

# *Speckin Forensics, LLC*

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SEROLOGIST  
DNA ANALYST & CONSULTANT  
CRIME SCENE RECONSTRUCTION

## **JULIE A. HOWENSTINE** Forensic Biology/DNA Expert

### **EDUCATION:**

Oakland University, MI	No Degree	1977-78	Pre-Med.
Michigan State University	B.S., M.S.	1978-81	Microbiology, Veterinary Science
Michigan State University	D.V.M.	1980-84	Veterinary Medicine

### **PROFESSIONAL EXPERIENCE:**

- 1984-1985:** Doctor of Veterinary medicine in clinical practice at Miller Animal Clinic and Waverly Animal Clinic, Lansing, MI. Practiced veterinary medicine and surgery in mixed animal clinics including clinical lab analyses using microscopy, spectrophotometry, and radiology.
- 1985-1989:** Laboratory Scientist, Serology Unit, Michigan State Police, East Lansing Laboratory. Supervisors Curtis E. Fluker and Charles E. Barna. Trained and participated in crime scene investigation, documentation and evidence collection, serological evidence analysis, report writing, expert witness testimony, training of MSP personnel and community interest groups.
- 1989-1995:** Laboratory Scientist, DNA Unit, Michigan State Police, East Lansing Laboratory. Supervisor Charles E. Barna. Installed and calibrated equipment and instrumentation necessary for DNA RFLP typing. Designed and executed multiple validation studies on DNA typing methodology using Restriction Fragment Length Polymorphism (RFLP) analysis of VNTRs. Analyzed numerous known whole blood samples for purpose of creating population databases. Accepted and performed DNA RFLP typing analysis on forensic samples. Report writing and expert testimony.
- 1995-1997:** Laboratory Scientist, Serology Unit, Michigan State Police, East Lansing Laboratory. Supervisor Marie Bard-Curtis. Accept evidence and perform serological analyses on

evidentiary samples. Crime scene investigation. Training of MSP and other personnel.  
Report writing and expert testimony.

**1998-2010:** Forensic Scientist, Biology Unit, Michigan State Police, East Lansing Laboratory.  
Supervisors Charles Barna, Jeff Nye (since 2004) and Nibedita Mahanti (since 2008). Job  
description as above including both DNA (PCR STR) and Serology functions.

**2011-present:** Forensic Biology/DNA expert with Speckin Forensics, East Lansing, MI

**2013-present:** Quality Manager- Semen and Sperm Detection, Inc., East Lansing, MI

**COURTROOM EXPERIENCE:** General Serology- approximately 67 opportunities.

Hair Comparison- approximately 5 opportunities.

DNA Analysis- approximately 122 opportunities.

**PROFICIENCY TESTING** (all completed successfully:

**1986-2020:** CTS Biological Fluids test taken annually.

**1991-2020:** CTS DNA analysis test taken annually.

**2014-present:** CTS DNA Interpretation (autosomal & Y-STR) test taken annually.

**PROFESSIONAL AFFILIATIONS:**

Member American Academy of Forensic Sciences (AAFS),  
1990-2002, 2007-present.

Member Midwestern Association of Forensic Scientists (MAFS),  
1986-2006.

Molecular Biology Diplomate of the American Board of Criminalistics (ABC),  
1994-2009.

**PRESENTATIONS AT SCIENTIFIC MEETINGS:**

**OCT 1992** "Effects of Anticoagulants on DNA ", MAFS,  
Grand Rapids, MI

**OCT 1995** "Chemiluminescent Detection of RFLP Analysis",  
MAFS, Paducah, KY

**SEPT 1999** "Sexual Assault Evidence Collection", Sexual Assault Systems Response Task  
Force Meeting, Lansing, MI

**JUNE 2005** "Evidence Collection & Preservation for CSC Exams", SANE Annual Conference,  
Holland, MI

## **PUBLICATIONS (CONTRIBUTOR):**

**1993**                    VNTR POPULATION DATA: A WORLDWIDE STUDY, Published by the U.S. Department of Justice.

## **CONTINUING EDUCATION:**

**NOV 1985**            Advanced Hair and Fiber Comparison, Michigan State Police, Lansing, MI

**MAR 1986**            Crime Scene Search and Collection of Evidence, Michigan State Police, Houghton, MI

**MAY 1986**            Expert Witness Testimony Course, Michigan State Police Training Academy, Lansing, MI

**JULY 1986**           Forensic Microscopy, McCrone Institute, Chicago, Ill

**AUG 1986**            Law Enforcement Photography, Cadillac, MI

**OCT 1986**            Independent Computing, Automation Resource Corporation, Lansing, MI

**MAR 1987**            Human Immunoglobulin Allotyping, Allotype Genetic Testing, Inc., St. Louis, MO

**MAR 1987**            Advanced Electrophoresis, The Serological Research Institute, Grand Rapids, MI

**OCT 1987**            Mathematics in Serology, MAFS Workshop, Mackinaw, MI

**NOV 1987**            Isoelectric Focusing Workshop, FBI, Grand Rapids, MI

**MAR 1988**            Instructor Development, Michigan State Police, Lansing, MI

**MAY 1988**            Introduction to Hairs and Fibers, Federal Bureau of Investigation, Quantico, VA

**JULY 1988**           IEF/DNA Workshop, Memorial Blood Center of Minneapolis, in Grand Rapids, MI

**NOV 1988**            Basic Techniques in Recombinant Nucleic Acid, Michigan State University, East Lansing, MI

**JAN 1989**            Forensic Application of DNA Typing Methods, FBI, Quantico, VA

**JAN 1989**            Laboratory Application of DNA Typing Methods, FBI, Quantico, VA

**MAR 1989** Polymerase Chain Reaction Lectures, Michigan Dept. of Public Health, Lansing, MI

**MAY 1989** Forensic RFLP Analysis, Michigan State University, East Lansing, MI

**MAY 1992** Advanced Aspects of Forensic DNA Analysis, FBI, Quantico, VA.

**AUG 1992** AMPLITYPE HLA DQalpha Forensic DNA Amplification and Typing The Perkin-Elmer Corp., Alameda, CA

**OCT 1995** Introduction to Mitochondrial DNA Workshop, MAFS Mtg. Paducah, KY

**MAY 1998** Florida DNA Training-STRs-The Next Generation

**JUNE 1999** DNA Statistics Workshop, MSP FSD, Lansing, MI

**OCT 1999** Bloodstain Pattern Analysis Workshop, MSP FSD, Lansing, MI

**APR 2000** Advanced Bloodstain Pattern Analysis Workshop, KBI, Lansing, MI

**OCT 2000** Casework Guidelines & Complex Mixture Interpretation Workshop, Symposium on Human Identification, Biloxi MS

**SEPT 2003** Basic Principles in Statistics, Symposium on Human Identification, Phoenix, AZ

**APR 2004** ABI Quantifiler™, Prism<sup>R</sup> 3100, Identifiler™ & GeneMapper™ Workshop, MSP Lab, Lansing, MI

**SEPT 2004** Supervisor Development, MSP Training Academy, Lansing, MI

**JUNE 2005** ABI Quantifiler™ Workshop, MSP Lab, Lansing, MI

**SEPT 2005** DNA Statistics Workshop, Symposium on Human Identification, Grapevine, TX

**FEB 2006** Advanced Topics in STR DNA Analysis Workshop, AAFS Seattle, WA

**FEB 2008** Review of DNA Data Accepted at NDIS, On-line with DOJ

**MAR 2008** A Comparison of STR Kits, Promega Corp., Madison, WI

**MAY 2008** Advanced DNA Technical Workshop, Bode Tech., Captiva, FL

**DEC 2008** Population Statistics and Forensic DNA Analysis, MSP Lab, Lansing

**JAN 2009** Use of Plexor HY & AB 7500 Real-Time PCR System, MSP Lab, Lansing

**JAN 2009** Review of DNA Data Accepted at NDIS, On-line with DOJ

**JUNE 2009** 3130 Genetic Analyzer Training, MSP Lab, Lansing

**JULY 2009** Forensic Y-STR Analysis, Sorenson Forensics, MSP Lab, Lansing

**AUG 2009** DNA Audits, Maxwell 16, Powerplex 16, Y-STRs & Hamilton Robotics, MSP Lab, Lansing

**JAN 2010** Review of DNA Data Accepted at NDIS, On-line with DOJ

**FEB 2010** Y-STR Analysis, NFSTC, Schoolcraft College, Livonia, MI

**OCT 2013** DNA Mixture Interpretation Theories Workshop, MAFS Dayton, OH

**OCT 2014** DNA Mixture Interpretation: A Casework Perspective, MAFS St Paul, MN

**OCT 2014** How TrueAllele<sup>R</sup> Works, Cybergeneics Webinar.

**OCT 2016** Y-STR Analysis and Interpreting Y-STR Evidence, MAFS, Branson, MO

**DEC 2016** ASCLD DNA Mixtures Webinar Series: Technical Overview, FTCOE

**JAN 2018** From Training to Trial: A Reflection on Nearly Three Years of Probabilistic Genotyping, Promega Webinar

**SEPT 2018** Cutting-Edge Research in Forensic DNA Analysis from Early-Career Scientists FTCOE Webinar

**SEPT 2018** Systems Thinking and DNA Mixtures Workshop, International Symposium on Human Identification, Phoenix, AZ

**MAY 2019** FTCOE/NIJ webinar series on Probabilistic Genotyping

**SEPT 2020** Arguing the Case for DNA Evidence Based on PG Workshop, International Symposium on Human Identification, Virtual Meeting

**JULY 2021** DNA Mixtures: A NIST Scientific Foundation Review, NIST Webinar

**SEPT 2021** Lawyer Proof Your Lab, International Symposium on Human Identification, Virtual Meeting

**DEC 2022** Interlab Comparison of SpermX and Conventional Differential Extractions, FTCOE webinar series

**FEB 2023** NIJ R&D Symposium, Virtual Meeting

**OCT 2023** AAFS Webinar, Cognitive Bias in Forensic Decisions

**FEB 2024** NIJ Research & Development Symposium – Virtual Meeting

## **INTERNATIONAL SYMPOSIUMS:**

- JUNE 1989** Forensic Aspects of DNA Analysis, FBI Academy, Quantico, VA
- NOV 1989** First International Symposium on Human Identification, Promega Corporation, Madison, WI
- MAR 1991** The Application of DNA Technology to Forensics, University of California, Riverside, CA
- MAY 1992** Third International Symposium on Human Identification, Promega Corporation, Phoenix, AZ
- SEPT 1993** Fourth International Symposium on Human Identification, Promega Corporation, Phoenix, AZ
- OCT 2000** Eleventh International Symposium on Human Identification, Promega Corporation, Biloxi, MS
- OCT 2003** Thirteenth International Symposium on Human Identification, Promega Corporation, Phoenix, AZ
- SEPT 2005** Fifteenth International Symposium on Human Identification, Promega Corporation, Grapevine, TX
- MAY 2008** Bode Advanced DNA Technical Workshop-East, Captiva, FL
- JULY 2010** Green Mountain DNA Conference, VT
- SEPT 2018** Twenty-ninth International Symposium on Human Identification, Promega Corporation, Phoenix, AZ
- JULY 2019** Green Mountain DNA Conference, VT
- SEPT 2020** Thirty-first International Symposium on Human Identification, Promega Corporation, Virtual Meeting
- SPET 2021** Thirty-second International Symposium on Human Identification, Promega Corporation, Virtual Meeting

## **PROFESSIONAL ASSOCIATION MEETINGS:**

- 1987 FALL** MAFS, Mackinaw, MI
- 1989 FEB** American Academy of Forensic Science, Las Vegas, NV
- 1990 FEB** American Academy of Forensic Science, Cincinnati, OH
- 1992 FEB** American Academy of Forensic Science, New Orleans, LA

<b>1994 OCT</b>	MAFS, Cleveland, OH - DNA Court Testimony workshop
<b>1995 OCT</b>	MAFS, Paducah, KY
<b>1996 OCT</b>	MAFS, Dayton, OH
<b>1998 OCT</b>	MAFS, Ann Arbor, MI
<b>2006 FEB</b>	American Academy of Forensic Science, Seattle, WA
<b>2009 FEB</b>	American Academy of Forensic Science, Denver, CO
<b>2011 FEB</b>	American Academy of Forensic Science, Chicago, IL
<b>2012 FEB</b>	American Academy of Forensic Science, Atlanta, GA
<b>2013 OCT</b>	MAFS, Dayton, OH
<b>2014 OCT</b>	MAFS, Saint Paul, MN
<b>2015 FEB</b>	American Academy of Forensic Science, Orlando, FL
<b>2016 OCT</b>	MAFS, Branson, MO
<b>2017 FEB</b>	American Academy of Forensic Science, New Orleans, LA