

Professional Vita
Jessica E. Bickham

Formal Education

Master of Arts in Molecular, Cellular, and Developmental Biology; University of California, Santa Barbara (UCSB), Santa Barbara, CA, 2003. *Thesis*: "Development of an Animal Model to Study Urinary Tract Infections, and the Identification of Factors That May Play Roles in *Escherichia coli* Intestinal Colonization"

Bachelor of Science in Cell & Structural Biology; University of Illinois at Urbana-Champaign, Urbana-Champaign, IL, 1999

Professional Meetings, Workshops, and Specialized Courses

- National Institute of Justice Forensic Technology Center of Excellence (NIJ FTCE): Forensic Genealogy and its Application in Solving Cold Cases; September 2020
- NIJ FTCE: Arguing the Case for DNA Evidence Based on Probabilistic Genotyping; September 2020
- NIJ FTCE: Probabilistic Genotyping of Evidentiary DNA Typing Results – An Online Workshop Series; May-July 2019
 - Probabilistic Genotyping Software and Output
 - Validation of Probabilistic Genotyping Systems for Casework Usage
 - Uncertainty and Limitations of Probabilistic Genotyping Systems
 - Probabilistic Genotyping Summation and Special Topics
- Midwestern Association of Forensic Scientists (MAFS): Analyzing Challenging and Familial Mixtures with TrueAllele Casework System; 18 September 2018
- MAFS: Advanced Y-STR Interpretation; 17 September 2018
- Mid-Atlantic Association of Forensic Scientists (MAAFS): Beyond Nuclear DNA: Mito/Y-STRs/SNPs Implementation in Casework Laboratories, Ethics in Forensic Science; 24 May 2017
- ThermoFisher Applied Biosystems Webinar: "Policy and Legislative Considerations for Next Generation Sequencing (NGS) in the Forensic Laboratory"; 16 November 2016
- MAFS: Y-STR analysis & typing and Interpreting Y-STR Evidence; 3 October 2016

- National Institute of Standards and Technology (NIST) DNA Analyst Webinar Series: Validation Concepts and Resources Part 1; 6 August 2014
- NIST DNA Analyst Webinar Series: Probabilistic Genotyping and Software Programs Part 1; 28 May 2014
- California Association of Criminalists (CAC): DNA Workshop, Fall Seminar; 2013
- CAC: DNA Workshop, Spring Seminar; 2012
- CAC: DNA Workshop, Fall Seminar; 2011
- CAC: Advanced DNA Mixture Interpretation Workshop; December 2010
- CAC: DNA Workshop and General Meeting, Spring Seminar; 2010
- Forensic Science for the 21st Century: The National Academy of Sciences Report and Beyond; 2009
- The Science of DNA Profiling: A National Expert Forum, Forensic Bioinformatics Annual Conference; 2008
- CAC: DNA Workshop and General Meeting, Fall Seminar; 2007
- Population Statistics and Forensic DNA Analysis: course by Dr. George Carmody, Seattle, WA; 2006
- Science in the Courtroom for the 21st Century: Issues in Forensic DNA; 2006
- DNA From Crime Scene to Court Room: An Expert Forum, Forensic Bioinformatics Annual Conference; 2006
- Applied Biosystems HID University: Future Trends in Forensic DNA Technology; 2006
 - Practical STR Statistics Workshop
 - GeneMapper ID Software Verification Workshop
- CAC: DNA User's Group and General Meeting, Fall Seminar; 2005
- Promega: International Symposium on Human Identification; 2004
 - Low Copy Number DNA Analysis and Sample Screening Workshop
 - Parentage and Mixture Statistics Workshop
- Applied Biosystems: Future Trends in Forensic DNA Technology; 2004

Occupational History

2008 –	Assistant Laboratory Director, Technical Associates, Inc., Ventura, CA
2008 –	Senior Forensic Scientist, Technical Associates, Inc., Ventura, CA
2006 –	Assistant Technical Lead/Technical Manager, Technical Associates, Inc., Ventura, CA
2003 – 2008	Forensic Scientist, Technical Associates, Inc., Ventura, CA
1999 – 2003	Molecular geneticist research graduate student, UCSB, Department of Molecular, Cellular & Developmental Biology, Dr. David Low's laboratory

1996 – 1999	Summer Intern, Motorola Inc. Control Centers Department, Schaumburg, IL (1996, 1997, 1999)
1998	Summer Intern, Motorola Inc. BioChip Systems, Tempe, AZ

Teaching Projects

2000 – 2003	Teaching Assistant in Molecular Genetics, Teaching Assistant in Immunobiology, Teaching Assistant in The Immune System & AIDS, UCSB
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Publications and Presentations

2013 "Molecular Biology in Forensic Science", Westmont College, Montecito, CA
 2011 "Molecular Biology in Forensic Science", Westmont College, Montecito, CA
 2010 "Molecular Biology in Forensic Science", Westmont College, Montecito, CA
 2009 "Molecular Biology in Forensic Science", Westmont College, Montecito, CA
 2008 "Molecular Biology in Forensic Science", Westmont College, Montecito, CA
 2007 "Biology in Forensics", Bioscience Academy, Ventura, CA
 2007 "Biology in Forensics", Carpinteria High School, Carpinteria, CA
 2007 "Molecular Biology in Forensics", Westmont College, Montecito, CA
 2006 "How to Investigate a Case that has DNA Evidence", National Defender Investigator Association National Conference, San Francisco, CA
 2006 "DNA in Forensics", Bioscience Academy, Ventura, CA
 2005 Aoki, S. K., Pamma, R., Hernday, A. D., Bickham, J. E., Braaten, B. A., Low, D. A. "Contact-Dependent Inhibition of Growth in *Escherichia coli*"; *Science* **309**, 1245 (2005)
 2005 "DNA in Forensics", University of California, Santa Barbara
 2005 "DNA in Forensics", Bioscience Academy, Ventura, CA
 2005 "DNA in Forensics", Buena High School, Ventura, CA
 2005 "DNA in Forensics", Ventura College, Ventura, CA
 2004 "DNA in Forensics", University of California, Santa Barbara
 2004 "DNA in Forensics", Ventura College, Ventura, CA

Awards and Honors

2003 Outstanding Teaching Award, University of California, Santa Barbara