# Jon T. Stimac

#### Forensic Instructor - Ron Smith & Associates, LLC

Editor - Identification News, International Association for Identification

55566 Wagon Master Way Sunriver, OR 97707 541-593-9719

#### Professional Experience:

Government Forensic Laboratory, 1996-Present Forensic Scientist, 2004-Present Latent print examinations (comparison, processing, AFIS)

> Latent Print Examiner, 1996-2004 Latent print examinations, crime scene examination.

International Association for Identification Editor, *Identification News*, 2007-Present

Salt Lake City Police Department Crime Laboratory Crime Lab Technician, 1993-96

## **Education**

Weber State University, Bachelor of Science; Criminalistics/Criminal Justice, 1993.

#### **Certifications**

Certified Latent Print Examiner, International Association for Identification

#### **Publications**

Stimac, J.T., Thermal & Carbonless Papers: A Fundamental Understanding for Latent Friction Ridge Development, *Journal of Forensic Identification*, 53:2, 2003.

Stimac, J.T., Thermal Paper: Latent Friction Ridge Development via 1,2-Indanedione, *Journal of Forensic Identification*, 53:3, 2003.

Stimac, J.T., Forensic Science, or Business? The Use of Production Standards, *Journal of Forensic Identification*, 53:5, 2003.

Stimac, J.T., The Search for Safe, Non-running Solvents: A Brief History, *Journal of Forensic Identification*, 50:5, 2000.

Stimac, J.T., Adhesive Tape Separation with Un-du®, Fingerprint Whorld, 26:102, 2000.

Stimac, J.T., Plastic Fingerprint Impressions: An Inked Approach, *Journal of Forensic Identification*, 48:5, 1998.

Stimac, J.T., Dry Ninhydrin, *Gizmos & Gadgets*, 2005, http://www.csigizmos.com/products/latentdevelopment/drynin.html.

Stimac, J.T., An Interview with Andre Moenssens-Part II, Identification News, 43:2, 2013.

Stimac, J.T., An Interview with Andre Moenssens-Part I, Identification News, 43:1, 2013.

Identification News, Editor – International Association for Identification, 2007-present.

DactyloGram, Editor - (non-affiliated electronic newsletter on friction ridge identification) 2006-2007.

#### Publications (continued)

FP Stuff, Editor – (non-affiliated electronic newsletter on friction ridge identification) 2001-2005.

#### <u>Research</u>

**Novec HFE-7100 Specialty Fluid** – Research, testing, validation and publication of the associated results of this solvent for latent print forensic laboratory procedures. Testing of this safe, non-ozone-depleting solvent for use as a primary carrier in Ninhydrin and DFO processing techniques focused on comparative latent print development with other solvents, including comparative assessment of HFE-7100's efficient use with applied mechanical and handwritten inks. Subsequent contact from the 3M Corporations Specialty Materials Division (John Chorba, Paul Rajtar) resulted in non-profit consultation with 3M. Conclusions of research and validation was published within the *Journal of Forensic Identification* (The Search for Safe, Non-running Solvents: A Brief History, 50:5, 2000).

**Ninhydrin for Thermal Papers** – Results of this research introduced to the forensic community the use of a 'Specialty' Ninhyrdin for the development of latent print impressions on thermal papers. Using traditional ninhydrin formulations on this type of paper is often problematic to successfully develop latent print impressions without physically damaging the papers properties. The application of this 'Specialty' solution, carried in HFE-71IPA, effectively develops latent prints, while minimizing damage to the applied thermal paper. A commercial, non-affiliated variation of this solution has been marketed by Holland's BVDA. Conclusions of research and validation was published within the *Journal of Forensic Identification* (Thermal & Carbonless Papers: A Fundamental Understanding for Latent Friction Ridge Development, 53:2, 2003).

**1,2-Indanedione for Thermal Papers** – Results of this research introduced to the forensic community the use of a fluorogenic solution, 1,2-Indanedione for the development of latent print impressions on thermal papers. Analytical validation using appropriate parameters was conducted to determine the consistency and replication of this solutions effectiveness for both latent print development and minimal damage to the thermal papers susceptible components. Conclusions of research and non-affiliated validation was published within the *Journal of Forensic Identification* (Thermal Paper: Latent Friction Ridge Development via 1,2-Indanedione, 53:3, 2003).

**Un-du<sup>®</sup> Solvent for Adhesive Separation** – Results of this research introduced to the forensic community the use of Un-du<sup>®</sup> as an alternative adhesive separator. Pressure-sensitive adhesive tapes applied to porous surfaces are commonly submitted to forensic identification laboratories for separation from their applied surface followed by latent friction ridge processing techniques. The use of Un-du<sup>®</sup>, a commercially available adhesive "neutralizer" for household application was tested to determine if this product could successfully and consistently remove various pressure-sensitive tapes from their applied surface, while also allowing for latent friction ridge development. A conclusion of research validation was published within the United Kingdom's *Fingerprint Whorld* (Adhesive Tape Separation with Un-du<sup>®</sup>, 26:102, 2000). This article has had subsequent reprints within numerous International Association for Identification Division/Regional publications.

## Above Listed Research Cited in:

Ramotowski, R., *Lee and Gaensslen's Advances in Fingerprint Technology*, 3<sup>rd</sup> Edition, CRC Press, pp. 37-38, 165, 174, 2012.

US Department of Justice, *The Fingerprint Sourcebook*, Chapter 7: Latent Print Development, National Institute of Justice, pp. 7/22-7/23, 2011.

Champod, C.; Lennard, C.; Margot P.; Stoilovic, M., *Fingerprints and Other Ridge Skin Impressions*, CRC Press, pp.136, 160, 2004.

Lee, H.C.; Gaensslen, R.E., Advances in Fingerprint Technology, 2<sup>nd</sup> Edition, CRC Press, pp. 113, 2001.

Latent Print Processing Methods – Section 8, *Friction Ridge Skin Identification Training Manual*, International Association for Identification.

Matthias, G., Cyanoacrylate Processing of Tape Following the Use of Un-Du, *Journal of Forensic Identification*, 66:5, 2016.

#### **Cited research (continued)**

Ponschke, M.; Hornickel, M., A Limited Validation and Comparison of 1,2-Indanedione and ThermaNin for Latent Print Development on Thermal Paper, *Journal of Forensic Identification*, 66:3, 2016.

Olson, A., Processing Thermal Paper for Latent Prints – Validation Study, *Identification Canada*, Vol. 3, No 3, September 2014, pp 70-84.

Fitzi, T.; Fischer, R.; Moret, S.; Becue, A., Fingermark Detection on Thermal Papers: Proposition of an Updated Processing Sequence, *Journal of Forensic Identification*, Vol. 64, No. 4, 2014.

Hill, M.; Yamashita, B.; Rolston, D., A Comparison of Latent Print Fingerprint Visualization Techniques on Thermal Paper, *Identification Canada*, Vol. 34, No. 3, September 2011, pp 97-113.

Schwartz, L.; Hermanowski, M., Using Indanedione-Zinc, Heat and G3 Solution Sequentially to Detect Latent Fingerprints on Thermal Paper, *Journal of Forensic Identification*, 61:1, 2011.

Parasram, L., Processing Thermal Paper with 1,2-Indanedione/Zinc Chloride – A Novel Technique, *Identification Canada*, 34:1, 2011.

Bissonnette, M.; Knaap, W.; Forbes, S., Steam Development of Latent Fingerprints on Thermal Paper, *Journal of Forensic Identification*, 60:6, 2010.

Patton, E.; Brown, D.; Lewis, S., Detection of Latent Fingermarks on Thermal Printer Paper by Dry Contact with 1,2-indanedione, *Analytical Methods*, 2010, 2, 631-637, DOI: 10.1039/C0AY00121J.

Kusenthiran, S.G.V.; Rogers, T.; Knaap, W., Latent Print Detection on Thermal Paper Using Vacuum Metal Deposition and Steam, *Journal of Forensic Identification*, 60:1, 2010.

Jasuja, O.; Singh, G., Development of Latent Fingermarks on Thermal Paper: Preliminary Investigation into use of Iodine Fuming, *Forensic Science International*, Volume 192, Issues 1-3, 20 November 2009, Pages e11-e16.

Sears, V.; Batham, R.; Bleay, S., The Effectiveness of 1,2-Indandione-Zinc Formulations and Comparison with HFE-Based 1,8-diazafluoren-9-one for Fingerprint Development, *Journal of Forensic Identification*, 59:6, 2009.

Lee, J.L.; Bleay, S.M.; Sears, V.G.; Mehmet, S.; Croxton, R., Evaluation of the DMAC Contact Transfer Process and its Application to Fingerprint Development on Thermal Papers, *Journal of Forensic Identification*, 59:5, 2009.

Siegel, S.D., The Use of Cellophane Tape to Overcome the Background Discoloration on Thermal Paper, *Journal of Forensic Identification*, 57:2, 2007.

Ma, R.; Wei, Q., Chemical Fuming: A Practical Method for Fingerprint Development on Thermal Paper, *Journal of Forensic Identification*, 56:3, 2006.

Tomboc, R., Forensic Application of Un-du<sup>®</sup> Adhesive Tape Neutralizer, *California Identification Digest*, 4:4, 2004.

Schwartz, R.L.; Higginbotham, L.C.; Smith, D.R., The Effects of Un-du<sup>®</sup> on Latent Print Development, *Fingerprint Whorld*, 29, 66-73, 2003.

Novec Engineered Fluid HFE-7100 for use as a Carrier Solvent for Ninhydrin or DFO in Latent Fingerprint Development, 3M Corporation, 2002. http://multimedia.mmm.com/mws/mediawebserver.dyn?6666660Zjcf6IVs6EVs666XLPCOrrrQ-

Brennan, J.S., Isomark Spray: A Novel Method for the Replication of Marks, *Journal of Forensic Identification*, 51:6, pp. 571, 2001.

Rajtar P.E., 3M Novec Engineered Fluid HFE-7100, A New Carrier Solvent for use in Ninhydrin and DFO Formulations, *Fingerprint Whorld*, 26:102,143-152, 2000.

Rajtar, P.E., *A New Substitute Carrier Solvent for Ninhydrin and DFO Formulations*, 3M Corporation, 2001, <u>http://multimedia.3m.com/mws/mediawebserver?666666UuZjcFSLXTtlxTcM8TEEVuQEcuZqVs6EVs6E6666666---</u>.

## Cited research (continued)

Warrington, D., Un-Du Adhesive Remover, *Gizmos & Gadgets*, http://www.csigizmos.com/products/latentdevelopment/undu.html.

1,2-Indanedione Product Information, BVDA, http://www.bvda.com/EN/prdctinf/en\_ind\_1.html.

ThermaNin Product Information, BVDA, http://www.bvda.com/EN/prdctinf/en\_thermanin.html.

#### **Recognition**

Distinguished Member, International Association for Identification (I.A.I.).

Outstanding Achievement Award, Pacific Northwest Division of the I.A.I., 2008.

Consultant, 3M Corporation – Specialty Materials, 1999-2000.

Police Distinguished Unit Citation - Crime Lab, Salt Lake City Police Department, 1996.

Federal Bureau of Identification – Contractor Security Clearance, 2010 – 2014.

#### **Teaching and Lecture Experience**

Advanced Comparison of Friction Ridge Impressions, December 5-9, 2016 Westminster Police Department, 40 hours, Westminster, CA.

- Latent Print Search & Comparison Techniques Oct. 3-7, 2016 Denver Police Department, 40 hours, Denver, CO.
- Comparison of Plantar Impressions Sept. 19-20, 2016 Glendale Police Department, 16 hours, Glendale, CA.
- Latent Print Search & Comparison Techniques Aug. 22-26, 2016 Pasadena Police Department, 40 hours, Pasadena, CA.
- Comparison of Plantar Impressions Workshop August 8, 2016 International Association for Identification, 4 hours, Cincinnati, OH.
- Exclusions A Problematic Conclusion April 23, 2016 Chesapeake Bay Division of the IAI, 1 hour, Williamsburg, VA.
- Comparison of Plantar Impressions Workshop April 22, 2016 Chesapeake Bay Division of the IAI, 4 hours, Williamsburg, VA.
- Latent Print Search & Comparison Techniques Workshop Nov. 6, 2015 Tri-Conference (AZ, NV, UT Divisions of the IAI), 4 hours, Reno, NV.
- Basic Fingerprint Comparison Techniques Workshop Nov. 5, 2015 Tri-Conference (AZ, NV, UT Divisions of the IAI), 4 hours, Reno, NV.
- Comparison of Plantar Impressions Oct. 19-20, 2015 King County Sheriff's Office, 16 hours, Burien, WA.
- Latent Print Search & Comparison Techniques Oct. 5-9, 2015 San Luis Obispo County Sheriff's Office, 40 hours, San Luis Obispo, CA.
- Comparison of Plantar Impressions Workshop August 3, 2015 International Association for Identification, 4 hours, Sacramento, CA.

#### Teaching and Lecture Experience (continued)

Advanced Comparison of Friction Ridge Impressions – June 17-19, 2015 West Virginia University, 24 hours, Morgantown, WV.

Latent Print Search & Comparison Techniques – January 12-16, 2015 Rhode Island State Police, 40 hours, Kingston, RI.

Latent Print Search & Comparison Techniques – Sept. 8-12, 2014 Louisiana State Police, 40 hours, Baton Rouge, LA.

Comparison of Plantar Impressions Workshop – August 13, 2014 International Association for Identification, 4 hours, Minneapolis, MN.

Tenprint Search & Comparison Techniques Workshop – June 12, 2014 Pacific Northwest Division of the IAI, 8 hours, Coeur D'Alene, ID.

Comparison of Plantar Impressions Workshop – June 11, 2014 Pacific Northwest Division of the IAI, 4 hours, Coeur D'Alene, ID.

Comparison of Plantar Impressions Workshop – May 12, 2014 Michigan State Police AFIS Users Group, 4 hours, Mt. Pleasant, MI.

Latent Print Search & Comparison Techniques – May 5-9, 2014 Orange County Sheriff's Office, 40 hours, Tustin, CA.

Latent Print Search & Comparison Techniques – April 7-11, 2014 New York Police Department, 40 hours, Jamaica, NY.

Best Practices in Training for Forensic Science Symposium – March 13, 2014 West Virginia University, 2 hours, Morgantown, WV.

Comparison of Plantar Impressions – March 3-4, 2014 New York Police Department, 16 hours, Jamaica, NY.

Comparison of Plantar Impressions – February 3-4, 2014 Arizona Identification Council, 16 hours, Glendale, AZ.

Comparison of Plantar Impressions – December 2-3, 2013 Broward County Sheriff's Office, 16 hours, Ft. Lauderdale, FL.

Latent Print Search & Comparison Techniques – November 4-8, 2013 Michigan State Police, 40 hours, Lansing, MI.

Comparison of Plantar Impressions – October 21-22, 2013 New York Police Department, 16 hours, Jamaica, NY.

Intermediate Comparison of Friction Ridge Impressions – August 27-30, 2013 Idaho State Police, 32 hours, Boise, ID.

Comparison of Plantar Impressions Workshop – August 8, 2013 International Association for Identification, 4 hours, Providence, RI.

Advanced Comparison of Friction Ridge Impressions - Latent Prints, April 29–May 3, 2013 Los Angeles County Sheriff's Department, 40 hours, Los Angeles, CA.

Advanced Comparison of Friction Ridge Impressions - Latent Prints, October 15-18, 2012 King County Sheriff's Office, 32 hours, Seattle, WA.

## Teaching and Lecture Experience (continued)

Advanced Comparison of Friction Ridge Impressions – October 11-12, 2012 West Virginia University Continuing Education for Forensic Professionals, 16 hours, Nashville, TN.
Comparison of Plantar Friction Ridge Impressions – October 9-10, 2012 West Virginia University Continuing Education for Forensic Professionals, 16 hours, Nashville, TN.
Footprint Comparison Workshop – July 26, 2012 International Association for Identification, 4 hours, Phoenix, AZ.
Advanced Comparison of Friction Ridge Impressions – Tenprint, June 25-28, 2012 King County Sheriff's Office, 32 hours, Seattle, WA.
Methodological and Philosophical Changes in Friction Ridge Examination – May 3, 2012 Pacific Northwest Division of the IAI, 1 hour, Boise, ID.
Visual Perception and Friction Ridge Impressions – May 3, 2012 Pacific Northwest Division of the IAI, 1 hour, Boise, ID.
Intermediate Comparison of Friction Ridge Impressions – Tenprint Workshop, May 2, 2012 Pacific Northwest Division of the IAI, 8 hours, Boise, ID.
Advanced Comparison of Friction Ridge Impressions – Workshop, May 1, 2012 Pacific Northwest Division of the IAI, 8 hours, Boise, ID.
Intermediate Comparison of Friction Ridge Impressions – Tenprint Workshop, June 9 & 10, 2011 Texas Division of the IAI, 4 hours, Woodlands, TX.
Intermediate Comparison of Friction Ridge Impressions – Latent Print Workshop, June 9 & 10, 2011 Texas Division of the IAI, 4 hours, Woodlands, TX.
Intermediate Comparison of Friction Ridge Impressions – Tenprint Workshop, May 18, 2011 California Division of the IAI, 4 hours, Napa, CA.
Intermediate Comparison of Friction Ridge Impressions – Latent Print Workshop, May 17, 2011 California Division of the IAI, 8 hours, Napa, CA.
Intermediate Comparison of Friction Ridge Impressions – Latent Prints, March 28-31, 2011 West Virginia University Continuing Education for Forensic Professionals, 32 hours, New Orleans, LA.
Intermediate Comparison of Friction Ridge Impressions – May 24–27, 2010 King County Sheriff's Office, 32 hours, Seattle, WA.
Intermediate Comparison of Friction Ridge Impressions – Sept. 28 - Oct. 1, 2009 King County Sheriff's Office, 32 hours, Seattle, WA.

- SWGFAST: A Latent & Tenprint Perspective September 2, 2009 AFIS Internet Conference, .75 hour, Sacramento, CA.
- Intermediate Comparison of Friction Ridge Impressions Tenprint Workshop, September 1, 2009 AFIS Internet Conference, 4 hours, Sacramento, CA.
- Intermediate Comparison of Friction Ridge Impressions Latent Print Workshop, May 19, 2009 Pacific Northwest Division of the IAI, 8 hours, Walla Walla, WA.
- Intermediate Comparison of Friction Ridge Impressions Latent Prints, February 23-26, 2009 Arizona Identification Council, 32 hours, Tempe, AZ.

#### Teaching and Lecture Experience (continued)

- Contemporary Issues in Friction Ridge Identification November 6, 2008 West Virginia University, 1 hour, Morgantown, WV.
- Visual Perception of Friction Ridge Impressions, August 11, 2005 90<sup>th</sup> Educational Conference, International Association for Identification, 1 hour, Dallas, TX.
- Visual Perception of Friction Ridge Impressions, October 22, 2003 Utah Division I.A.I. Educational Conference, 1 hour, Salt Lake City, UT.
- What is SWGFAST? October 22, 2003 Utah Division I.A.I. Educational Conference, 1 hour, Salt Lake City, UT.
- Basic Analysis of Latent Prints, October 22, 2003 Utah Division I.A.I. Educational Conference, 6 hours, Salt Lake City, UT.
- Basic Analysis of Latent Prints Workshop, May 2, 2000 Pacific Northwest Division I.A.I. Educational Conference, 3 hours, Spokane, WA.
- Search for a Non-Running Solvent Workshop, May 1, 2000 Pacific Northwest Division I.A.I. Educational Conference, 4 hours, Spokane, WA.
- Police New-recruit Training Crime Laboratory, June 3, 1996 Salt Lake City Police Department, 1 hour, Salt Lake City, UT.
- Automated Fingerprint Identification Network (AFIS) NEC-WIN Training, January 8-9, 1996 Salt Lake City Police Department, 12 hours, Salt Lake City, UT.
- Automated Fingerprint Identification Network (AFIS) NEC-WIN Training, Sept. 9-10, 1995 Salt Lake City Police Department, 12 hours, Salt Lake City, UT.
- Police New-recruit Training Crime Laboratory, March 18, 1995 Salt Lake City Police Department, 1.5 hour, Salt Lake City, UT.
- Latent Print Processing Techniques New Technician Training, February 7-11, 1995 Salt Lake City Police Department, 40 hours, Salt Lake City, UT
- Forensic Photography New Technician Training, January 31 Feb. 4, 1994 Salt Lake City Police Department, 40 hours, Salt Lake City, UT.
- Police New-recruit Training Crime Laboratory, September 26, 1994 Salt Lake City Police Department, 1.5 hour, Salt Lake City, UT.

## Professional Affiliation – at present

Scientific Working Group on Friction Ridge Analysis, Study and Technology (SWGFAST) (2000 - 2014)

International Association for Identification (I.A.I.) Editor, *Identification News* Publications Standing Committee General & Innovative Techniques Standing Committee (2003-2004)

Pacific Northwest Division of the I.A.I. President (2003-2004) 1<sup>st</sup> Vice President (2002-2003) 2<sup>nd</sup> Vice President (2001-2002) Board Member (1999-2001) Secretary (1998-1999) Science & Practice Committee, Chair (2009-present)

Utah Division of the I.A.I. Vice President (1996)

# <u>Biography</u>

Jon Stimac is both a Certified Latent Print Examiner and a 'Distinguished Member' of the International Association for Identification (IAI), while also serving as Editor for their bimonthly publication, *IDentification News*. He was a fourteen year member of the NIJ sponsored Scientific Working Group on Friction Ridge Analysis (SWGFAST) and has had several research projects pertaining to latent friction ridge development published in the *Journal of Forensic Identification, Fingerprint Whorld* and Divisional IAI newsletters. More recently, he has instructed numerous comparison courses to both latent print and tenprint analysts throughout the United States and from Argentina, Australia, Canada, Puerto Rico and Sweden.