of Resources

Compiling a list of resources helps adoptees, adoptive families, and biological families to navigate some of the difficulties in engaging in a family search. Such resources may include the organization's webpage, news articles about the Project, personal contacts, referrals of adoptees who have been reunited with their biological families, and confirmation of the organization's legitimacy. The purpose is to offer resources so that adoptees and families can learn more about the project and access support mechanisms.

In our Project, Pro-Búsqueda's website, www.probusqueda.org.sv, is primarily for families of the disappeared, adoptees and adoptive families in El Salvador, and individuals in any of these categories in other Spanish-speaking countries. The project website of the HRC,

https://humanrights.berkeley.edu/programs-projects/forensic-project is primarily for English-speaking transnational adoptees and their adoptive families. The Pro-Búsqueda site would likely be the website of choice for family members of the disappeared who, as members of the Salvadoran diaspora, now live in countries such as the US where Spanish is not the principal language.

# **IX. PSYCHOSOCIAL SUPPORT**

# A. WHAT PSYCHOSOCIAL SUPPORT IS

The International Federation of the Red Cross defines psychosocial support as "the process of facilitating and strengthening resilience within individuals, families and communities to recover from and adapt to critical adversities with potentially damaging long-term impacts".<sup>13</sup>

Providing psychosocial support to families and adoptees who were forcibly separated is important because it helps them cope more effectively with family reunifications. Psychosocial support addresses cross-cultural relationships, identity, family dynamics, and personal expectations for adoptees, biological families, and adoptive family members.

It helps *adoptees* make informed decisions about establishing contact and/or meeting their biological families, and it supports them through the complex and emotional process of learning about their birth families. Psychosocial support helps *biological families* to overcome their grief, provides them with news about their missing relatives, and prepares them to handle adoptees' decisions about communicating with and/or meeting them. For *adoptive families*, psychosocial support helps them deal with their own anxieties while supporting the adoptees.

One of the main functions of Pro-Búsqueda's Psychosocial Unit is ultimately to help facilitate a family reunion or family meeting between the adoptee or disappeared person and his/her biological family. Historically, adoptions have been considered highly confidential and at one time, it was difficult for adoptees to obtain information about their birth families. Adoptees were discouraged to seek out their biological families.

Within the last several decades, however, adoptees have expressed greater interest in meeting their biological families and adoption laws are trending toward greater transparency. New theories on adoption generally state that, among the interested parties, the adoptee holds the decision-making power with regard to establishing the pace of reunion and the parameters of the reunion. Of course, we hope that decisions reached will be agreeable to all and that each party will be open to understanding the hopes, anxieties, pressures, and expectations of others, but in its work Pro-Búsqueda believes that ultimately the adoptee has the final say.

# **B. PROVIDING PSYCHOSOCIAL SUPPORT**

# 1. Who, Where, and How?

# 1.1 Who provides psychosocial support?

At Pro-Búsqueda, trained psychologists or social workers have provided psychosocial support to individuals or families. Pro-Búsqueda's psychosocial support unit is currently comprised of two psychologists full time.

# **PSYCHOSOCIAL SUPPORT**

### 1.2 Who is offered psychosocial support?

The Psychosocial Unit of Pro-Búsqueda offers its services to the biological family, the adoptee, and the adoptive family. It is the choice of each individual whether she/he wants to receive psychosocial support. While it is recommended, some people are not interested in psychosocial support. The organization needs to respect this choice and continue to work with the individual in another way.

### 1.3 Where is psychosocial support provided?

For biological families, in-country adoptees, and in-country adoptive families, Pro-Búsqueda offers psychosocial support at the organization's headquarters and/or at the family/adoptee's home. Since confidential information is shared, the space where the conversations take place needs to be quiet, preferably a room with a closed door for maximum privacy.

For the transnational adoptee and adoptive family, Pro-Búsqueda provides psychosocial support through the exchange of e-mails, telephone calls, and web conversations. When the adoptee and/or the adoptive family travel to El Salvador to meet the birth family, Pro-Búsqueda provides in-person psychosocial support.

# 1.4 How often are adoptees and/or their biological families contacted?

The adoptee and/or family member determine how frequently contact occurs. In large part, communication between Pro-Búsqueda and adoptees/relatives depends on the lifestyle of each person—most have busy work schedules, families, and various other activities that prevent them from staying in touch regularly— and on the methods of communication (personal visits, phone calls, e-mails). Maintaining contact with individuals who have limited Internet or telephone access is more challenging. Nevertheless, Pro-Búsqueda tries to connect with adoptees and biological families according the needed of each particular case.

# 1.5 What happens if neither the adoptee nor the adoptive family nor the biological family wants psychosocial support?

When neither adoptees nor family members want psychosocial support, Pro-Búsqueda respects the wishes and decisions of each individual. Sometimes those involved in family reunifications do not want the involvement of third parties, other times they are not ready to openly discuss issues and feelings about the disappearance, adoption, and/or reunion. In these situations, Pro-Búsqueda acknowledges the decision of each individual and lets them know that they can contact the Psychosocial Unit at any time if they change their minds.

# 2. Guidelines

To best serve adoptees and their adoptive and biological families, Pro-Búsqueda adheres to the following guidelines while keeping in mind that each case is unique:

# **PSYCHOSOCIAL SUPPORT**

### Psychosocial Support Guidelines at Pro-Búsqueda

### Adoptee

1. Once an identification has been made (a disappeared person found or an adoptee's family found), the case is transferred from the Investigation Unit to the Psychosocial Unit. It is important to make sure that the investigator introduces the psychologist to the adoptee or to the family.

2. Provide the adoptee with a brief description of the role of the Psychosocial Unit and the services it provides.

3. Clearly state how psychosocial support can help the adoptee specifically. Emphasize that all information provided is confidential and will not be shared with anyone.

4. Re-emphasize that the adoptee is the one leading the process. The adoptee decides whether or not he/she wants to establish contact and/or meet his/her birth family.

5. Explain that the adoptee can communicate with his/her biological family through letters, phone calls, e-mails, web conversations. Also discuss family expectations, cultural differences, and language barriers.

6. Respect the adoptee's values and ideological and political views, and take into account the stage of the adoptee's life (i.e., student, young professional, married, etc.).

7. Assist adoptees through the process as needed.

# Adoptive Family

1. The psychologist needs to introduce him/herself and provide the family member with a brief description of the role of the Psychosocial Unit and the services it provides.

2. Clearly state how psychosocial support can help the adoptive family specifically. Emphasize that the decision on whether they want psychosocial support or not is theirs to make.

3. Explain the importance of the psychologist's role in the process. Emphasize that all information provided is confidential and will not be shared with anyone.

4. Discuss family expectations, cultural differences, language barriers, and personal anxieties.

5. Respect the family's values and ideological and political views.

6. Assist family members through the process as needed.

# **PSYCHOSOCIAL SUPPORT**

### Psychosocial Support Guidelines at Pro-Búsqueda

### **Biological Family**

1. When the Psychosocial Unit contacts the biological family, the family will already know that the adoptee has been located. Provide the birth family with a brief description of the role of the Psychosocial Unit and the services it provides.

2. Clearly state how psychosocial support can help the birth family specifically. Emphasize that the decision on whether they want psychosocial support or not is theirs to make and that all information provided is confidential and will not be shared with anyone.

3. Explain that direct contact and/or a reunification may or may not occur and that this depends on the wishes of the adoptee.

4. Discuss family expectations, cultural differences, and language barriers.

5. Respect the family's values and ideological and political views, and take into account how the war impacted their lives.

6. Assist family members through the process as needed.

In summary, our experience has taught us that it is important to provide psychosocial support to families and adoptees because it helps them cope more effectively with family reunifications. Adoptees and family members appreciate Pro-Búsqueda's efforts to establish a relationship with them, support them through their emotional journey, and keep in touch. It is important not to underestimate the role that psychosocial support plays in successful family reunions.

One of the goals of genetic tracing is to reunite families where a family member has been forcibly disappeared. The decision by all parties –the biological family, the adoptee and the adoptive family– to engage in a family reunion is a momentous one. The Psychosocial Unit at Pro-Búsqueda plays a critical role in preparing all parties for a reunion, helping all parties to navigate difficult decisions, helping to ensure that the reunion goes smoothly, and then assisting in developing post-reunion relationships.

# A. PREPARING ADOPTEES AND FAMILIES

# 1. Preparing Adoptees

### 1.1 What support is provided to best prepare an adoptee for a family reunion?

Pro-Búsqueda's Psychosocial Unit has a conversation with in-country and transnational adoptees about expectations regarding a family reunion. Staff counsels the adoptees to expect several relatives, physical contact, excitement, and tears, and for family members to ask questions and, more often than not, to ask for forgiveness. Staff members also find out what the adoptee wishes and what he/she may be anxious about. Pro-Búsqueda shares with the adoptee the logistics of the reunion (where it will be, how long it will take, how the introductions might occur, etc.). They also talk about other family reunions, which helps make the event more concrete and real for adoptees. For transnational adoptees, Pro-Búsqueda helps translate during a family reunion because frequently the transnational adoptee does not speak Spanish.

Often, a great economic disparity exists between transnational adoptees raised in North America and Western Europe and their biological families. We have found this especially true with regard to the conflict in El Salvador because much of the fighting occurred in the northern part of the country, which tends to be rural and remote. Many families impacted by the war are impoverished even by Salvadoran standards. Pro-Búsqueda counsels transnational adoptees to prepare for this disparity and discusses with them ways to manage their reactions and feelings (i.e., guilt, shock, embarrassment).

# 1.2 What are the questions adoptees most frequently ask about their biological family and their adoption?

- Where does my biological family live?
- How many siblings do I have and what do my siblings do?
- How big is my extended family?
- How did the war affect my birth family?
- Why did my biological family put me into adoption and not another sibling?
- Why is my birth family looking for me now?

It is helpful for staff providing psychosocial support to prepare the answers to these questions in advance.



Pictured Above: 2022. Jana Leigh Woodiwiss reunited with her biological family in El Salvador.

**1.3 What information concerning the adoption is provided to an adoptee before a family reunion?** Since the adoptee is the person leading the reunification process, the information provided to an adoptee prior to a family reunion depends on what she/he requests. Before meeting their birth family, most adoptees have communicated with their biological relatives already. In these communications, most ask questions about the size of their birth family, how and where they live, and about the circumstances of separation. Other adoptees chose to wait until they meet their biological family to ask them about the adoption.

### 1.4 Typically, how do adoptees feel about family reunions?

In general, adoptees have mixed feelings about family reunions. They are excited about meeting their birth family, but are also nervous about coming face to face with a life they do not know. For most transnational adoptees, family reunions are the first time they visit their country of origin. Many do not speak the same language as their birth family, which can make family reunions a daunting experience. The socioeconomic background, political views, and religious beliefs of adoptees may also differ greatly from those of their biological family, which can cause anxiety to both parties. Pro-Búsqueda has found that talking about feelings and emotions helps the adoptee greatly.

# **1.5** Does the organization help transnational adoptees with travel and accommodation?

Pro-Búsqueda provides transnational adoptees with information about El Salvador and travel to the country. It does not finance the transnational adoptee's plane fare or accommodation. The resources provided include a list of places to stay, recommended restaurants, safety tips, transportation options, and sightseeing suggestions, among others.

# 2. Preparing Families

# 2.1 What support is provided to best prepare biological families for a family reunion?

Pro-Búsqueda has an in-person conversation with the family members who will be meeting the adoptee. A staff member discusses the experiences of other family reunions—both the positive aspects as well as the negative ones so that everyone has a sense of what a family reunion is like. As with adoptees, the Psychosocial Unit explains how the day of the reunion will unfold (i.e., time of arrival, duration of reunion, who is accompanying the adoptee) and if it is a transnational adoptee, they have a conversation about potential language and cultural differences with the family.



Pictured Above: José Eduardo Giai Checco reunited with his biological brother Raymundo Ruiz Chacón in El Salvador.

It is also crucial to ask the family how they feel and share with them the most common questions adoptees ask (see section 1.2 above). It is important for the family to be prepared to answer difficult questions. Remind the family that every reunion is unique and, therefore, they need to be prepared for whatever comes. For example, family members need to be prepared that the adoptee may not want to hug them or call them by their nicknames (Uncle Tom, Mom, Grandpa, etc.). It is crucial to discuss family expectations and, if needed, to lower them.

As mentioned above, since economic disparities often exist between transnational adoptees and biological families in El Salvador, Pro-Búsqueda addresses this issue at length with the biological family. Staff counsels the birth family to recognize the pressure the transnational adoptee may feel and reminds them that the adoptee is coming to meet them, to find out about the family, and to form a relationship. It is emphasized that the visit may not necessarily result in access to greater resources or financial support and that if the family chooses to raise these issues it could jeopardize the future relationship with the adoptee.

Pro-Búsqueda also talks with the family about the best way to explain to the adoptee the basis for the adoptee's separation from the family. This is particularly important because almost all adoptees want to know the circumstances of the separation. Because some were separated under very violent circumstances, sometimes involving the slaying of other family members, the reason needs to be explained tactfully. In addition, recalling and retelling these events may cause family members to re-experience the trauma brought on by the war.

# 2.2 What are the questions birth families most frequently ask about the adoptee and the family reunion?

- How long is the adoptee staying for?
- Who is the adoptee coming with (i.e., adoptive parents, adoptee's own family, friends, etc.)?
- What will the adoptee ask us?
- Is the adoptee angry at us?
- What will the adoptee think of us?
- How are the adoptee's adoptive parents? Are they comfortable with the family reunion?

# 2.3 What information concerning the adoptee is provided to the birth family before a family reunion?



Pictured Above: Carolina Cárcamo de Rivas reunited with her biological mother Josefina Osorio Henríquez in El Salvador.

As mentioned earlier, before meeting the adoptee at least one family member has communicated with the adoptee already. In these communications, the biological family asks questions

about the how and where the adoptee lives, what he/she looks like, and what they like to do. Since the adoptee is the person leading the reunification process, the information provided to the birth family prior to a family reunion depends on what the adoptee feels comfortable sharing.

# 2.4 Typically, how does the biological family feel about the family reunion?

Birth families feel anxious about meeting the adoptee. From the moment the disappeared person is located, families are impatient to meet the adoptee. They want the family reunion to take place as soon as possible, sometimes forgetting that the adoptee might not feel the same way. Families are eager to reconnect with the adoptee, whom they knew as a young child and who is now an adult. While families are quite eager to meet the disappeared relative, the meeting may be tinged with great sadness and guilt on the part of family members, especially family members who, for years now, have felt responsible for the child's disappearance.

# 2.5 Does the organization help biological families cover expenses?

In general, a family reunion is a time of celebration for the biological family and they may want to host a party or an elaborate meal to mark this celebration. On occasion, Pro-Búsqueda will help the family to defray costs and may offer the organization's office as a venue to host the event if the family home is not an appropriate venue (i.e. too small, or located in an unsafe area). Other than this, Pro-Búsqueda does not offer any financial support to birth families (or to any other party).

# 3. Preparing an Adoptive Family

### 3.1 What support is provided to best prepare adoptive families for a family reunion?

Sometimes adoptive families will also attend the family reunion and receive similar support as the adoptee. It is important to make the adoptive family feel welcome and to underscore the valuable role they play in helping to facilitate a successful family reunion. Some adoptive families may feel alienated and may harbor fears that the new biological family may supplant them as the adoptee's primary family. Pro-Búsqueda makes special efforts to acknowledge this possible anxiety and to reassure adoptive families.

# 3.2 What are the questions adoptive families most frequently ask about the birth family and the family reunion?

- Does the birth family know we are coming too?
- How will the birth family react?
- What will the birth family ask us?
- Will we be able to communicate with the family (*i.e.*, do they speak English, Italian, French)?
- What will the birth family think of us?

# 3.3 What information concerning the biological family is provided to the adoptive family before a family reunification?

The information provided to an adoptive family depends on the adoptee. We consider that the information of the biological families is the proprietary information of the adoptees. At the beginning of a project, Pro-Búsqueda, and the Human Rights Center share information about an adoptee's biological family first and foremost with the adoptee. This allows the adoptee to decide what information they want to share with their adoptive family.



Pictured Above: German Alberto Zamora reunited with his biological mother Milagro del Pilar Martinez.in El Salvador.

# 3.4 Typically, how does the adoptive family feel about the family reunion?

In general, adoptive families feel scared about family reunions. Even supportive families, who accompany the adoptee to meet the birth family, cannot help feeling worried. The uncertainty of how the family reunion might impact the relationship between them and the adoptee is a concern. They are afraid the adoptee might distance him/herself from them and/or feel hostile. Adoptive families are afraid of becoming insignificant in the presence of birth families.

A good way to help adoptive families cope with is to encourage them to share their anxiety with the adoptee in a constructive way. It is important for the adoptee to realize that the process is also difficult for the adoptive family.

### 3.5 Does the organization help adoptive families cover expenses?

No. Pro-Búsqueda does not offer any financial support to adoptive families (or to any other party).

### **B. Post-Reunion Relationship Building**

While the initial family reunion is a momentous occasion, in many ways it is only the beginning of what is hoped to be a long-term relationship between the biological family and the adoptee. Building such a relationship is challenging, especially with transnational adoptees.

While Pro-Búsqueda does provide some assistance in the development of post-reunion relationships, we acknowledge that this is an area in which greater emphasis should be placed in the future. Currently, Pro-Búsqueda helps adoptees develop and maintain a communications channel with the biological families. With regard to transnational adoptees from the U.S., Pro-Búsqueda helps biological families who do not speak English with translation and access to the Internet. Family members can visit Pro-Búsqueda's office to use the computer or to receive assistance with e-mail, Facebook, and mailing correspondence.

Pro-Búsqueda also helps to arrange for post-reunion visits; while Pro-Búsqueda may not play as active a role as it did in the initial family reunion, Pro-Búsqueda offers assistance in brokering subsequent visits. The key point is that birth families, adoptees, and adoptive families know they can rely on Pro-Búsqueda if they need help communicating with each other.



Pictured on the Left: Mario Ulises Ramos Carballo reunited with his biological parents and sister in El Salvador.

# **XI. LESSONS LEARNED**

These accomplishments are the result of a strong partnership among Pro-Búsqueda, the Alliance, and UC Berkeley's Human Rights Center and the team's dedicated work, plus its capacity to learn and change direction when something was not working. The project increased Pro-Búsqueda's forensic capacity. However, the genetic tracing is still conducted out of the country. Pro-Búsqueda has been able to achieve and keep Memorandums of Understanding with certified and accredited labs in these types of forensic analysis. The project also expanded Pro-Búsqueda's outreach in the US and enhanced investigations locally and abroad.

Below are the main lessons we learned in the past years. We hope the manual, along with our reflections, is useful to organizations seeking to start a similar project in order to locate the disappeared living, to reunite families, and to seek accountability for the crimes committed.

1. It is important that any effort to identify disappeared children using genetic tracing be coordinated in full partnership with a locally-based civil society organization that is comprised of families of the disappeared so that families of disappeared are full partners in the project with decision-making power.

2. We encourage local organizations or governments interested in identifying disappeared children through genetic tracing to consult with or work in partnership with an international organization with expertise and experience in using genetic tracing to resolve forced disappearances.

3. We encourage all partner organizations to enter into a written Memorandum of Understanding (MOU), which clearly articulates the roles, responsibilities, and expectations of each partner organization for the duration of the partnership.

4. We have found it very helpful to have one partner organization be identified as the lead organization and one person from that organization to be designated as the project manager whose job, among others, is to: (1) facilitate the ability of each partner organization to perform their tasks and responsibilities successfully; (2) help all the partner organizations in coordinating tasks so that the project moves forward as a whole, develop and adhere to communication protocols, and distribute project resources as needed; (3) help identify the needs of partner organizations and develop strategies about how those needs may be met; and (4) maintain liaison with organizations providing support.

5. If possible, it is important to budget reasonably for the purchase of project resources, which may include contracting with a lab to conduct DNA analysis, software programs to facilitate DNA and kinship analyses, and provision for secure electronic communications and computers.

6. It is equally important, if possible, to budget realistically for travel, both domestic and international. While electronic and remote communications are vital and necessary, nothing can take the place of face-toface communications while developing relationships, especially when discussing the use and analysis of DNA and the possible identification of disappeared children. This is particularly true in relation to building trust with families of the disappeared.

# **LESSONS LEARNED**

7. In attempting to resolve human rights violations such as forced disappearances, we have tried to execute the Project in accordance with human rights principles, including seeking full and informed consent in the donation of DNA samples; respecting the privacy, agency, and dignity of those involved, including staff of the partner organizations, the families of the disappeared, the young adults who were disappeared as children, and the adoptive families of these young adults; making and executing decisions in a fully transparent way; and operating the project in a nondiscriminatory manner.

8. It is important to develop and have full agreement on a leadership and decision-making structure.

# **APPENDIX**

# APPENDIX 1 (A-1): INTAKE FORMS

A-1.1: Intake Form for Family Members and Local Adoptees in Spanish

1. Datos de la niña o del niño desaparecida/o
Nombre
Fecha de nacimiento: añomesdíadía
Lugar de origen
MunicipioDepartamentoDepartamento
¿Existen fotografías? SíNo
¿Existe partida de nacimiento? SíNo
Características personales:
2. Datos de la desaparición
Fecha: añomesdíadía
Lugar
MunicipioDepartamento Cuerpo responsable
Oficial responsable
Relato de la desaparición:
NOMBRE DEL TESTIGO RESIDENCIA CALIDAD DE TESTIMONIO
Informaciones posteriores
3. Familiares de la niña o del niño desaparecida/o
Nombre Relación Estado Edad Domicilio
4. Datos del declarante
Nombre
Domicilio
Teléfono
DUI
EdadRelación familiar
Lugar y fecha de nacimiento
Firma o huella

### A-1.2: Intake Form for Transnational Adoptees and Adoptive Family Members

Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos
Colonia Layco 27 calle poniente casa No.1329, San Salvador, El Salvador, C.A. Tele-Fax: (503) 2235-1039; (503) 2235 1041.
FICHA DE REGISTRO DE CASODE JOVEN QUE BUSCA / FORM FOR PERSON WHO SEARCHES HIS/HER FAMILY
No de Entrevista/ Interview Number Fecha/ Date
DETALLES PERSONALES / PERSONAL DETAILS  Nombre Adoptivo / Adoptive Name
Nombre Biológico (si conocido)/ Biological Name (if known)
Lugar y Fecha de Nacimiento (día/mes/año) / Address and Date of Birth (day/month/year)
Dirección Actual / Current Address
Ne de Teléfone / Telephone Ne
No. de Teléfono / Telephone No. Correo Electrónico / Email
Padas Sasialas (Fasabaak, Twitter, atc) / Sasial Natworks (Fasabaak, Twitter, atc)
Redes Sociales (Facebook, Twitter, etc) / Social Networks (Facebook, Twitter, etc)

#### 2. DATOS DE LA FAMILIA ADOPTIVA / INFORMATION ON ADOPTIVE FAMILY

Nombre de la Madre Adoptiva / Name of Adoptive Mother

Nombre del Padre Adoptivo / Name of Adoptive Father

#### 3. DATOS DE LA FAMILIA BIOLÓGICA / INFORMATION ON BIOLOGICAL FAMILY

Nombre de la Madre Biológica / Name of Biological Mother

Nombre del Padre Biológico / Name of Biological Father

#### 4. OTROS FAMILIARES BIOLÓGICOS CONOCIDOS/ INFORMATION ON ADDITIONAL BIOLOGICAL RELATIVES

Nombre / Name	Parentesco con la Persona que Busca / Relationship to the Person who Searches his/her Family



Colonia Layco 27 calle poniente casa No.1329, San Salvador, El Salvador, C.A. Tele-Fax: (503) 2235-1039; (503) 2235 1041.

#### 5. CARACTERÍSTICAS FÍSICAS / PHYSICAL FEATURES

Marcas distintivas (cicatrices, marcas de nacimiento o alguna enfermedad que recuerde haber padecido) / Distinguishing physical marks (acquired before adoption – e.g. scars, birthmarks, an illness you may have suffered before you were adopted).

#### 6. RECUERDOS / MEMORIES

Por favor, escríbanos si recuerda algo de su vida en El Salvador antes de su adopción. Cualquier información será de utilidad para la investigación (continuar en otra página si es necesario) / Please tell us of any memories you may have of your life in El Salvador before your adoption – any information at all is useful for our investigation (continue on another page if necessary).

#### 7. DETALLES DE LA ADOPCIÓN / ADOPTION DETAILS

Certificado de Nacimiento / Birth Certificate	YES	NO		
País en el que fue expedido / Country where issued:				
Fecha de Adopción / Date of Adoption				
Nombre del Abogado o Notario encargado de la Adop	ción / Name of La	wyer or Not	tary l	Public in charge of the Adoption
Agencia o Institución involucrada en la Adopción (si hu	ubiera) / Agency	or other Ins	titut	ion involved in the Adoption (if any)
Nombre y Dirección del Hogar u Orfanato/ Name and	Address of Orpha	nage (if you	i spei	nt any time in an orphanage prior
to adoption)				

#### 8. DOCUMENTOS / DOCUMENTS

Favor anexar documentos oficiales relacionados con su adopción (certificado de nacimiento, documentos de adopción como también fotografías). Puede enviar las copias o documentos escaneados cuando usted retorne este formulario al Fax (503) 2226 6530, e-mail: <u>investigacion2@probusqueda.org.sv</u>, o al Apartado Postal 3211, Centro de Gobierno, San Salvador, El Salvador /Please send us any official documents relating to your adoption (birth certificate, adoptions papers as well as photographs). Send us copies or scanned documents when you return this form by fax (503) 2226 6530, e-mail: <u>investigacion2@probusqueda.org.sv</u>, or PO Box 3211, Centro de Gobierno, San Salvador, El Salvador

#### 9. OTRA INFORMACIÓN QUE DESEE APORTAR / ANY OTHER INFORMATION YOU WOULD LIKE TO ADD



#### 10. COMENTARIOS / COMMENTS

Por favor díganos cómo conoció Pro-Búsqueda / Please tell us, how you learned about Pro-Búsqueda

Yo/I,\_\_\_\_\_\_\_estoy de acuerdo en que la Asociación Pro-Búsqueda utilice esta información para la búsqueda de mi familia biológica y exclusivamente para aquello / I agree that Asociación Pro-Búsqueda may use this information to conduct a search for my biological family and exclusively for this purpose.

Firma / Signature\_

Política de Confidencialidad: La información recopilada a través de este formulario será de estricto uso interno de la Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos / Confidentiality Policy: The information included in this document will be for internal use only by Pro-Búsqueda.

> FICHA DE REGISTRO DE CASO DE JOVEN QUE BUSCA / FORM FOR PERSON WHO SEARCHES HIS/HER FAMILY (v. 07.05.2014) Page 3 of 3

# APPENDIX 2 (A-2): LETTERS TO TRANSNATIONAL ADOPTEE'S FAMILY

# A-2.1: Letter to Transnational Adoptee's Family from the Human Rights Center

[Logo of the organization]

[City, Date]

Dear [Parents of adoptee],

I hope this letter finds you well.

I am writing in regards to your daughter, [adoptive name of adoptee], who was adopted from El Salvador.

I am based at the University of California, Berkeley, working with the Human Rights Center. The Human Rights Center works in partnership with Pro-Búsqueda (www.probusqueda.org.sv) to facilitate family reunifications between adoptees from El Salvador who have grown up in the United States and their biological families in El Salvador. For more information on this project, please see the Human Rights Center's website (hrc.berkeley.edu). The idea behind a family reunification is to give adoptees an opportunity to learn about their biological background and cultural heritage and to give families in El Salvador an opportunity to know what happened to children in their families.

The Human Rights Center is currently helping Pro-Búsqueda to communicate with adoptive parents and to initiate a conversation with Salvadoran adoptees in the U.S. We realize that the decision to establish contact with the biological family can be a complex and emotional process that requires time, resources, and support. We want to assist your family by providing as much information as you need to enable you to make an informed decision.

With your family's consent, we would like to send you a packet of information by mail for your family to think about this decision carefully and have time to reflect fully and to discuss it. Please feel free to contact me at any time if you have any questions or concerns. My e-mail address is [xxx@yyy.edu] and my phone number is [phone number].

If you are not [the parent of adoptee to whom this letter is addressed] with daughter [adoptive name of adoptee], I ask that, as a courtesy, that you please contact me by phone or e-mail and let me know. This way, I can explore other paths to find the right family.

I look forward to hearing from you. With kindest regards.

Sincerely, [First and last name of investigator]

# A-2.2: Letter to Transnational Adoptee's Family from Asociación Pro-Búsqueda in Spanish (since 2017)

Fecha

Apreciado/a Señor/a XXXX,

Mi nombre es XXX y trabajo en la Unidad de Investigación de la Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos de El Salvador (www.probusqueda.org.sv). Como usted tal vez sepa, nuestra organización investiga casos de desapariciones de niños/as o adopciones que tuvieron lugar en El Salvador entre 1979 y 1992, durante el conflicto armado en El Salvador.

Gracias por contactarnos. Apreciamos especialmente su interés por saber más de sus orígenes familiares. Haremos nuestro mejor esfuerzo para obtener toda la información posible acerca de su familia biológica.

Me gustaría explicarle brevemente cómo trabajamos en nuestra asociación. Tratamos de conocer los orígenes biológicos de las personas que fueron adoptadas en El Salvador de dos formas simultáneas: con investigación documental y testimonial y, también, comparando perfiles de ADN de las personas que están buscando a sus familias con los de los familiares que están registrados en la base de perfiles genéticos de Pro-Búsqueda.

En este sentido, necesitaríamos aquella documentación que pueda tener sobre su adopción (certificado de nacimiento, documentos de adopción, etc.). Cualquier información relacionada con su adopción va a ser muy útil para nosotros. También necesitaríamos, por favor, que rellene este formulario de registro que adjunto en este correo con aquella información que pueda facilitarnos.

Al mismo tiempo, le solicitaremos una muestra de ADN. El proceso es muy sencillo y también es gratis. Usted recibirá un kit y las instrucciones de uso desde Pro-Búsqueda directamente. Usted tiene que enviar el kit de vuelta con una muestra bucal (células de la mejilla recogidas de su boca) y dos documentos firmados (un consentimiento y una cadena de custodia, ambos incluidos en el kit). La muestra será analizada en laboratorios forenses acreditados internacionalmente y su perfil genético comparado con los otros perfiles que están incorporados en la base genética perteneciente exclusivamente a Pro-Búsqueda.

Nuestra experiencia demuestra que la investigación de estos casos es compleja y puede prolongarse en el tiempo. En otras palabras, este proceso puede llevar mucho tiempo. Le agradecemos su comprensión al respecto.

Finalmente, sólo quiero preguntarle cómo supo de nuestra organización. ¿Dónde encontró la información de este proyecto? Estamos tratando de reforzar nuestra comunicación con aquellas personas que todavía no conocen la misión de Pro-Búsqueda, por eso, esta información es especialmente útil para nosotros.

Sabemos muy bien que este proceso plantea muchas dudas y preguntas. Por favor, no dude en preguntarnos todas aquellas cuestiones que considere.

Quedamos pendientes de su respuesta.

Atentamente,

XXX Unidad de Investigación

# A-2.3: Letter to Transnational Adoptee's Family from Asociación Pro-Búsqueda in English (since 2017)

Date

Dear Mr. or Mrs. XXXX,

My name is XXX and I work in the Investigation Unit of the Pro-Búsqueda Association of Missing Children of El Salvador (Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos de El Salvador, www.probusqueda.org.sv). As you may know, our organization investigates child disappearances or adoptions that took place in El Salvador between 1979 and 1992, during the armed conflict in El Salvador. Thank you for contacting us. We deeply appreciate and care about your interest in knowing more about your family origins. We'll do our best to find out all possible information about your biological family.

I'd like to explain briefly how we work in our association. We try to learn about the biological origins of people who were adopted in El Salvador in two simultaneous ways: with investigation work on documentary evidence and witness testimony, and also, comparing DNA profiles of people that are looking for their family with all the profiles of family relatives that are registered in Pro-Búsqueda's genetic database of family references.

In this sense, we will request documentation that you may have about your adoption (birth certificate, adoption's documents, etc.). Any information related to your adoption is going to be very useful for us. We also need, please, to have this registration form that I'm attaching in this email filled out with all the information that you can provide to us.

At the same time, we'll ask you for a DNA sample. The process is very simple and is also free. You'll receive a kit and accompanying instructions sent from Pro-Búsqueda itself. You will have to send the kit back with a buccal sample (cheek cells collected from your mouth), and two signed documents (a consent form and a chain of custody, both included in the kit). The sample will be analyzed at internationally accredited forensic labs and its DNA profile compared with the other profiles that are incorporated in the genetic database belonging exclusively to Pro-Búsqueda.

Our experience shows that these investigation processes are complex and extend over time. In other words, the process can take a long time. We are grateful for your understanding about this.

Finally, I only want to ask you how did you know about our organization. Where did you find the information on this project? We're trying to enhance our outreach to those who don't yet know about Pro-Búsqueda's mission, so this information is really useful for us!

We know well that there are inevitable concerns that arise from taking the steps you are considering. So, please, don't hesitate in asking any questions you may have.

We are very interested in your reply.

Yours sincerely,

XXX Investigation Unit

# APPENDIX 3 (A-3): BUCCAL DNA COLLECTION KIT

# A-3.1: Buccal DNA Collection Kit Informed Consent Form for Donor in Spanish (One Copy for Donor and a Second Copy for Pro-Búsqueda)





Protección de Privacidad y Consentimiento Informado del Donante (para ser entregado al donante con duplicado para Pro-Búsqueda)

- En el análisis de ADN se utilizarán solo marcadores de identificación. Estos marcadores no revelan características físicas, predisposición genética a enfermedades o rasgos de la personalidad.
- 2. Las muestras bucales se conservarán después de su análisis para fines de aseguranza de calidad.
- Si opta por la destrucción del colector bucal, debe ponerse en contacto con Pro-Búsqueda, Colonia Layco 27 calle poniente casa No.1329, San Salvador, El Salvador; o, Apartado postal: 3211, Centro de Gobierno, San Salvador, El Salvador; o, teléfono (503) 2235-1041; o, Tele-Fax: (503) 2235-1039; o, email: <u>genprobusqueda@gmail.com</u> y <u>apb@probusqueda.org.sv</u>
- El perfil de ADN obtenido de la muestra bucal será guardado en un banco de datos confidencial y de la exclusiva propiedad de Pro-Búsqueda.
- El uso de este banco de datos de ADN será exclusivamente para propósitos de determinar filiación biológica.
- 6. La búsqueda en el banco de datos para cualquier otro propósito no ocurrirá.
- El perfil de ADN no se entregará, o compartirá con persona o entidad alguna, a menos que exista la aprobación escrita del donante.
- 8. Una muestra bucal adicional a la primera puede ser necesaria para confirmar un posible parentesco.
- El donante acepta los términos antes descritos para la determinación de parentesco en relación a la búsqueda de niños desaparecidos por la Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos.

'irma del donante		
ugar para huella dactilar	si no puede firmar)	
Fecha (dd/mmm/aa)	Lugar	10

# A-3.2: Buccal DNA Collection Kit Informed Consent Form for Donor in English (One Copy for Donor and a Second Copy for Pro-Búsqueda)





### Non Disclosure of DNA Information / INFORMED CONSENT FORM

- DNA testing conducted will be for identification markers only. These markers are not indicators of physical characteristics, disease predisposition, or personality traits.
- 2. The buccal samples will be retained after testing for quality assurance purposes.
- If you would like to have the buccal collector destroyed, please contact Pro-Búsqueda, Colonia Layco, 27 Calle Poniente, casa No.1329, San Salvador, El Salvador; or, Apartado postal: 3211, Centro de Gobierno, San Salvador, El Salvador; or, telephone (503) 2235-1041; or, Tele-Fax: (503) 2235-1039; or, email: genprobusqueda@gmail.com and apb@probusqueda.org.sv
- The DNA profiles developed from testing the buccal sample will be stored in a secured Data Bank, the exclusive property of Pro-Búsqueda.
- 5. The use of this DNA data bank will be for relationship or kinship purposes only.
- 6. Searching the data bank for any other purposes will not occur.
- The DNA profile will not be given or shared with anyone or agency, unless the donor of the sample approves so in writing.
- 8. An additional buccal sample may be needed to confirm possible kinships.
- The donor accepts the terms above for purposes of kinship determination relative to Pro-Búsqueda's search of missing children.

Name of donor

Signature of Donor

(Provide a thumbprint if Donor cannot sign)

Date (mm/dd/vv)

Location

Sample code (M#)

# A-3.3: Buccal DNA Collection Kit Donor Information Form

		I	
	Barcode / Código d		riew Code / Código de entrevista e blank / Dejar en blanco)
Last Name	Maiden name (if ap	pplicable)	
Primer apellido	Segundo apellido	Apellido de ca	ada
Name (first and middle) / Nombre compl	leto	Gender/ Se	xo F M
I am / Yo soy	I am / Yo soy		
Person who searches for family / Persona que busca	Relative of miss Familiar de pers		
Ethnicity/Human Group (if known) / Et	nia/grupo humano (si lo conoce):		
Home address / Dirección Casa			
Street/ Calle		1	1
City/ Ciudad St	ate/ Provincia	Zip/ Código Postal	Country/Pais
Home Telephone / Teléfono de casa M	obile Telephone / Teléfono Celular	Telephone office / Teléfo	no lugar de trabajo
FAX E-	mail	Postal Address / Direcció	n Postal
Agency issuing Identification Number / Identification number (optional) / Núme			
Date of birth (if known) / Fecha de naci			
Birthplace (if known) / Lugar de nacimi	ento (si lo conoce):		
Agency issuing the birth certificate / Cer	tificado de nacimiento extendido p		
Birthplace (if known) / Lugar de nacimi Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t	tificado de nacimiento extendido p ógico (si lo conoce):	or:	
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t	tificado de nacimiento extendido p ógico (si lo conoce): tiempo ha estado fuera de El Salvad	or:	
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol	tificado de nacimiento extendido p ógico (si lo conoce): tiempo ha estado fuera de El Salvad	or:	Nombre y firma del testigo
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t Signature Donor / Firma del donante	tificado de nacimiento extendido p ógico (si lo conoce): tiempo ha estado fuera de El Salvad 	or:	Nombre y firma del testigo t) / (lugar para huella
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t Signature Donor / Firma del donante	tificado de nacimiento extendido p ógico (si lo conoce): tiempo ha estado fuera de El Salvad  Nar ara huella	or:	Nombre y firma del testigo t) / (lugar para huella 'derecho)
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t Signature Donor / Firma del donante (place for right thumbprint) / (lugar p dactilar pulgar derecho) Note: Thumbprint if either witness or d	tificado de nacimiento extendido p ógico (si lo conoce):	or:	Nombre y firma del testigo t) / (lugar para huella 'derecho)
Agency issuing the birth certificate / Cer Original name (if known) / Nombre biol How long outside El Salvador / Cuanto t Signature Donor / Firma del donante (place for right thumbprint) / (lugar p dactilar pulgar derecho) Note: Thumbprint if either witness or d	tificado de nacimiento extendido p ógico (si lo conoce):	or:	Nombre y firma del testigo t) / (lugar para huella 'derecho)

#### If you are a relative of missing person / Si es familiar de la persona buscada

I am the missing person's / Soy de la I	am the missing person's / Soy de la persona buscada The missing person is my / La persona buscada			
		ample: brother, son, maternal half-brother, etc. / Ejemplo: nano, hijo, hermano materno, etc.)		
Information about other close relat	ives of the missing person / Informa	ación sobre otros parient	es de la persona buscada	
1. Blood relative / Pariente consange	uineo:			
Full Name/ Nombre Completo			Age / Edad	
Relationship to the missing person / F Home address / Dirección Casa	'arentesco con la persona buscada:			
Street/ Calle	1			
City/ Ciudad	State/ Provincia	Zip/ Código Postal	Country/Pais	
Home Telephone / Teléfono de casa	Mobile Telephone / Teléfono Celula	r Telephone office / Teléi	iono lugar de trabajo	
FAX	E-mail	Postal Address / Direcci	ón Postal	
Relationship to the missing person / P Home address / Dirección Casa Street/ Calle	arentesco con la persona buscada:			
Sheer Chie				
City/ Ciudad	State/ Provincia	Zip/ Código Postal	Country/País	
Home Telephone / Teléfono de casa	Mobile Telephone / Teléfono Celula	r Telephone office / Teléf	òno lugar de trabajo	
FAX	E-mail	Postal Address / Dirección Postal		
3. Blood relative / Pariente consangu	líneo:		1	
Full Name/ Nombre Completo			Age / Edad	
Relationship to the missing person / I	arentesco con la persona buscada:			
Home address / Dirección Casa				
Street/ Calle	I			
City/ Ciudad	State/ Provincia	Zip/ Código Postal	Country/Pais	
- City, Cittan	States FIOVIDEIN	E.p. Courgo rostar	country i as	

Home Telephone / Teléfono de casa Mobile Telephone / Teléfono Celular Telephone office / Teléfono lugar de trabajo

E-mail

Postal Address / Dirección Postal

FAX

# A-3.4: Buccal DNA Collection Kit Witness Information Form

# Witness Information Form / Formulario de Información del Testigo

Last Name	Maiden name (if applic	able)	
Primer apellido	Segundo apellido	Apellido de casada	
Name (first and middle) / Nombre con Home address / Dirección Casa:	mpleto		
Street/ Calle			
City/ Ciudad	State/ Provincia	Zip/ Código Postal	Country/Pais
Home Telephone / Teléfono de casa	Mobile Telephone / Teléfono Celular	Telephone office / Telé	fono lugar de trabajo
FAX	E-mail	Postal Address / Direct	ción Postal
Location and date sample collected (v Lugar y fecha de colección muestra (e		/ Month / Mes / Day / Di	/ ía / Year/Año
Relationship to donor / Relación co			
Relative/ Pariente yes / sí	no/no Specify/Esp	ecifique:	
<ul> <li>Friend acquaintance/ amigo o conor</li> <li>Pro-Búsqueda representative/ Repro-</li> </ul>		/ sí no / no	
Other/ Otros:			
Signature Witness / Firma del Witne	ss Name	e and signature Donor / N	šombre y firma del donante
(place for right thumbprint) / (luga dactilar pulgar derecho		(place for right thumbpr dactilar pulg	
Note: Thumbprint if either witness of	r donor cannot sign / Nota: Huella dac	tilar si el testigo o donant	e no puede firmar

### A-3.5: Buccal DNA Collection Kit Chain of Custody of DNA Sample





# CADENA DE CUSTODIA DE LA MUESTRA// CHAIN OF CUSTODY OF DNA SAMPLE

Entrevista: \_\_\_\_\_ Parentesco: \_

	CÓDIGO DE LA MUESTRA // CODE OF THE SAMPLE	FECHA // DATE
NOMBRE DEL DONANTE // NAME OF DONOR:		FIRMA#SIGNATURE
NOMBRE DEL TESTIGO // NAME OF WITNESS:		FIRMA#SIGNATURE
LUGAR DE COLECCIÓN DE LA MUESTRA // LO	CATION OF COLLECTION OF THE SAMPLE:	

Nota: Cada persona que tiene a su cargo y custodia la muestra debe escribir en la siguiente tabla, su nombre, firma, fecha y lugar donde la transferencia y custodia de la muestra ha ocurrido. Por ejemplo, el donante de la muestra debe escribir su nombre en la primera columna debajo de "MUESTRA RECIBIDA DE // SAMPLE RECEIVED FROM.", la fecha de la colección de la muestra en "FECHA // DATE" y el lugar donde la muestra fue tomada en "CIUDAD/PAIS // CITY/COUNTRY".

Note: Each person who handles the sample and takes custody of it must enter in the following table their name, signature, date, and place where transfer and custody of the sample has occurred. For instance, the donor of the sample should enter his/her name in the first column under "MUESTRA RECIBIDA DE // SAMPLE RECEIVED FROM:", the date the sample was collected under "FECHA // DATE" and the place where the sample was collected under "CIUDAD/PAIS // CITY/COUNTRY".

MUESTRA RECIBIDA DE // SAMPLE RECEIVED FROM:		MUESTRA ENTREGADA A // SAMPLE DELIVERED TO:		FECHA // DATE	CIUDAD/PAIS // CITY// COUNTRY
NOMBRE # NAME OF DONOR	FIRMA//SIGNATURE OF DONOR	NOMBRE // NAME	FIRMA // SIGNATURE		

# A-3.6: Buccal DNA Collection Kit Item Checklist and Instructions in Spanish

Estimado/a amigo/a,

Gracias por comunicarse con nosotros.

Con esta carta usted encontrará un estuche de colección de su ADN.

Por favor, lea en detalle la siguiente información y siéntase con la libertad de compartir y discutir dicha información con su familia y/o amigos(as) u otra persona de confianza. Por supuesto, Pro-Búsqueda y el Centro de Derechos Humanos de la Universidad de California en Berkeley también se encuentran disponibles para responder sus dudas. Para esto comuníquese con Pro-Búsqueda con la Unidad de Investigación al correo electrónico investigacionprobusqueda@gmail.com, o, con Patricia del Carmen Vásquez Marías, Genetista en Pro-Búsqueda y colaboradora del Centro de Derechos Humanos (HRC) de la Universidad de California en Berkeley, disponible en el correo electrónico genprobusqueda@gmail.com y pdcvmarias@berkeley.edu.

Contenido del sobre que Ud ha recibido (Por favor marque en la columna derecha cuando se haya cerciorado del contenido descrito o terminado cada paso)

Item	Artículo	Notas Explicativas	Hecho
1	Protección de Privacidad y Consentimiento Informado del Donante (Dos copias)	Lea y complete las secciones sombreadas en gris de este formulario (firma del donante, fecha y lugar), en duplicado, de Ud. estar de acuerdo con los términos de este proceso y con los procedimientos de colección y análisis de su muestra de ADN. Por favor conserve para Ud. una copia del formulario "Copia del Donante", y retorne junto con la muestra la Copia del Laboratorio.	
2	Instrucciones de Colección Bucal	Lea este formulario antes de abrir el paquete de colección bucal. Este formulario resume en 7 pasos como frotar su mejilla para obtener la muestra de ADN. 'Bucal' es el término científico para el interior de la mejilla.	
3	Dos guantes	El uso de los guantes protege su muestra de ADN en contra de la contaminación. Deslice los guantes en sus manos después de haber leído las instrucciones de colección bucal, y antes de abrir la bolsa de plástico del colector.	
4	Número de Código	El Número de Código está impreso en una etiqueta adhesiva empezando con la letra M seguido por un número de 4 dígitos (MXXXX). El propósito del número de código es identificar su muestra mientras se conserva su privacidad. Lo encontrará dentro de un sobre pequeño identificado por el mismo código MXXXX.	
5	Colector Bucal de ADN	Usando los guantes, abra el sobre de plástico que contiene el Colector Bucal. Adhiera el número de código (MXXXX) en el extremo del colector donde aparece la palabra "Name" (sección A en el ítem 2) y proceda de acuerdo a los pasos 1-6 según la hoja de instrucciones en el ítem 2.	

Item	Artículo	Notas Explicativas	Hecho
6a 6b	Desecantes (2 desecantes) Bolsa de Colección Bucal de ADN	Después de haber obtenido su muestra de ADN, proceda a insertar el colector únicamente dentro de la bolsa de transporte del estuche de colección bucal (paso 7 de las instrucciones de colección bucal, ítem 2), junto con los desecantes. Selle la bolsa de transporte y deseche los guantes. El desecante protege su muestra ya que la mantiene seca.	
7	Formulario de Cadena de Custodia	Rellenar las partes sombreadas en gris y retornar con la muestra	
8	Envíe la muestra en el sobre que se le ha proporcionado dirigido a: EL SALVADOR DNA REUNIFICATION PROJECT Human Rights Center Berkeley Law 396 Simon Hall University of California Berkeley, CA 94720 USA	Coloque los siguientes formularios en el sobre de envío, junto con la bolsa de transporte del colector bucal de ADN, que contiene su muestra con los desecantes: a. Formulario de Consentimiento del Donante (Copia del laboratorio) b. Formulario de Cadena de Custodia Nota: Marque en el cuadrito que corresponda más arriba, una vez que haya insertado cada formulario en el sobre de envío.	

Atentamente,

Asociación Pro-Búsqueda

# A-3.7: Buccal DNA Collection Kit Item Checklist and Instructions in English

Dear Friend,

Thank you for contacting us.

Enclosed you will find a DNA collection kit.

Please read the enclosed information carefully and certainly share it and talk it over with your family and/or friends or someone you can trust. Pro-Búsqueda and the Human Rights Center, School of Law at the University California, Berkeley are available to answer any questions that you may have. You may contact the Investigation Unit at Pro-Búsqueda in San Salvador, email investigacionprobusqueda@gmail.com Likewise, Patricia del Carmen Vásquez Marías, geneticist at Pro-Búsqueda and Fellow at the Human Rights Center, UC Berkeley, email genprobusqueda@gmail.com and pdcvmarias@berkeley.edu

You should have received the following ítems (Please check off the right hand column under "Done", when you have reviewed the contents of the envelope or after you complete a step towards the collection of your sample in preparation to mailing it back to the Human Rights Center)

Item	Article	Explanatory Notes	Done
1	Informed Consent Form (two copies)	Read and complete, in duplicate, (donor signature, date and place) if you agree to the terms of this process and the nature of the procedure to collect and analyze your DNA sample. Please keep the Donor copy for yourself and return the Lab Copy.	
2	Buccal DNA Collection Kit Instructions	Read the instructions before you open the Buccal Collector packet (item 5 below). This form outlines the steps for how to swab your cheek to collect a sample of your DNA Definition: 'Buccal' is the scientific term for the inside of your cheek	
3	Pair of gloves	Gloves prevent contamination of your DNA sample. Slip the gloves on your hands after you read the Buccal Collection Instruction Sheet (item 2) and before you open the collector packet to swab your cheek	
4	Label with Number Code	The number code is printed on an adhesive label starting with the letter M followed by a four- digit number (MXXXX) The purpose of the code is to identify your sample while preserving your privacy.	
5	Buccal DNA Collector	Wearing the gloves, open the plastic bag that contains the DNA collector. Adhere number code (MXXXX) to the handle of the collector where the word "Name" is located (section A in item 2) and proceed according to steps 1-6 noted on the Buccal DNA Collection Kit Instruction Sheet (Item 2).	

Item	Article	Explanatory Notes	Done
6a 6b	Desiccant (2 little bags inside of the Buccal DNA Collector Transport Pouch) Buccal DNA Collector Transport Pouch	After you have collected your DNA sample follow final instructions in Step 7 of the Buccal DNA Collection Kit Instructions (item 2). Place your specimen in the Buccal DNA Collector Transport Pouch with the 2 desiccants. Seal the pouch and discard the gloves. The desiccant preserves your sample by keeping it dry	
7	Chain of Custody Form	Please fill out and return with the sample.	
8	Mail the sample in the envelope provided, to: EL SALVADOR DNA REUNIFICATION PROJECT Human Rights Center Berkeley Law 396 Simon Hall University of California Berkeley, CA 94720 USA	Place the following forms that you should have completed, in the return envelope, along with the sealed DNA Buccal Collector Transport Pouch containing your specimen and the 2 desiccants: a. Informed Consent Form (Lab copy) b. Chain of Custody Form Note: Enter a check mark in the small square (above) once each form has been inserted into the return envelope.	

Sincerely,

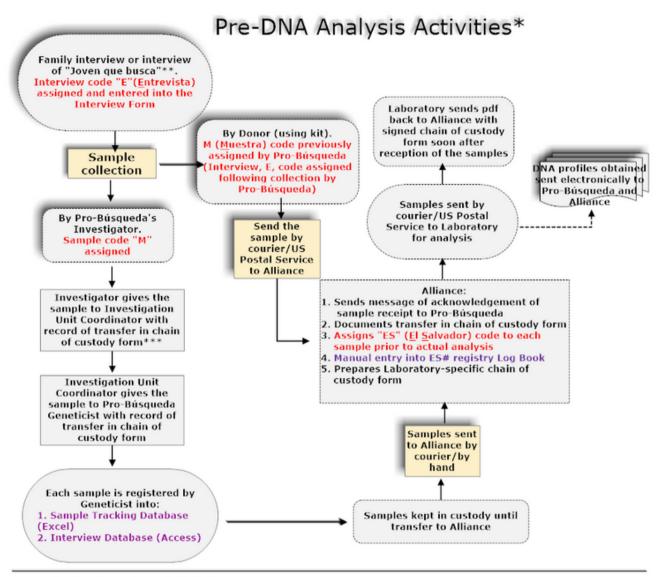
Asociación Pro-Búsqueda

# A-3.8: Genealogical Tree Diagram in Spanish

Código Muest	Estatus	Abuela	Abuela	Estatus	Código Muestra
	VFD			VFD	
Código Muest	Estatus	Abuelo	Abuelo	Estatus	Código Muestra
	V F D			VFD	
Código Muest	Estatus	Tio	Tio	Estatus	Código Muestra
	VFD	1.		VFD 1.	
	VFD	2.		VFD 2.	
	VFD	3.		V F D 3.	
Código Muest	Estatus	Tía	Tía	Estatus	Código Muestra
	VFD	1.		VFD I.	
	VFD	2.		VFD 2.	
	VFD	3.		V F D 3.	
Código Muest	Estatus	Padre	Madre	Estatus	Código Muestra
	VFD			VFD	
Código Muest	Estatus	Hermanos	Hermanas	Estatus	Código Muestra
	VFD	1.		VFD 1.	
	VFD	2.		VFD 2.	
	VFD	3.		VFD 3.	
	VFD	4.	Perso	VFD 4.	
		÷	e e		
		Código Muestra			
Código Muest	Estatus	Hermanas/os Paternos	Hermanas/os Maternos	Estatus	Código Muestra
	VFD	1.		VFD 1.	
	VFD	2.		V F D 2.	
	V F D V F D	3.		V F D 2. V F D 3.	

#### APPENDIX 4 (A-4): PRE-DNA ANALYSIS ACTIVITIES

A-4.1: Initial Pre-DNA Analysis Activities (First 6 Years of the Project)

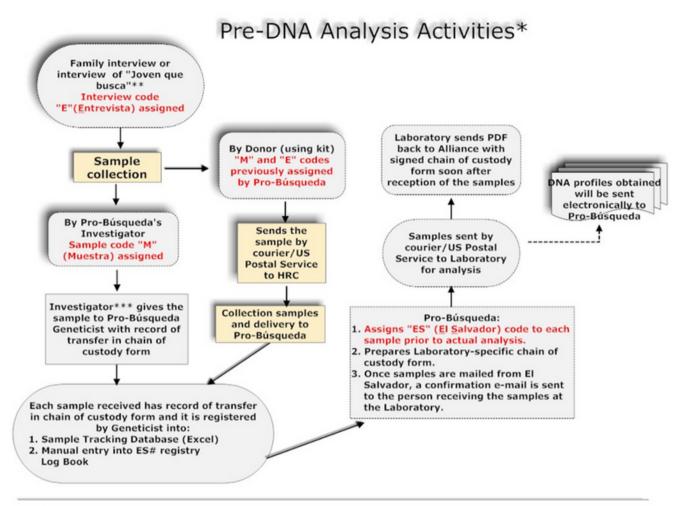


Codes in red; Databases in fuchsia

\*\* "Joven que Busca": Person who seeks her/his biological family

\*\*\* Each investigator has a code assigned that is recorded in the Interview Form and the Interview Database. All investigators have been typed for their DNA profile in order to check for inadvertent contamination of the sample by the investigator.

#### A-4.2: Pre-DNA Analysis Activities (Updated)



\* Codes in red.

\*\* "Joven que Busca": Person who seeks her/his biological family.

\*\*\* Each Pro-Búsqueda investigator has a code assigned that is recorded in the Interview Form and the Interview Database. All investigators have been typed for their DNA profile in order to check for inadvertent contamination of the sample by the investigator.

# APPENDIX 5 (A-5): COMMUNICATIONS WITH AN ADOPTED PERSON

#### A-5.1: Communication to an Adopted Person

#### Dear Mr o Mrs:

Receive the kindest regards from the Pro-Búsqueda Association of Missing Children of El Salvador.

In order to continue with the investigation it is necessary that you also send us a biologic sample from which we are going to get your genetic profile and add it to the Pro-Búsqueda Family References DNA Database to be compared with the rest of relatives and youngsters who are looking for their families. Your profile, like the rest in the database, will be kept in confidence as described in the Informed Consent Form, for which we will need your agreement and signature.

With all respect we need your address and postal code to send you the kit with all the necessary instructions and tools for the sample to be taken. The kit also includes the Informed Consent Form already mentioned. This kit will be delivered to your house one week following the reception of your postal information.

We appreciate your collaboration.

Investigador Unidad de Investigación Asociación Pro-Búsqueda <u>investigacionprobusqueda2@gmail.com</u> Tel: (503) Urbanización Buenos Aires Av. Sta. Mónica No.10 San Salvador, El Salvador, C.A.

# A-5.2: Communication to an Adopted Person With a DNA Match

#### Dear Mr o Mrs:

Receive the kindest regards from the Pro-Búsqueda Association of Missing Children of El Salvador.

It is for us a big satisfaction to inform you that from the results obtained through the DNA analysis, and the historical and contextual facts related to your case, that your final report of biological kinship has been obtained. This report recommends with a 99.9 per cent of probability the establishment of a biological kinship between you and the family\_\_\_\_\_\_ (see schematic blow)

The next step for us is to refer your case to the Psycho Social Unit with XXX (psicosocial.probusqueda@gmail.com). \_\_\_\_\_\_\_\_ is going to be in touch with you soon to establish how to proceed to a possible family reunification, so important to your relatives who have been waiting for this moment. The initial steps for actual family reunification should happen in the most convenient way to all involved.

Your family is being informed of this kinship without revealing your current name. Your contact information will not be sent to them until you authorize it, through your communications with the Psycho Social Unit.

We appreciate your collaboration.

# APPENDIX 6 (A-6): CHECKSHEET FOR TECHNICAL REVIEW

		(GMID) - Data Review Check Sheet and Sample Evaluation Comments (v.2.1.04.17.10)
Analys	Name	Date
		(grayed areas) to select the box, and then click again to position the cursor in the writing (this does not apply for Sample Evaluation Comments table, pgs 4-6).
	01 0	
1.	conducted pr	alysis folder with the acronym of the laboratory where the analysis was receded by the date of the shipment of the samples to the lab (e.g. 01-10 shipment sent to Chromosomal Labs on Jan. 10, 2010)
	Analysis fold	dername
	Copy the run	n folder(s) into the Analysis folder.
	Run Folders:	:
2.	Launch Gene	eMapper v3.2. Add Sample Files to create new project.
3.	Set the follow	wing parameters before analyzing data:
	a.	Sample Type (If applicable. Allelic Ladders, Negative Control, etc.)
	b.	Typing kit
		(enter kit and version)
	c.	Analysis Method (e.g. CL Anal.Method). Set to
	c. d.	Analysis Range
		Analysis Range

10\_PV, should the data review have been performed by Patricia Vasquez on 03-28-10). If multiple projects from the same shipment are analyzed, these are numbered with a -1, -2, -3 (e.g. 01-10-10\_CL\_GM\_03-28-10\_PV-1).

Project Name:

Pro Búsqueda / Alliance

#### GeneMapperID (GMID) - Data Review Check Sheet and Sample Evaluation Comments (v.2.1.04.17.10)

Analyst Name		Date	
--------------	--	------	--

First click on fill-in boxes (grayed areas) to select the box, and then click again to position the cursor in the desired starting point for writing (this does not apply for Sample Evaluation Comments table, pgs 4-6).

- Evaluate the size standards. Check that the size standards pass using both the PQV and base pair assignments.
- 6. Evaluate the allelic ladders. All ladders that do not have the correct allele assignments should be set to *Sample Type: Sample*.
- Evaluate the negative controls. Edit any artifact peaks (spikes, dye blobs). Note any true allele peaks in the Sample Evaluation Comments section at the end of this check sheet. Include both the sample name and the injection number.
- 8. Evaluate the positive controls. Edit any artifact peaks. Verify that the genotypes are correct. Verify that the peak height ratios, peak heights, peak morphology, and resolution are acceptable. Note any problems plus failed injections in the Sample Evaluation Comments section, including sample name and injection number.
- Evaluate the samples. Edit any artifact peaks. Verify that the peak height ratios, peak heights, peak morphology, and resolution are acceptable. Note any problems plus failed injections in the Sample Evaluation Comments section, including sample name and injection number.
- 10. Perform electronic capture of electropherograms (preferably with SnagIt) and save in a Word or pdf file. One injection for each sample, positive and negative control (do include the sizing table). Each injection used for the Project should include one "Normal View" and one "Zoomed View", with the Y axis set at 0-100 RFUs. Do not capture the allelic ladders. File the electropherograms in a folder labeled Electropherograms Project Name (for Project Name see Item 4, bottom of pg. 1).
- Export the project file to the Analysis folder. Enter the same name as the Project Name above (for Project Name see Item 4, bottom of pg. 1). Use <u>GeneMapper</u> Manager to export the project file.
- Export the table to the Analysis folder. Select the Genotypes tab and use the *export* table setting.

Pro Búsqueda / Alliance

#### <u>GeneMapperID</u> (GMID) - Data Review Check Sheet and Sample Evaluation Comments (v.2.1.04.17.10)

Analyst	Name	Date					
First click on fill-in boxes (grayed areas) to select the box, and then click again to position the cursor in the desired starting point for writing (this does not apply for Sample Evaluation Comments table, pgs 4-6).							
13.	Compare the current analysis to the previous analysis (e.g. CL's) using the Concordance spread sheet (Excel). Copy and paste data from both runs (current analysis <u>vs</u> CL's data, for example) in the appropriate columns. Note discrepancies and resolutions in the Sample Evaluation Comments section, including sample name and injection number.						
14.	14. Name the Concordance spread sheet with the name Concordance Table of Shipme Date Lab Acronym GM_Today's Date Reviewer's Initials (e.g. Concordance Table of 01-10-10_CL_GM_03-28-10_PV, should the data review have been performed by Patricia Vasquez on 03-28-10)						
	Concordance Table						
15.	15. Save the Concordance spread sheet in the Analysis folder						
16.	Archive the Analysis folder in a secure website						
		(e.g., <u>www.probproject.com</u> )					
Pro Búsqueda / Alliance							
<u>GeneMapperID</u> (GMID) - Data Review Check Sheet and Sample Evaluation Comments (v.2.1.04.17.10)							
Analyst	Name	Date					

First click on fill-in boxes (grayed areas) to select the box, and then click again to position the cursor in the desired starting point for writing (this does not apply for Sample Evaluation Comments table, pgs 4-6).

#### Sample Evaluation Comments

Sample Number/Name	Locus	Comments	Repeat Analysis

# APPENDIX 7 (A-7): COMMUNICATION PROTOCOL FOR TRANSPORTING DNA SAMPLES

# A-7.1: Communication Protocol for Transporting DNA Samples in Spanish

#### A QUIEN INTERESE:

Estimado Señora o Señor,

Los contenidos de este paquete no son tóxicos. Son muestras de células de mejillas (mucosa bucal) que son parte de un estudio y colaboración entre la organización no-gubernamental de derechos humanos Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos de El Salvador y el Centro de Derechos Humanos de la Escuela de la Ley de la Universidad de California en Berkeley en los Estados Unidos (http://www.law.berkeley.edu/HRCweb/index.html). Estas muestras se han recolectado por la Asociación Pro-Búsqueda de familiares de la niñez desaparecida, muestras que se han almacenado en sobres convencionales tanto por razones científico-forenses como para reunir requisitos adecuados de transporte.

Los perfiles genéticos obtenidos del ADN de las muestras formarán parte de una base de datos que Pro-Búsqueda tendrá para la posteridad, por si en el futuro se presentan niños, adolescentes y adultos que pudiesen haber sido parte de, o estar relacionados con, la niñez desaparecida. En cuanto se obtengan sus perfiles genéticos de ADN serán comparados con el panel de perfiles genéticos de familiares para buscar una posible filiación. El análisis de ADN ha sido ya una herramienta indispensable para reunir familias de la Asociación Pro-Búsqueda con sus hijos o hijas.

Se agradece de antemano su colaboración en hacer este embarque posible.

Atentamente,

# A-7.2: Communication Protocol for Transporting DNA Samples in English

The Project established a simple communication protocol to transport DNA samples from Pro-Búsqueda and the Human Rights Center to the Laboratory. Once samples are mailed from El Salvador, a confirmation email is sent to the person receiving the samples at the Laboratory. The e-mail informs the staff receiving the samples when the samples were sent and any specific instructions. This is a sample letter placed outside (in the pouch with shipping labels) with a description of the materials and their use and with assurance of safety, for anyone who may handle the shipment in route.

#### TO WHOM IT MAY CONCERN:

Dear Madam or Sir,

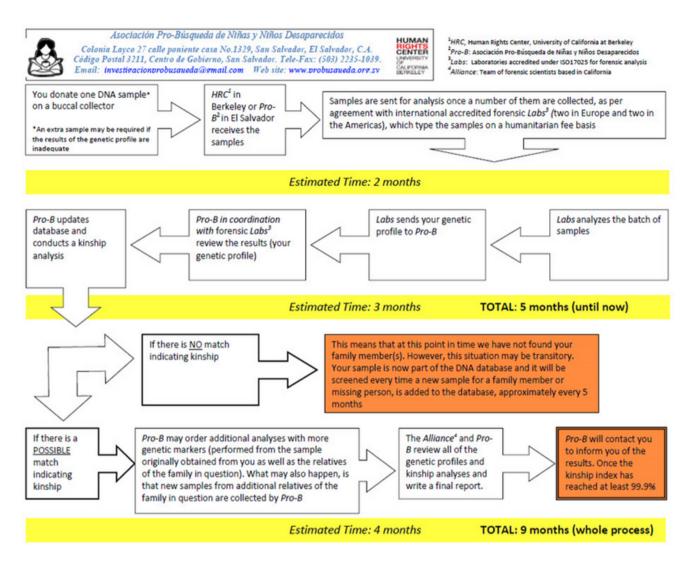
The contents of this shipment are nontoxic. They are samples of cheek cells that are part of a scientific study/collaboration between the nongovernmental human rights organization Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos (Pro-Search Association of Missing Children) of El Salvador and the Human Rights Center of the School of Law at the University of California at Berkeley in the United States (http://www.law.berkeley.edu/HRCweb/index.html). These samples have been collected by the Pro-Búsqueda Association from relatives of the missing children and have been stored in regular envelopes for forensic scientific reasons and for adequate transport requirements.

The genetic profiles obtained from the DNA in the samples will become part of a database that Pro-Búsqueda will have for posterity as children, adolescents, and adults appear in the future who could have been among or are related to the missing children. As their DNA profiles are obtained they will be compared to the panel of genetic profiles from relatives to look for possible family affiliation. DNA typing via the Pro-Búsqueda Association has already been a key element in reuniting families with their children.

Your assistance in making this shipment possible will be deeply appreciated.

Sincerely,

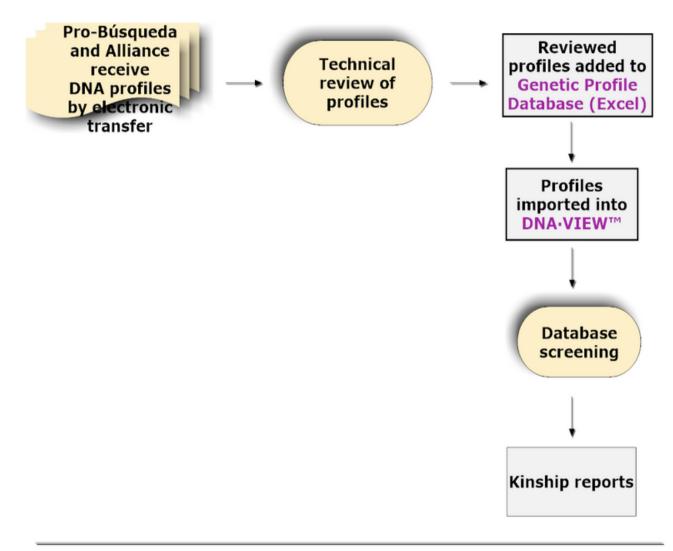
# APPENDIX 8 (A-8): PROCESS FROM SAMPLE COLLECTION TO RESULT



# APPENDIX 9 (A-9): POST-DNA ANALYSIS ACTIVITIES

This diagram illustrates the process from the time Pro-Búsqueda and the Alliance receive the DNA profiles to attaining kinship reports. It summarizes the steps thoroughly explained in Chapters III, IV, and V.

# Post-DNA Analysis Activities\*



\*Databases in fuchsia



Asociación Pro-Búsqueda de Niñas y Niños Desaparecido:

June 1, 2010

# Identification Report for NN1 Case E1000

Reference: Samples were obtained and Short Tandem Repeat DNA profiles produced for:

Adoptee to be identified: NN1

Unique Identifier ES6000

Suspected birth name/missing child: NN2

Reference family:

ES6034 Alfredo López Martínez (Sibling of NN2) ES6033 Carlos López Martínez (Sibling of NN2)

**Summary:** The DNA provides evidence that NNI is related to the reference family in the same way as NN2- i.e. evidence identifying NNI and NN2 as the same person. In addition, there is strong supporting circumstantial evidence. Taking both into account we believe that the identification is over 99.9% certain.

**Standard assumptions**: Lacking any evidence except the belief that *NN1* is among the approximately 30,000 children lost or adopted during the civil conflict, she is 1/30,000 to be the same person as any particular randomly chosen child who disappeared. Therefore we take 1/30,000 as a "baseline" prior probability that *NN1* is the missing child (the same 1/30,000 chance that *NN1* is any other missing child). The DNA likelihood ratio calculation further assumes that *NN1* is either a missing child from the purported family or else unrelated to that family.

Background: NN2 lived in San Salvador with her parents, Miguel López and María Martínez, and her four siblings, Alfredo, Carlos, Carolina and Ester.

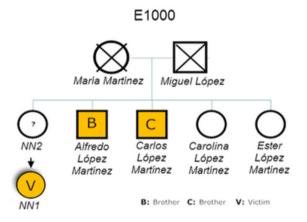
In November of 1996, testimony was given to Pro-Busqueda by Alfredo López Martínez (older brother to NN2) according to <u>Alfredo</u>, in 1980 both parents were murdered by "Escuadrones de la Muerte" (death squads). The children left abandoned, were taken in briefly by their maternal grandmother but she was too old to care for them. They were then taken by their maternal aunt Clara <u>Martínez</u>. She too was unable to care for them due to the economic conditions at the time. It is alleged by <u>Alfredo</u> that <u>Clara Martínez</u>, had taken two of his sisters, NN2 (6 years old) and <u>Ester</u> (3 years old) to give them up for adoption to people from the United States. <u>Clara Martínez</u> did not collaborate with Pro-Búsqueda's investigation; however, she stated that she had maintained contact with both girls but subsequently lost contact with them over time.

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The initial belief that *NN1* is *NN2* came about because of an e-mail *NN1* sent to Pro-Búsqueda in May 2005. She contacted Pro-Búsqueda stating that she was looking for her family and provided the name of her aunt, *Clara Martínez* and her address in Mejicanos. Pro-Búsqueda noticed the coincidence in the name of the aunt from the testimony given by *Alfredo*. *NN1* also reported that she had a sister who was separated from her family at the same time. Further investigation using kinship analysis was requested.

**Discussion:** The presumption that *NN1* is *NN2* is supported by the available DNA evidence. The following hypotheses were compared simultaneously:



1. NN1 is the sibling of Alfredo López Martínez and sibling of Carlos López Martínez.

2. NN1 is unrelated to this family.

A likelihood ratio of 6.94 billion was calculated, meaning that the DNA profiles obtained from *NN1* and from the references are 6.94 billion times more probable if hypothesis 1 is correct and *NN1* is *NN2* than if hypothesis 2 is correct and *NN1* is unrelated. This is very powerful evidence for hypothesis 1. Considering only the baseline prior probability of 1/30,000 and the DNA calculation, the posterior probability for identity (hypothesis 1) is about 99.9996%.

We recommend declaring identity whenever the probability of identity is at least 99.9% based on evaluation of the DNA and a reasonable interpretation of the background evidence. Therefore the standard for identification is easily met and we recommend that the identification of NN1 as NN2 be taken as proven.

The analysis of this report assumes that the DNA and the DNA profile associated with the *NN1* is hers. A fresh biological sample from *NN1* is recommended to confirm that her DNA typing is correct.



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**Conclusion:** We recommend regarding identification as proven.

Primary Analyst

Technical Reviewer



Asociación Pro-Búsqueda de Niñas y Niños Desaparecidos

# Appendix - DNA types and summary of computation

Case E1000 NN1

V,B,C:Mo+Fa ; agree all Relations /Other,B,C:Mo+Fa ; *NN1* is unrelated

El Salvador data	cumulative LR 6.94e9
	Posterior probability
	(assuming 1/30,000 prior) = 99.9996%

			V= NN1	C=Alfredo	B=Carlos
D3S1358		2.91	15	15	15
VWA		1.28	16,18	17,18	16,19
FGA		36.8	20,23.2	23.2,27	23.2,27
D8S1179		17.9	10,15	10,15	10,15
D21S11		1.03	29,32.2	31.2,32.2	31.2,32.2
D18S51		13.1	13,16	13,16	13,16
D5S818		3.2	11	11	11
D13S317		0.445	8,9	11,12	9,12
D7S820		3.44	10,11	10,11	10,11
D16S539		1.25	12,13	10,13	10,13
TH01		2.17	6	6,7	6
TPOX		1060	7,9	7,9	8
CSF1PO		3.85	11	11	10,11
D2S1338		0.677	17,20	20,23	20
D19S433		5.73	12,14	15	12,14
cumulative	LR	6.94e9			

# APPENDIX 11 (A-11): TECHNICAL OVERVIEW OF KINSHIP

A likelihood ratio is calculated to evaluate putative family relationships and develop some degree of certainty for identity. The likelihood ratio is the statistical calculation that results from the comparison of two hypotheses. For this project, we use this calculation to determine whether a person is related or unrelated to a putative family. This calculation determines how many times more likely a person is related based on the given family relationships (using available genetic profiles) than unrelated. The project uses the software program called DNA View to determine kinship.

Non-DNA information is collected during the interviews. The information considered for the statistical calculations may include but is not limited to the following: an estimate of the total population of children that disappeared as a result of the war, the sex of the disappeared person, the age when they disappeared, geographical data, any memories of the event when they were separated from their family (when available), unique physical characteristics, and any supporting documentation including photos.

The first step in the process is that the genetic profiles of the disappeared persons are compared with family reference profiles. Family reference profiles are the genetic profiles of the family members searching for their disappeared relatives and are stored in a separate database from the profiles of the disappeared persons. By comparing the profile of a disappeared person against the family reference profiles, unrelated families can be discarded and "potential families" isolated.

The second step in kinship analysis is to determine if a disappeared person can be statistically linked to a putative family through comparison of their genetic profiles and non-DNA information collected during the interview. Once a potential family has been isolated or a family linked by an investigation, individual kinship analysis is conducted to determine if identity to the disappeared person can be confirmed using all available information. For this Project, kinship is accepted when the statistical calculations indicate a "posterior probability" or probability of identity of at least 99.9 percent. The "posterior probability" or probability of identity associate a disappeared person to a family.

Through years of investigation Pro-Búsqueda determined that approximately 30,000 children had disappeared as a direct result of the wars throughout Central America during the decade of the 1980's and years surrounding it. This estimate of the population of disappeared persons is the baseline number used as the non-DNA information accounted for in each statistical calculation. This is referred to as "prior odds." The likelihood ratio is calculated from the DNA information or genetic profiles and the "prior odds" calculated from non-DNA information obtained through the interviews conducted by Pro-Búsqueda. Together both calculations are used to determine the "posterior probability" or probability of identity for each family relationship evaluated and an identification is made when 99.9 percent is obtained.