**Name: Julia Webb Date of Last Update: 6/9/2025**

**Job Title: Forensic Scientist III - DNA**

**Indicate all disciplines in which you currently perform testing or calibration work:**

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| [ ]  | **Seized Drugs** |  | [ ]  | **Blood Alcohol (Toxicology – Testing)** |
| [x]  | **Biology** |  | [ ]  | **Firearms/Toolmarks** |
| [ ]  | **Latent Prints (Friction Ridge)** |  | [ ]  |  |
| [ ]  | **Breath Alcohol (Toxicology - Calibration)** |  | [ ]  | **Impressions (Footwear)** |

**For each discipline checked in the table above, list all categories in which you perform work:**

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| Body Fluid Identification, DNA-Nuclear, Individual Characteristic Database  |

**Education:** List all higher academic institutions attended (list high school only if no college degree has been attained)**.**

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| Institution  | Dates Attended | Major | Degree Completed |
| University of California, Santa Barbara  | 09/2005 – 03/2012  | Molecular, Cellular, and Developmental Biology | PhD |
| Colorado State University | 08/2001 - 05/2005 | Biological Sciences | BS |
| North Carolina State University | 08/2012 – 12/2012 | N/A | Online coursework only |
| Weber State University | 01/2012 – 08/2012 | N/A | Online coursework only |
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**Continuing Education:**  List formal coursework, conferences, workshops, in-service and other training received applicable to past and current forensic related positions.

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| Course Title | Source of Training | Date(s) of Training |
| Human Identification Solutions (HIDS) Conference | ThermoFisher Scientific - multiple speakers | 5/13/25-5/14/25 |
| Testimony Training – Daubert | Ben McGough | 6/4/24 – 6/5/24 |
| STRmix Training | L. Russell, K. Chen, J. Bright | 4/8/24-4/11/24 |
| Probabilistic Genotyping of Evidentiary DNA Typing Results | Forensic Technology Cener of Excellence | 01/09/24 |
| International Symposium on Human Identification including Advanced Workshop on Likelihood Ratios | Promega – multiple speakers | 9/18-9/21/23 |
| Root Cause Analysis and Ethics | Seaglass Training, Anja Einseln | 5/9-5/10/23 |
| CODIS 11.0 | FBI | 12/1/22 |
| CODIS Conference | FBI – multiple speakers | 11/14/22-11/17/22 |
| Applied Biosystems RapidHIT ID System Training  | Kristen Smith  | 10/25/22  |
| EZ2 Connect & QIAcube Connect Applications Training  | Qiagen – Carrie Mayes and Bryan Davis  | 05/17/2022  |
| Minimizing Bias and Enhancing Forensic Decisions  | Itiel Dror  | 03/17/2021  |
| American Academy of Forensic Sciences Meeting  | Multiple Sources  | 02/15-02/19/2021  |
| International Symposium on Human Identification  | Multiple sources   | 09/14 - 09/16/2020  |
| QAS Auditor Training  | FBI  | 07/02/2020  |
| Y-Screening and 3500 Data Collection Software Updates  | ThermoFisher (Peterjon McAnany)  | 06/25 & 06/26/19  |
| Forensic ISO/IEC 17025:2017 Internal Auditor Training  | ANAB (Emma Dutton)  | 06/17 – 06/20/19  |
| Non-STR DNA Markers | National Institutes of Justice | 4/17/2019 |
| Advanced and Emerging DNA Techniques and Technologies | National Institutes of Justice | 4/17/2019 |
| Next Generation DNA Technologies | National Institutes of Justice & RTI International | 1/31/2019 |
| FBI QAS Auditor Training  | FBI  | Nov 2018 – Apr 2019  |
| Y-STR Webinars (x3)  | Promega; various speakers  | 04/20 & 4/23/18  |
| Y23 Y-STR Teachback  | Promega  | 03/28/2018  |
| Rapid DNA Webinars | American Society for Crime Lab Directors Rapid DNA Webinar 1 and 2 | 11/8/2018-11/09/2018 |
| Y-STR Analysis Training  | William Frank, Illinois Police Department  | 10/11/17-10/12/17  |
| Science in the Courtroom  | Val Van Brocklin  | 08/16/17-08/17/17  |
| DNA Mixture Analysis (ArmedXpert)  | Niche Vision LLC  | 05/17/16-05/19/16  |
| Hair Evaluation for DNA Analysis  | West Virginia University  | 03/07/16-04/18/16  |
| Quantifiler Trio DNA Quantification Kit and GlobalFiler PCR Amplification Kit Teachback  | Life Technologies  | 03/03/15-03/05/15  |
| CODIS 7.0  | FBI Computer Based Training  | 09/10/14-09/18/14  |
| Bloodstain Pattern Analysis I  | Bevel, Gardner & Associates  | 08/25/14-08/29/14  |
| Validation Concepts & Resources Part I  | NIST Webinar  | 08/06/14  |
| Probabilistic Genotyping Part I  | NIST Webinar  | 05/28/14  |
| DNA Evidence Collection & Preservation Training  | Danielle Ledford & Stacey Johnson (in house)  | 03/20/14  |

**Testimony:** Complete the information below for testimony provided.

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| Discipline or Category of Testimony | Period of Time in Which Testimony Occurred | Approximate Number of Times Testified |
| Forensic Bio (Body Fluid ID/DNA)  | 2017-2025 | 19 |

**Professional Affiliations:** List professional organizations of which you are or have been a member. Indicate any offices or other positions held and the date(s) of these activities.

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| Organization | Period of Membership | Offices or Positions Held/Dates |
| American Association for the Advancement of Science  | 2009-2012  |   |
| American Society of Microbiology  | 2010-2012  |   |
| American Society for Clinical Laboratory Science  | 2012-2013  |   |
| American Association for Clinical Chemists  | 2012-2013  |   |
| American Society for Gravitational & Space Biology  | 2004-2005  |   |

**Employment History:** List all scientific or technical positions held, particularly those related to forensic science. **List current position first.**

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| **Job Title**  | Forensic Scientist I/II/III – DNA (Casework)  | **Tenure**  | 10/01/2015-PRESENT  |
| **​​Employer​**  | Department of Public Safety, Alaska Scientific Crime Detection Laboratory  |
| Provide a brief description of principal duties:  |
| Perform biological/DNA screening and DNA analysis on forensic casework. Prepare reports, perform technical and administrative reviews, and provide expert witness testimony in court. Generate DNA profiles of arrestee and convicted offenders for entry into state and national databases. Equipment maintenance, reagent preparation and verification, and validation support as needed.  |

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| **Job Title**  | Forensic Scientist I – DNA Database  | **Tenure**  | 03/03/2014-10/01/2015  |
| **Employer**  | Department of Public Safety, Alaska Scientific Crime Detection Laboratory  |
| Provide a brief description of principal duties:  |
| Generate DNA profiles of arrestee and convicted offenders for entry into state and national databases. Equipment maintenance and reagent preparation.   |

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| **Job Title**  | Research Analyst II - STNP  | **Tenure**  | 09/23/2013-01/17/2014  |
| **Employer**  | Department of Health & Social Services, Alaska Psychiatric Institute  |
| Provide a brief description of principal duties:  |
| Gather and input data from hospital population for quality assurance purposes. Track trends, generate graphs and tables.  |

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| **Job Title**  | Post-doctoral Fellow & Graduate Research Assistant  | **Tenure**  | 08/2006-07/2013  |
| **Employer**  | University of California – Santa Barbara, Department of Molecular, Cellular, & Developmental Biology  |
| Provide a brief description of principal duties:  |
| Utilized genetic and molecular techniques (including nucleic acid purification, polymerase chain reaction [PCR], immunofluorescence microscopy, quantitative PCR, western blot analysis, etc.) to study a cell to cell communication system in bacteria. Managed independent projects, collected data on short term and long term studies, generated graphics for data presentation. Taught and managed undergraduate research assistants. Wrote and aided in production of grant proposals and papers for peer-reviewed journals. Presented work at national meetings, departmental symposia, and laboratory meetings. Helped in laboratory equipment maintenance and biohazardous/chemical/ radioactive waste disposal.   |

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| **Job Title**  | Undergraduate Research Assistant  | **Tenure**  | 09/2001-05/2005  |
| **Employer**  | Colorado State University, Department of Microbiology, Immunology, & Pathology  |
| Provide a brief description of principal duties:  |
| Utilized genetic and molecular techniques to study various issues in microbial ecology (including single nucleotide polymorphisms analysis for microbial communities). Managed independent projects, collected data on short term and long term studies, generated graphics for data presentation. Taught laboratory techniques to undergraduate and graduate students. Maintained laboratory stocks and dishware. Presented work at university symposia.  |

**Other Qualifications:** List below all personal certifications identifying the issuing organization and the dates; all scientific publications and/or presentations you have authored or co-authored, research in which you are or have been involved, academic or other teaching positions you have held, and any other information which you consider relevant to your qualifications.

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| **Teaching Positions** Adjunct Instructor – Charter College, Anchorage, AK (07/2013 – 12/2013) Teaching Assistant – Molecular Genetics I, University of California, Santa Barbara (01/2009 – 03/2009 & 01/2011-03/2011) **Other Research Experience** Department of Homeland Security Fellow, Lawrence Livermore National Laboratory, Livermore, CA (06/2006-08/2006) – validation of nucleic acid purification kit for the detection of animal diseases in livestock. NASA Spaceflight and Life Sciences Trainee, Kennedy Space Center, FL (06/2004-07/2004) – evaluation of media and inoculation density for growth of nitrogen-fixating microbial communities  **Scientific Publications** **Webb, J.S.**, Nikolakakis, K., Willet, J., Aoki, S.K., Braaten, B.A., Hayes, C.S. and Low, D.A. (2013) Delivery of CdiA Nuclease Toxins into Target Cells during Contact-Dependent Growth Inhibition. PLoS ONE 8(2): e57609. doi:10.1371/journal.pone.0057609. Diner, E.J., Beck, C.M., **Webb, J.S**., Low, D.A., and Hayes, C.S. (2012) Identification of a target cell permissive factor required for contact dependent growth inhibition (CDI). Genes & Development, 26, 515-525. Diner, E.J., Beck, C.M., **Webb, J.S.**, Low, D.A. and Hayes, C.S. (2012) Identification of a target cell permissive factor required for contact-dependent growth inhibition (CDI). In The Social Biology of Microbial Communities. Institute of Medicine of the National Academies. The National Academies Press. Washington, D.C. Aoki, S.K., Diner, E.J., t'Kint de Roodenbeke, C., Burgess, B.R., Poole, S.J., Braaten, B.A., Jones, A.M., **Webb, J.S.**, Hayes, C.S., Cotter, P.A., and Low, D.A. (2010) A widespread family of polymorphic contact-dependent toxin delivery systems in bacteria. Nature 468:439-442. Aoki, S.K., **Webb, J.S.**, Braaten, B.A., and Low, D.A. (2009) Contact-dependent growth inhibition causes reversible metabolic downregulation in Escherichia coli. Journal of Bacteriology 191:1777-1786. Aoki, S.K., Maliverni, J.C., Jacoby, K., Thomas, B., Pamma, R., Trinh B.N., Remers, S., **Webb, J.S.**, Braaten, B.A., Silhavy, T.J., and Low, D.A. (2008). Contact-dependent growth inhibition requires the essential outer membrane protein BamA (YaeT) as the receptor and the inner membrane transport protein AcrB. Molecular Microbiology 70:323-340.  **Selected Scientific Presentations** C. Duda, **J. Webb**, K. Vaona, and J. Miyaoka. Internal Validation of QIAcube® Automated Wash Protocol for Differential Extractions. International Symposium on Human Identification. Phoenix, AZ. September 29-October 2, 2014. **Julia S. Webb**, Stephanie K. Aoki, Bruce A. Braaten, and David A. Low. Biogenesis and Delivery of Uropathogenic Escherichia coli 536 CdiA. American Society of Microbiology Annual Meeting. New Orleans, LA. May 20 - 24, 2011.  **Julia Shimizu (Webb)**, Tony Rector, Mary Hummerick, Jay Garland, and Michael Roberts. Functional and Genetic Analysis of Microbial Communities in the Aerobic Rotational Membrane System Bioreactor. American Society for Gravitational and Space Biology 20th Annual Meeting. New York, NY. November 9-12, 2004. Nancy M. DuTeau, Gail Bernadino-Lang, Donald A. Klein, Janet Kemp, **Julia Shimizu (Webb)**, Jessica Bushanam, and Jenna Horne. Identifiying Mosquito Gut Candidates for Paratransgenesis. Society for Vector Ecology Annual Meeting. Boston, MA. September 26-29, 2004 |