DANICA M. OMMEN

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last updated: Jan 2021

Professional Experience

Assistant Professor, Department of Statistics, Iowa State University — Aug. 2017—present

Education

Ph.D. in Computational Science & Statistics
South Dakota State University — Sept. 2014—Aug. 2017

M.S. in Mathematics with emphasis in Statistics
South Dakota State University — Sept. 2012—Aug. 2014

B.S. in Mathematics
South Dakota State University — Sept. 2008—May 2012

Publications

Danica M. Ommen and Christopher P. Saunders, "Differences between Bayes Factors and Likelihood Ratios for Quantifying the Forensic Value of Evidence," invited chapter in *Statistics in the Public Interest: In Memory of Stephen E. Fienberg*, Editors: Alicia Carriquiry, William Eddy, and Judith Tanur, Springer-Verlag, forthcoming Spring 2021.

Danica M. Ommen and Christopher P. Saunders, "A Problem in Forensic Science Highlighting the Differences between the Bayes Factor and Likelihood Ratio," *Statistical Science*, in press: https://imstat.org/journals-and-publications/statistical-science/statistical-science-future-papers/

Danica M. Ommen, Cami Fuglsby, Michael P. Caligiuri, "Advances Toward Validating Examiner Writership Opinion Based on Handwriting Kinematics," *Forensic Science International*, in press: http://dx.doi.org/10.1016/j.forsciint.2020.110644

JenaMarie Baldaino, Danica M. Ommen, Christopher P. Saunders, Jack Hietpas, and JoAnn Buscaglia (2021), "Characterization and differentiation of aluminum powders used in improvised explosive devices Part 1: Proof-of-concept of the utility of particle micromorphometry," *Journal of Forensic Sciences,* 66:1, pp. 83-95, http://dx.doi.org/10.1111/1556-4029.14564

Cami Fuglsby, Christopher P. Saunders, Danica M. Ommen, Michael P. Caligiuri (2020), "Use of an Automated System to Evaluate Feature Dissimilarites in Handwriting under a Two-Stage Evaluative Process," *Journal of Forensic Sciences,* 65:6, pp. 2080-2086, https://doi.org/10.1111/1556-4029.14547

Danica M. Ommen and Christopher P. Saunders (2018), Building a Unified Statistical Framework for the Forensic Identification of Source Problems, *Law, Probability, and Risk,* 17:2, pp. 179-197, https://doi.org/10.1093/lpr/mgy008

Danica M. Ommen, Christopher P. Saunders, and Cedric Neumann (2017), The Characterization of Monte Carlo Errors for the Quantification of the Value of Forensic Evidence, *Journal of Statistical Computation and Simulation*, 87:8, pp. 1608-1643, DOI: 10.1080/00949655.2017.1280036.

Danica M. Ommen, Christopher P. Saunders, and Cedric Neumann (2016), An Argument Against Presenting Interval Quantifications as a Surrogate for the Value of Evidence, *Science and Justice,* 56, pp. 383-387.

Danica M. Ommen (2017), Approximate Statistical Solutions to the Forensic Identification of Source Problem, *South Dakota State University Theses and Dissertations*, 1710, http://openprairie.sdstate.edu/etd/1710

Teaching

STAT 104 - *Introduction to Statistics* (1 section, 3 cr.)
Fall 2020
Fall 2018
Fall 2017

STAT 544 - *Bayesian Statistics* (1 section, 3 cr.)
Spring 2020

STAT 588 - *Statistical Theory for Research Workers* (1 section, 4 cr.)
Spring 2020
Fall 2019
Spring 2019

STAT 226 - *Introduction to Business Statistics* (1 section, 3 cr.)
Spring 2018

Advising (in progress)

Major Professor

Madeline Johnson – M.S./Ph.D. STAT	Summer 2020 – present
Federico Veneri Guarch – M.S./Ph.D. STAT	Summer 2020 – present

POS Committee member

Miranda Tilton – Ph.D. STAT	Fall 2020 – present
Abby Martin – Ph.D. MATH & COM S	Summer 2020 – present
Charlotte Roiger – M.S. STAT	Spring 2020 – present
Haley Jeppson – Ph.D. STAT	Fall 2019 – present
Katherine Goode – Ph.D. STAT	Spring 2019 – present
Mohammad Shahhosseini – Ph.D. IMSE (with Graduate STAT minor)	Fall 2019 – present
Vahid Azizi – Ph.D. IMSE (with Graduate STAT minor)	Fall 2019 – present

Advising (completed)

Role:	Graduation Date
Co-Major Professor	
Amy Crawford *(with Alicia Carriquiry)* – Ph.D. STAT	Spring 2020
Miranda Tilton *(with Susan Vanderplas)* – M.S. STAT	Spring 2019
Soyoung Park *(with Alicia Carriquiry)* – Ph.D. STAT	Summer 2018
POS Committee member	
Fan Dai – Ph.D. STAT	Summer 2020
Xiaoshan Feng – M.Eng. CCEE (with Graduate STAT Minor)	Spring 2020
Joseph Zemmels – M.S. STAT	Spring 2020
Eryn Blagg – M.S. STAT	Spring 2020
Stephanie Reinders – Ph.D. MATH & ECpE (with Graduate STAT Minor)	Spring 2020
Geetika Singh – M.S. ECpE (with Graduate STAT Minor)	Spring 2020
Martin Silerio Vazquez – M.S. STAT	Spring 2020
Mentoring	
Jessie Hendricks (undergraduate student in Mathematics) Undergraduate Senior Seminar Project on the “Use of Approximate Bayesian Computational Methods in Forensic Science” Funded by South Dakota State University Scholarly Excellence Fund	Summer 2016

Grants

Accounting for Covariates in Forensic Error Rate Assessment and Evidence Interpretation
National Institute of Justice, Award # 2019-DU-BX-0011
Dr. Liansheng (Larry) Tang, GMU/UCF – Principal Investigator
Dr. Danica Ommen, ISU – Principal Investigator on sub-award to ISU
Total Funding: $495,056 (2-year award)
Funding to ISU: $ 47,647
Project Dates: Sept. 2020 – Apr. 2022

Statistical Infrastructure for the Use of Error Rate Studies in the Interpretation of Forensic Evidence
National Institute of Justice, Award # 2018-DU-BX-0228
Dr. Liansheng (Larry) Tang, GMU/UCF – Joint-Principal Investigator
Dr. Danica Ommen, ISU – Joint-Principal Investigator
Total Funding: $197,669 (1-year award)
Funding to ISU: $ 60,581
Project Dates: Jan. 2019 – Sept. 2019, Sept. 2020 – May 2021

Kinematic Validation of FDE Determinations about Writership of Questioned Handprinting and Handwriting
National Institute of Justice, Award # 2017-DN-BX-0148
Dr. Michael L. Caligiuri, UCSD – Principal Investigator
Dr. Danica Ommen, ISU – Principal Investigator on sub-award to ISU
Total Funding: $464,910 (2-year award)
Funding to ISU: $ 94,898
Project Dates: Jan. 2018 – Dec. 2019

Research Support

Center for Statistics and Applications in Forensic Evidence (CSAFE)
National Institute of Standard and Technology (NIST) Center of Excellence
Cooperative Agreement #70NANB15H176 & #70NANB20H019
Alicia Carriquiry, Director
Aug. 2017—Present

CSAFE (non-competitive) Sub-awards with Dr. Danica Ommen, ISU – Principal Investigator
Total Funding: $81,527 (Year 1)
1. *Machine learning methods for dependent score-data resulting from forensic evidence comparisons*
2. *Validation and reliability of score-based likelihood ratios for forensic evidence*
3. *Handwriting Evaluation (co-PI with Alicia Carriquiry)*

Funded Graduate Research Assistants

Center for Statistics and Applications in Forensic Evidence

Andrew Lim (funded by CSAFE Project #3 above)	Spring 2021 – present
Madeline Johnson (funded by CSAFE Project #3 above)	Summer 2020 – present
Federico Veneri Guarch (funded by CSAFE Project #1 above)	Summer 2020 – present
Nathaniel Garton (as research advisor only, funded by Alicia Carriquiry)	Fall 2019 – Spring 2020

Awards & Honors

Stephen E. Fienberg CSAFE Young Investigator Award	Sept. 2017
Stephen E. Fienberg CSAFE Young Investigator Travel Award - $1500	June 2017

Professional Service

Committee Work:

American Statistical Association Advisory Committee on Forensic Science — Jan. 2021 – Present
Committee member

NIST Organization of Scientific Area Committees for Forensic Science — Oct. 2019 – Present
Gunshot Residue Subcommittee Member & Statistical Task Group Member

Federal Bureau of Investigation Laboratory Division
Counterterrorism and Forensic Science Research Unit — May 2015 – Present
Provide statistical support to various research projects

Expert Working Group on Human Factors for Handwriting Examination
National Institute of Standards and Technology/National Institute of Justice — June 2015 – Present
Provide statistical support to the group as a volunteer contributor

Conference Organization:

The 11th International Conference on Forensic Inference and Statistics — March 2019 – Present
Scientific Committee member

South Dakota State University Data Science Symposium 2020 — Nov. 2019 – Feb. 2020
Scientific Committee member & Chair of invited speaker session

Session Chair — Sept. 2017
Statistical Foundations – Score-based Likelihood Ratios Session
International Conference on Forensic Inference and Statistics;
South Dakota State University; Minneapolis, MN

Facilitated the Handwriting Modality Panel discussions — Jan. 2015
Symposium on Improving Biometric and Forensic Technology: The Future of Research Datasets
National Institute of Standards and Technology; Gaithersburg, MD

Peer Review:

Forensic Chemistry

Journal of the American Statistical Association

Bayesian Analysis

Law, Probability, and Risk

Journal of the American Society of Questioned Document Examiners
Editorial Review Board member (Jan. 2019 – Present)

Journal of Forensic Sciences

Memberships to Academic Societies

American Statistical Association — Jan. 2018—Present

International Society for Bayesian Analysis — Jan. 2016—Present

Institute of Mathematical Statistics — Jan. 2014—Present

Golden Key National Honour Society — Sept. 2010—Present

Invited Presentations & Panels

"A Method of Forensic Evidence Interpretation Using Error Rates"
Danica Ommen, Larry Tang, and Christopher Saunders
ICSA 2020 Applied Statistics Symposium; International Chinese Statistical Association; Virtual Conference — Dec. 2020

"A Method of Forensic Evidence Interpretation Using Error Rates"
Danica Ommen, Larry Tang, and Christopher Saunders
Joint Statistical Meetings 2020; American Statistical Association; Virtual Conference — Aug. 2020

"Which Forensic Likelihood Ratio Approach is Better?"
Danica Ommen and Peter Vergeer
10th International Workshop on Simulation and Statistics; Universitat Salzburg; Salzburg, Austria — Sept. 2019

"Which statistical paradigm should I use for forensic evidence interpretation?"
Danica Ommen and Christopher Saunders
ICSA 2019 Applied Statistics Symposium; International Chinese Statistical Association; Rayleigh, NC — June 2019

"Different Paradigms of Interpretation for Forensic Value of Evidence Quantification"
Danica Ommen, Christopher Saunders, Reinoud Stoel, and Peter Vergeer
University of North Carolina at Chapel Hill, Department of Statistics and Operations Research, STOR Colloquium; Chapel Hill, NC — Nov. 2017

"Research Overview: Approximate Solutions to the Forensic Identification of Source Problems"
Danica Ommen
Iowa State University Department of Statistics and Center for Statistics and Applications in Forensic Evidence Joint-Seminar; Ames, IA (invited interview seminar) — Apr. 2017

"Current Research Overview: Strategies for Characterizing Various Aspects of Uncertainty in Forensic Identification of Source Problems"
Danica Ommen
University of Central Florida National Center of Forensic Science and Department of Statistics Joint-Seminar; Orlando, FL (invited interview seminar) — Apr. 2017

"A South Dakotan's View on the Difference between the Bayes Factor and the Likelihood Ratio"
Danica Ommen
Netherlands Forensic Institute; The Hague, The Netherlands — Feb. 2017

"Research Overview: Approximations to the Value of Evidence for Forensic Identification of Source Problems"
Danica Ommen
South Dakota State University Department of Mathematics and Statistics Seminar; Brookings, SD (invited interview seminar) — Jan. 2017

"New Approaches to the Quantification of Trace Evidence for Source Identification"
Danica Ommen, Christopher Saunders, and JoAnn Buscaglia
Technical Colloquium: Quantifying the Weight of Forensic Evidence
International Biometric Performance Testing Conference 2016;
National Institute of Standards and Technology; Gaithersburg, MA — May 2016

Panel on the Use of Interval Quantifications for the Value of Forensic Evidence
Danica Ommen (panel presenter and discussant)
Technical Colloquium: Quantifying the Weight of Forensic Evidence
International Biometric Performance Testing Conference 2016;
National Institute of Standards and Technology; Gaithersburg, MA — May 2016

"Recent Developments in Approximate Solutions to Forensic Source Identification Problems"
Danica Ommen, Chris Saunders, and JoAnn Buscaglia
Algorithms for Threat Detection Program Review; July 2015
Defense Threat Reduction Agency and the National Science Foundation
Arlington, VA

Contributed Presentations

"Pairwise comparison scores for handwritten questioned documents"
Danica Ommen, Cami Fuglsby, Christopher Saunders, Michael Caligiuri,
Linton Mohammed, and JoAnn Buscaglia Feb. 2019
American Academy of Forensic Science Annual Scientific Meeting; Baltimore, MD

"A Solution to the Forensic Identification of Source Problems using Fiducial Inference"
Danica Ommen, Jan Hannig, and Jonathan Williams Aug. 2018
Joint Statistical Meetings; American Statistical Association; Vancouver, BC, Canada

"How strong is the evidence? And how can you tell?"
Danica Ommen and Marjan Sjerps Jun. 2018
2018 ISBA World Meeting, International Society for Bayesian Analysis; Edinburgh, UK

"To differentiate or not to differentiate…"
Danica Ommen, Larry Tang, and Cami Fuglsby
Symposium on Error Rates for Evidence Interpretation, Center for Statistical Applications Jan. 2018
in Forensic Evidence; Arlington, VA

"Recent Developments on a Distributional Quantification for the Likelihood Ratio"
Danica Ommen, Cedric Neumann, and Christopher Saunders
International Conference on Forensic Inference and Statistics; Sept. 2017
South Dakota State University; Minneapolis, MN

"Different Paradigms of Interpretation for Forensic Value of Evidence Quantification"
Danica Ommen, Christopher Saunders, Reinoud Stoel, and Peter Vergeer
Joint Statistical Meetings; American Statistical Association; Aug. 2017
Baltimore, MD (Contributed Presentation)

"Information Criteria Approximations to the Value of Evidence for Forensic Identification of Source Problems"
Danica Ommen and Christopher Saunders Aug. 2016
Joint Statistical Meetings; American Statistical Association;
Chicago, IL (Contributed Presentation)

"Convergence of Different Computationally Efficient Approximations of the Weight of the Forensic Evidence"
Danica Ommen, Doug Armstrong, Cedric Neumann, and Chris Saunders Sept. 2015
European Academy of Forensic Sciences Conference;
European Network of Forensic Science Institutes; Prague, Czech Republic

"Convergence of Different Computationally Efficient Approximations of the Weight of the Forensic Evidence"
Danica Ommen, Chris Saunders, and Cedric Neumann Aug. 2015
Joint Statistical Meetings; American Statistical Association; Seattle, WA

"The Common Source Value of Evidence in the Presence of Uncertainty about the Alternative Source Population"
Danica Ommen Oct. 2014
Computational Science and Statistics Seminar; South Dakota State University
Brookings, SD

Poster Presentations

"Statistical Infrastructure for the Use of Error Rate Studies in the Interpretation of Forensic Evidence"
Danica Ommen, Larry Tang, Cami Fuglsby, Christopher Saunders, Susan Vanderplas
CSAFE All-Hands Meeting; Ames, IA
May 2019

"Kinematic Validation of FDE Determinations about Writership for Questioned Handprinting and Handwriting"
Danica Ommen, Michael Caligiuri, Cami Fuglsby, Christopher Saunders, Linton Mohammed
CSAFE All-Hands Meeting; Ames, IA
May 2019

"Pairwise Scores for Designing Handwritten Document Comparisons"
Danica Ommen, Cami Fuglsby, Christopher Saunders, Michael Caligiuri, Linton Mohammed, and JoAnn Buscaglia
Forensics@NIST 2018 Conference; Gaithersburg, MD
Nov. 2018

"Statistical Characterization of Commercial and Home-made Aluminum in Explosives Using Automated Particle Micromorphometry"
JenaMarie Baldaino, Danica Ommen*, Cami Fuglsby, Christopher Saunder, Jack Heitpas, and JoAnn Buscaglia*
American Academy of Forensic Science Annual Scientific Meeting; Seattle, WA
(*co-presenters)
Feb. 2018

"Statistical Characterization of Commercial and Home-made Aluminum in Explosives Using Automated Particle Micromorphometry"
JenaMarie Baldaino*, Danica Ommen*, Cami Fuglsby, Christopher Saunder, Jack Heitpas, and JoAnn Buscaglia
Impression, Pattern, and Trace Evidence Symposium; Forensic Technology Center of Excellence; Arlington, VA
(*co-presenters)
Jan. 2018

"Information Criteria Approximations to the Value of Evidence for Forensic Identification of Source Problems"
Danica Ommen and Christopher Saunders
International Society for Bayesian Analysis 2016 World Meeting;
Cagliari, Sardinia, Italy
June 2016

"The Interpretation and Presentation of Trace Element Analysis of High Purity Copper Evidence"
Chris Saunders, Danica Ommen*, Joshua Dettman, and JoAnn Buscaglia
European Academy of Forensic Sciences Conference;
European Network of Forensic Science Institutes;
Prague, Czech Republic
Sept. 2015

"Computational and Statistical Aspects of the Forensic Identification Source Problem"
Danica Ommen, Chris Saunders, and Cedric Neumann
Joint Statistical Meetings; American Statistical Association;
Boston, MA.
Aug. 2014

Coauthored Presentations (* indicates presenter)

"An Evaluation of Score-Based Likelihood Ratios (SLRs) for Glass Data"
Federico Veneri* and Danica Ommen
American Academy of Forensic Science Annual Scientific Meeting; held virtually (Poster)
Feb. 2021

"Quantitative Support for Forensic Document Examination in an Open Set using Random Forests"
Madeline Q. Johnson*, Danica Ommen, and Alicia L. Carriquiry
American Academy of Forensic Science Annual Scientific Meeting; held virtually (Poster)
Feb. 2021

"Relationships between Handwriting Slant and Demographics"
Anyesha Ray*, Alicia L. Carriquiry, and Danica Ommen — Feb. 2021
American Academy of Forensic Science Annual Scientific Meeting; held virtually (Poster)

"Statistical Analysis of Handwriting: Probabilistic Outcomes for Closed-Set Writer Identification"
Amy Crawford*, Alicia Carriquiry, Danica Ommen — Feb. 2020
American Academy of Forensic Science Annual Scientific Meeting; Anaheim, CA

"The Interaction of Writing Profiles and Automated Scoring Rules"
Cami Fuglsby*, Michael Caligiuri, Danica Ommen, Chris Saunders, JoAnn Buscaglia — Feb. 2020
American Academy of Forensic Science Annual Scientific Meeting; Anaheim, CA

"Further development of scoring rules for sample comparisons using automated particle micromorphometry of aluminum (Al) powders"
Kayla Moquin*, Cami Fuglsby*, JenaMarie Baldaino, Danica Ommen, Christopher Saunders, Jack Hieptas, JoAnn Buscaglia — Feb. 2020
American Academy of Forensic Science Annual Scientific Meeting; Anaheim, CA (Poster)

"The Confidence Interval for the Likelihood Ratio with Application to Biometrics"
Larry Tang*, Danica Ommen, Elham Tabassi, Xiaochen Zhu — Sept. 2019
10th International Workshop on Simulation and Statistics;
Universitat Salzburg; Salzburg, Austria (Invited Presentation)

"The Incorporation of U-processes for Bayesian Approaches to Pattern Recognition with Application to Forensic Source Identification"
Cami Fuglsby, Chris Saunders*, Danica Ommen, JoAnn Buscaglia — Sept. 2019
10th International Workshop on Simulation and Statistics;
Universitat Salzburg; Salzburg, Austria (Invited Presentation)

"A Class of Score Functions for the Analysis of Kinematic Handwriting Data"
Cami Fuglsby*, Christopher Saunders, Danica Ommen, Michael Caligiuri — Sept. 2019
10th International Workshop on Simulation and Statistics;
Universitat Salzburg; Salzburg, Austria (Poster)

"A Bayesian Hierarchical Model for Forensic Writer Identification"
Amy Crawford*, Alicia Carriquiry, Danica Ommen — Sept. 2019
10th International Workshop on Simulation and Statistics;
Universitat Salzburg; Salzburg, Austria (Poster)

"The Development of Score Functions for the Analysis of Kinematic Handwriting Data"
Cami Fuglsby*, Chris Saunders, Danica Ommen, Michael Caligiuri — Sept. 2019
Department of Mathematics & Statistics Seminar;
South Dakota State University; Brookings, SD

"Statistical Analysis of Handwriting for Writer Identification"
Amy Crawford*, Nick Berry, Alicia Carriquiry, Danica Ommen — Aug. 2019
American Society of Questioned Document Examiners (ASQDE) Annual Meeting
Cary, NC

"A Bayesian Hierarchical Mixture Model with Applications in Forensic Handwriting Analysis"
Amy Crawford*, Nick Berry, Alicia Carriquiry, Danica Ommen — July 2019
Joint Statistical Meetings, American Statistical Association; Denver, CO

"Forensic Analysis of Handwriting"
Alicia Carriquiry*, Amy Crawford, Nick Berry, Danica Ommen — July 2019
VI Latin American Meeting of Bayesian Statistics (VI COBAL); Lima, Peru

"New Developments in the Interpretation of Pairwise Comparison Procedures for a Class of Forensic Applications Related to Improvised Explosive Devices"
Cami Fuglsby*, Christopher P. Saunders, Danica Ommen, JenaMarie Baldaino, JoAnn Buscaglia, Jack Hietpas — Feb. 2019
University of Kentucky Department of Statistics Seminar; Lexington, KY

"On the Development of Score Rules for the Pairwise Sample Comparison of Particle Micromorphometry of Aluminum (Al) Powders"
Cami Fuglsby, Danica Ommen, JenaMarie Baldaino, Jack Hietpas, Christopher Saunders*, and JoAnn Buscaglia*
American Academy of Forensic Science Annual Scientific Meeting; Baltimore, MD — Feb. 2019

"Exploratory Analysis of Handwriting Features: Investigating Numeric Measurements of Writing"
Amy Crawford*, Nick Berry, Alicia Carriquiry, Danica Ommen
American Academy of Forensic Science Annual Scientific Meeting; Baltimore, MD — Feb. 2019

"Characterization of commercial and home-made aluminum powders via micromorphomertic analysis"
JenaMarie Baldaino, Danica Ommen, Cami Fuglsby, Christopher Saunders, Jack Hietpas, and JoAnn Buscaglia*
European Academy of Forensic Sciences Conference;
European Network of Forensic Science Institutes; Lyon, France — Aug. 2018

"FDE Conclusion Scales: Rev. Bayes or Prof. Kirk? (Part 1)"
Linton Mohammed*, Cami Fuglsby, Christopher Saunders, Danica Ommen, Michael Caligiuri, and JoAnn Buscaglia
Annual General Meeting of the American Society of Questioned Document Examiners;
ASQDE and Southwestern Association of Forensic Document Examiners; Park City, UT — Aug. 2018

"FDE Conclusion Scales: Rev. Bayes or Prof. Kirk? (Part 2)"
Linton Mohammed, Cami Fuglsby*, Christopher Saunders, Danica Ommen, Michael Caligiuri, and JoAnn Buscaglia
Annual General Meeting of the American Society of Questioned Document Examiners;
ASQDE and Southwestern Association of Forensic Document Examiners; Park City, UT — Aug. 2018

"A Modified Two-Stage Approach to the Interpretation of Forensic Evidence"
Cami Fuglsby*, Christopher Saunders, Danica Ommen, and JoAnn Buscaglia
Joint Statistical Meetings, American Statistical Association
Vancouver, BC, Canada — Aug. 2018

"On the use of Bayesian p-Values for Forensic Identification of Source Problems"
Cami Fuglsby*, Christopher Saunders, Danica Ommen, and JoAnn Buscaglia
2018 ISBA World Meeting, International Society for Bayesian Analysis
Edinburgh, UK — Jun. 2018

"Several approaches to the LR: which is better?"
Peter Vergeer* and Danica Ommen
International Conference on Forensic Inference and Statistics;
South Dakota State University; Minneapolis, MN — Sept. 2017

"Approximate Bayesian Computation in Forensic Science"
Jessie Hendricks*, Cedric Neumann, Christopher Saunders, and Danica Ommen
International Conference on Forensic Inference and Statistics;
South Dakota State University; Minneapolis, MN — Sept. 2017

"Characterization of Aluminum Powders in Explosives Utilizing Particle Micromorphometry"
JenaMarie Baldaino*, Danica Ommen, Cami Fuglsby, Christopher Saunders, Jack Hietpas, and JoAnn Buscaglia
International Conference on Forensic Inference and Statistics;
South Dakota State University; Minneapolis, MN (Poster) — Sept. 2017

"On the Different Classes of Forensic Identification of Source Problems"
Danica Ommen, Christopher Saunders*, and Cedric Neumann,
Joint Statistical Meetings; American Statistical Association;
Chicago, IL — Aug. 2016

"Characterization of Aluminum (Al) Powders in Explosives Utilizing Particle Micromorphometry"
JenaMarie Baldaino*, Danica Ommen, Joshua Dettman, Raleigh Parrott II, Jack Hietpas, and JoAnn Buscaglia
American Academy of Forensic Sciences Annual Scientific Meeting; Las Vegas, NV — Feb. 2016

"Convergence of Score-based Likelihood Ratios in Forensic Science"
Madeline Ausdemore, Jessie Hendricks, Damon Bayer, Doug Armstrong, Danica Ommen, Cedric Neumann*, Christopher Saunders, and Jeannette Leegwater
International Fingerprint Research Group; Patiala, India — Oct. 2015

"Automated micromorphometry for the characterization of aluminum powders in explosives"
Jack Hietpas*, Joshua Dettman, Raleigh Parrott II, JoAnn Buscaglia, JenaMarie Baldaino, and Danica Ommen
European Academy of Forensic Sciences Conference;
European Network of Forensic Science Institutes; Prague, Czech Republic — Sept. 2015

"Derivation of Score-based LRs and Evaluation of their Approximation of the Forensic Value of Evidence"
Doug Armstrong*, Jeannette Leegwater, Danica Ommen, Wei Huang, Cedric Neumann, and Christopher Saunders
European Academy of Forensic Sciences Conference;
European Network of Forensic Science Institutes; Prague, Czech Republic — Sept. 2015

"Characterization of Aluminum Powders in Explosives Utilizing Particle Micromorphometry"
JenaMarie Baldaino*, Danica Ommen, Christopher Saunders, Joshua Dettman, Raleigh Parrott II, Jack Hietpas, and JoAnn Buscaglia
Impression Pattern and Trace Evidence Symposium; National Institute of Justice;
San Antonio, TX (Poster) — Aug. 2015

"Developing Appropriate Score-based LRs; the Example of Fingerprints"
Doug Armstrong*, Cedric Neumann, Chris Saunders, Danica Ommen, Austin O'Brien
International Conference on Forensic Inference and Statistics;
Netherlands Forensic Institute; Leiden, Netherlands (Contributed Poster) — Aug. 2014

"Computational and Statistical Aspects of the Forensic Identification of Source Problem: The Specific Source Problem from a Forensic Point of View"
Danica Ommen, Chris Saunders*, and Cedric Neumann
International Conference on Forensic Inference and Statistics;
Netherlands Forensic Institute; Leiden, Netherlands (Contributed Presentation) — Aug. 2014

"Computational and Statistical Aspects of the Forensic Identification of Source Problem: Asymptotic Properties of the Estimated Bayes Factor"
Danica Ommen, Chris Saunders*, and Cedric Neumann
University of Salzburg; Salzburg, Austria (Invited Presentation) — Aug. 2014

"Computational and Statistical Aspects of the Forensic Identification of Source Problem: A General Overview" (Invited Presentation)
Danica Ommen, Chris Saunders*, and Cedric Neumann
Algorithms for Threat Detection Program Review
Defense Threat Reduction Agency and the National Science Foundation
Boulder, CO — Mar. 2014