

# **DONOR CONSENT TO PROVIDE IMPRESSIONS FOR INCLUSION IN ICNML DATABASE**

## **Creation of an International Close Non-Match Library (ICNML)**

You are invited to participate in a study being funded by the National Institute of Justice. You are being asked to provide impressions of the fingers and palms of your hands for the first phase of the study. We ask you to read this form and ask any questions you may have before agreeing to donate impressions to the study.

The study is being conducted by Heidi Eldridge at RTI and Christophe Champod at University of Lausanne (Unil).

### **STUDY PURPOSE**

This study will be accomplished in two phases. This consent form is for the first phase only. The purpose of phase one of this study is to create a database of known ground truth finger and palm impressions (hereafter “ICNML”). Better training in the avoidance of false positive identifications of close non-matches is a critical need of the friction ridge community, but known close non-match pairs are difficult and time-consuming to find. A close non-match occurs when two friction ridge impressions are made by different sources but have features that are so similar that a latent print examiner could mistakenly conclude they are from the same source.

This project will collect known ground truth pairs and known different source close non-match images taken from Automated Fingerprint Identification Systems (AFISs) and create an ICNML. The ICNML will be made freely available for three prescribed uses (training, internal testing, and research) by the investigators and by trusted law enforcement partners worldwide. The completed database will be capable of producing testing materials to the specifications of law enforcement users (e.g. number of trials of each type, difficulty of trials, etc).

The second phase of this study will involve testing expert examiners using the images contained in the ICNML.

### **NUMBER OF PEOPLE TAKING PART IN THE STUDY**

If you agree to participate, you will be one of approximately 100 individuals donating impressions to create the ICNML.

### **PROCEDURES FOR THE STUDY**

If you agree to participate, you will do the following things.

You will first be asked to provide one set of complete, pristine exemplar recordings of your palms and distal phalanges (fingerprints). This set of exemplars will be provided to a Selection Team who will examine them and select 5 friction ridge areas they believe to be most likely to yield a close non-match.

You will then be asked to handle a variety of surfaces in specific ways to capture chance impressions (hereafter “marks”) from each of the 5 selected areas of your friction ridge skin. You will produce 10 marks for each of the 5 selected areas. Your site’s study administrator will also ensure that at least 5 incidental marks are also recorded. If there are not 5 suitable incidental marks available, you will be asked to handle additional objects to produce a total of 5 marks that are *not* from the 5 selected areas. In all, you will donate at least 55 marks. All mark donation will be done under observation so that the true origin of each impression can be ascertained and recorded.

Finally, you will be asked to provide two more sets of complete exemplar recordings of your palms and distal phalanges. One set will be of good quality, and one will be of low quality, forming a collection of 3 sets of exemplars (bad, good, pristine) for inclusion in the ICNML.

It is estimated your time-commitment will be between 2 and 3 hours depending on the difficulty of obtaining clear known exemplar impressions from your palms and the number of items you touch to provide chance impressions.

You will have the option to enroll as a research participant in phase two of the study and are encouraged to do so.

## **RISKS OF TAKING PART IN THE STUDY**

Every effort will be made to maintain your confidentiality; however, there is a small, non-zero risk that your identity may be discovered if someone chooses to enter one of your impressions into an AFIS that contains your records. Please see the section below on confidentiality for more information.

## **BENEFITS OF TAKING PART IN THE STUDY**

The ICNML will be made available to many law enforcement agencies worldwide for use in training their examiners on close non-matches. It will also provide test samples that can be used in future research. While there may be no direct benefits to you from taking part in this study, you may experience a feeling of satisfaction from contributing to the improvement of the discipline. You also may directly benefit from the ability to use this database in your laboratory if you are a trainer or manager or are involved in creating proficiency tests or conducting research.

## **ALTERNATIVES TO TAKING PART IN THE STUDY**

An alternative to participating in the study is to choose not to participate.

## **CONFIDENTIALITY**

Images of your fingers and palms collected through this study will be included in a database (ICNML) that will be shared with trusted law enforcement partners and may be used in future training, internal testing, and research. In order to preserve your confidentiality, your name will not be contained in the ICNML. Once the ICNML is completed, only your de-identified impressions will remain. However, anyone with access to the ICNML could choose to enter your impressions into an AFIS and could possibly receive a hit back to your record.

Additionally, portions of your impressions will be searched through one or more domestic or international AFIS databases during the creation of the ICNML. In order to locate close non-match exemplars, our partner laboratories will be searching your impressions through AFIS systems to generate other candidates. If they search through a database in which you have a record, your impressions will likely hit to your record. It is recommended that you not participate in this study if you are concerned about your impressions being entered into a criminal database anywhere in the world.

Your impressions may be selected for inclusion in publications or presentations resulting from this project. If you agree to this use, you will indicate your consent separately from your consent to add them to the ICNML. Finally, your impressions may be shared via the ICNML by the investigators (Heidi Eldridge and Christophe Champod) and by any trusted law enforcement partner.

Trusted law enforcement partners are defined as those agencies who have been approved by the investigators to join the ICNML and have signed a data sharing agreement in which they agree to limit their use of the ICNML to the aforementioned three approved activities and not to use the impressions for monetary gain (e.g., to create commercially-available proficiency tests). Additionally, trusted law enforcement partners must be located in a country that has contributed to the ICNML through providing data records after completion of the study or through being part of the initial research study team. In this way, the ICNML will continue to expand over time as records are added by new agencies.

Your name will not be associated with your impressions. Your consent form signature page will be kept securely for a period of 3 years from the completion of the study to ensure you provided consent, but will then be destroyed and only record of the fact that your donor name completed the form will be retained. At the time your impressions are received, you will be provided with an anonymous donor name and instructions for two-factor authentication of your identity. If at any time you wish to remove your impressions from the ICNML, you will be able to use this information to remove your data as long as the ICNML is housed and maintained by Unil. Nobody, including your employer, will ever have any way of knowing whether you have done this. This authentication will be verified using an email address you provide that will be hashed and stored in encrypted form using security protocols that exceed NIST recommendations such that your email address will be unreadable and irretrievable by anybody—including the investigators.

If you choose to remove your impressions from the ICNML at any time, all record of the images will be irretrievably deleted. This decision will be irreversible (we cannot restore your images at a later time if you change your mind again). Your deleted images will not be viewable, nor will they be included in any test, training, or research packets that are created after the time of removal. However, please be aware that because image packets are downloaded at the time they are created, any image packets that were created using your images *prior to* you removing your images may still exist with the law enforcement agencies that downloaded them.

## **COSTS AND PAYMENT**

There are no costs to you for participation in this study, nor will you receive payment for participation in the study beyond the wages you normally earn at work if you contribute to this study during work hours.

## **CONTACTS FOR QUESTIONS OR PROBLEMS**

For questions about the study, contact Heidi Eldridge, RTI International at 919-541-6305 or [heldridge@rti.org](mailto:heldridge@rti.org). You may also write anonymously by using the email address [LPRsearch@rti.org](mailto:LPRsearch@rti.org), which will be screened by a confidential assistant and passed on to Heidi after your identifying information is removed.

If you have any questions about the conduct of the first phase of the study, or the overall study, you can call RTI's Office of Research Protection at (919) 316-3358 in Durham, NC or 1-866-214-2043 (a toll-free number).

## **VOLUNTARY NATURE OF DONATION**

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty. Your decision whether or not to participate in this study will not affect your current or future relations with the investigator(s).

## **SUBJECT'S CONSENT**

Please see next page for consent statements and signature lines.

By signing below, you acknowledge that you have read the above information, that you are 18 years of age or older, and give your consent to the following statement(s). You are not obligated to agree to both statements. This signature page will be destroyed after the ICNML has been built.

Statement 1

I agree to provide impressions of my fingers and palms for inclusion in the ICNML. I understand that (a) my impressions will be searched through one or more domestic or international AFIS databases; (b) this signature page will be retained for a period of 3 years after completion of the study, at which time it will be destroyed; (c) my impressions may be used for future training, internal testing, and research by the investigators and by trusted law enforcement partner agencies; and (d) I have the right to remove my impressions from the ICNML using credentials that will be provided to me when my impressions are received.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Statement 2

I agree to allow the use of my impressions in publications or presentations that may result from this study.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Print this page if you want a copy for your records.



ICNML CONSENT FORM