

# SDFI<sup>®</sup> - TeleMedicine

Secure Digital Forensic Imaging – Secure Beyond Reasonable Doubt<sup>®</sup>

## SDFI<sup>®</sup> Forensic Hand Map “Development Notes”

# 2012





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## SDFI<sup>®</sup> Forensic Hand Map “Development Notes”

### Executive Summary

The purpose of this document is to outline, define and explain who, why, when, what and how the SDFI<sup>®</sup> Forensic Hand Map was developed.

### Who Should Read This Document

Legal, medical, educational and forensic photography professionals should read this document if there is a requirement to validate and confirm specific technical details related to the creation and use of SDFI<sup>®</sup>'s Forensic Hand Map. You may copy, print, post and link to this document provided it is kept whole.

REF: [http://www.sdfi.com/downloads/SDFI\\_Forensic\\_Hand\\_Map-Development\\_Notes.pdf](http://www.sdfi.com/downloads/SDFI_Forensic_Hand_Map-Development_Notes.pdf)

### Summary

The “SDFI<sup>®</sup> Forensic Hand Map” is a tool used by forensic photographers. When used as instructed, a forensic photographer will be able to capture a series of forensic hand photographs that overlap and are consistent for legal, medical and educational purposes.

### Introduction

In August of 2011, three predominant individuals within the general fields of nursing, forensics, education and business met with SDFI<sup>®</sup>-TeleMedicine staff. The intent was to produce, among other things, a simple and effective tool that could be used by any forensic photographer to take consistent pictures of a person's hands, front and back. The chart, graph or map created would help all parties, legal, medical and educational who are involved with forensics and forensic photography. The solution had to be cost effective, sanitary, easy to use, easy to understand and self explanatory.

Research articles on the specific subject of “Forensic Hand Mapping” could not be found. One semi-related article was posted in the African Journal of Health Sciences, Volume 12, Number 1-2, January-June 2005. The article focused on personal identification through fingernail shapes, similar to fingerprints. Follow up articles on the subject of using fingernail shapes to identify a person were not found during development of SDFI's Forensic Hand Map.

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## **Who Was Involved?**

The following three contributing professionals offered direct input into the creation of the SDFI<sup>®</sup> Forensic Hand Map along with SDFI<sup>®</sup>-TeleMedicine staff. They are:

### **Diana Faugno** MSN, RN, CPN, SANE-A, SANE-P, FAAFS, DF-IAFN

Master of Science in Nursing  
Certified Pediatric Nurse  
Sexual Assault Nurse Examiner Adolescent/Adult  
Sexual Assault Nurse Examiner Pediatrics  
Fellow American Academy of Forensic Science  
Distinguished Fellow- International Association of Forensic Nurses  
Forensic Registered Nurse Consultant  
Board Director/Secretary EAW International - [www.evawintl.org](http://www.evawintl.org)  
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### **Stacey A. Mitchell**, DNP, RN, SANE-A, SANE-P

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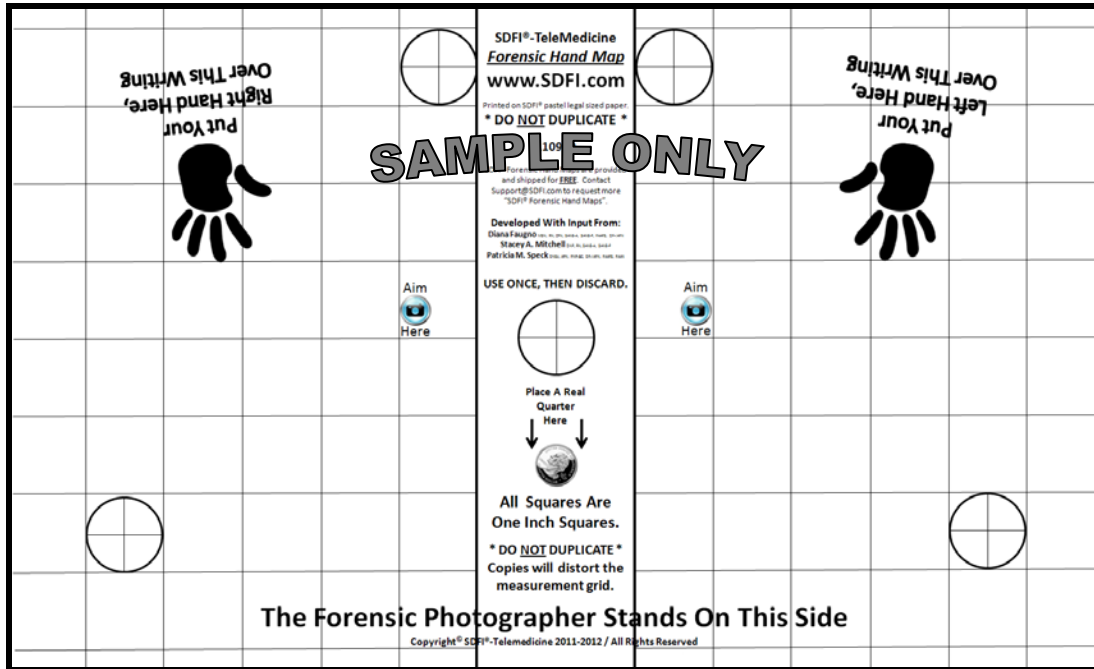
### **Patricia M. Speck**, DNSc, APN, FNP-BC, DF-IAFN, FAAFS, FAAN

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## The SDFI® Forensic Hand Map, Front and Back



## SDFI®-TeleMedicine “Forensic Hand Map”

**Back of the Right Hand**      User Guide and Instructions      **Back of the Left Hand**

**Front of the Right Hand**      **Front of the Left Hand**

Find a low flat uncluttered location and place this Forensic Hand Map on it, other side up.

Take at least four pictures as shown here. Aim near the “Aim Here” camera symbol.

Take additional close-up pictures as needed.

SDFI® users should use the close-up setting.

(A slightly dark picture is OK.)

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## Development Tools Used to Create The SDFI<sup>®</sup> Forensic Hand Map

The SDFI<sup>®</sup> Forensic Hand Map is printed on legal sized, 20 pound pastel/light blue color paper. Pastel/light color paper was chosen because it provides excellent contrast. Paper products used in the development and production of SDFI<sup>®</sup> Forensic Hand Map are purchased from various online and/or local office supply stores.

### General Information

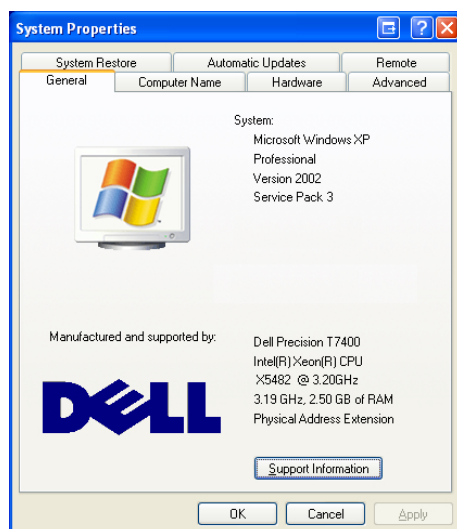
More than 250 sample prints were produced during and after development before final print production. The measurement grid spacing, on random sample prints, was measured with multiple ABFO<sup>®</sup> L-shaped scales to ensure printing and measurement grid consistency. Each complete square on the map represents a one inch square, give or take the thickness of the actual printed lines. The reference circles are also one inch in diameter, give or take the thickness of the actual printed lines.

A U.S. 25 cent quarter should be placed on the “quarter marker” as instructed (the printed “quarter marker” was reduced in size intentionally so it could NOT be confused with a real quarter). Including a quarter in the picture instantly validates the measurement grid should anyone question its validity of the printed measurement grid after the photographs are taken. Should a quarter not be captured as part of the final forensic photograph, the map squares on a printed sheet can be manually measured using a ABFO<sup>®</sup> or similar certified measurement tool. NOTE: the diameter of a U.S. quarter is .955 inches and was chosen because of its diameter size.

REF: [http://www.usmint.gov/faqs/circulating\\_coins/?action=faq\\_circulating\\_coin](http://www.usmint.gov/faqs/circulating_coins/?action=faq_circulating_coin)

### Computer and Operating System

The printed design was created by SDFI<sup>®</sup>-TeleMedicine on a T7400 Dell Precision computer. Inside the computer is an Intel Xeon X5482 CPU running at 3.20Ghz, supporting the operating system, Microsoft Windows XP Professional, Version 2002, Service Pack 3.



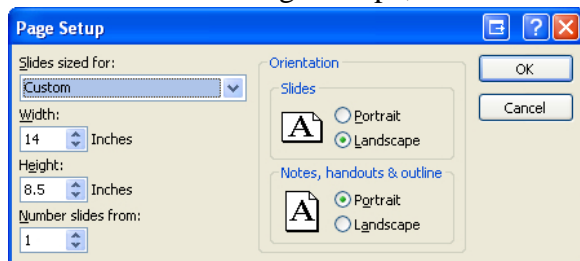
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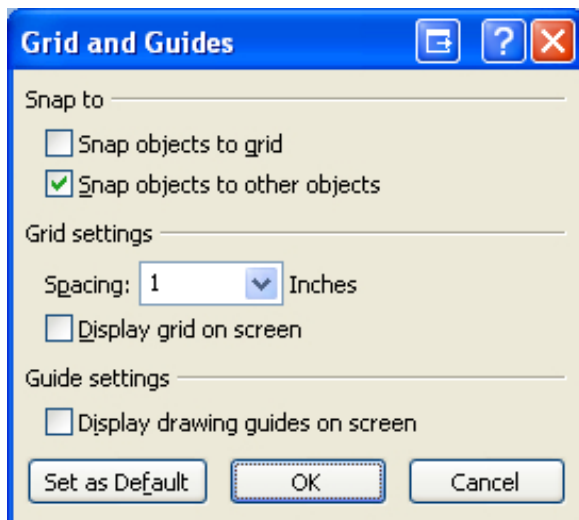
## Software

Microsoft Office PowerPoint 2007 (12.0.6557.5001) SP2 MSO (12.0.6554.5001) was used to create the SDFI<sup>®</sup> Forensic Hand Map.

PowerPoint 2007 “Page Setup”, was defined is a follows:



PowerPoint “Grid and Guides”, was defined a follows:

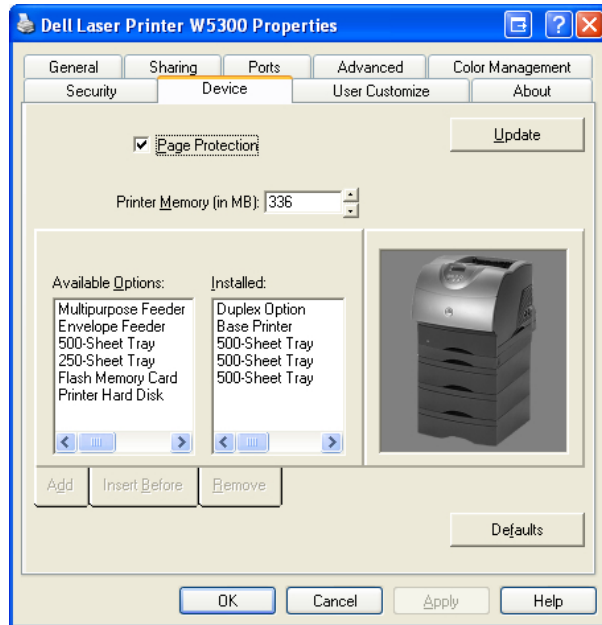


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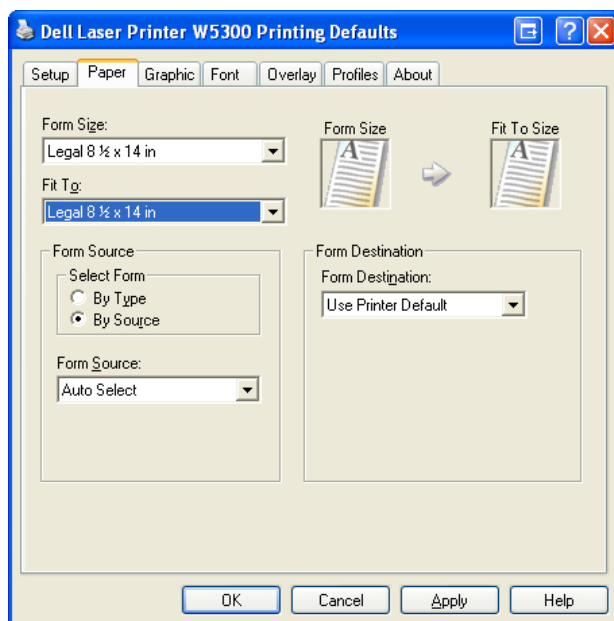
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## Development and Production Printing

Development and production maps are printed on a Dell W5300 monochrome laser printer with the following hardware device properties.



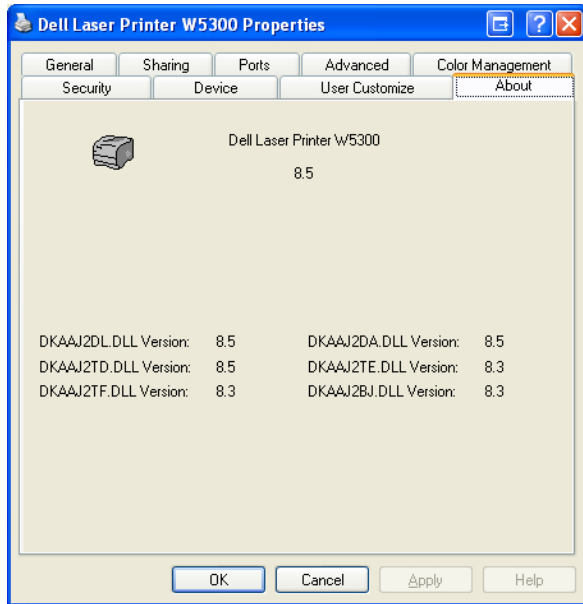
The following “Printing Defaults” were used:



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The following “Printer Drivers” were used:



**SDFI<sup>®</sup> Forensic Hand Maps** are offered for free, until further notice, in packs of 100 and are shipped for free.

Send a message to: [Support@SDFI.com](mailto:Support@SDFI.com) or call SDFI<sup>®</sup>-TeleMedicine us at: 310-492-5372 and request SDFI<sup>®</sup> Forensic Hand Maps for medical for forensic use.

## Word and Acronym Glossary

SDFI<sup>®</sup> Forensic Hand Map = A simple and cost effective self contained scientific tool created by SDFI<sup>®</sup>-TeleMedicine to assist forensic photographers take constant forensic hand photographs.

Overlap/Overlapping Storyboard = See [http://www.sdfi.com/downloads/SDFI\\_Digital\\_Protocol.pdf](http://www.sdfi.com/downloads/SDFI_Digital_Protocol.pdf)

ABFO<sup>®</sup> = American Board of Forensic Odontology <http://www.abfo.org/index.html>

**END**

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Secure Digital Forensic Imaging – Secure Beyond Reasonable Doubt<sup>®</sup>  
“You Can’t Get a Refund on Time<sup>®</sup>”



Scan or Take a Picture of this Quick Response Code  
with Your Enabled Smart Phone to Get to the SDFI Web Site

## **SDFI<sup>®</sup> - TeleMedicine**

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See the SDFI Web Page for Office Hours