Alaska Scientific Crime Detection Laboratory
Statement of Qualifications

Name	Julia S. Webb	Date	25-Jun-19

Job Title	Forensic Scientist III - DNA

Indicate all disciplines in which you currently perform testing or calibration work according to the Scope of Accreditation:

☐	Drug Chemistry	☐	Toxicology - Testing
☒	Biology	☐	Firearms/Toolmarks
☐	Latent Prints	☐	Crime Scene
☐	Breath Alcohol (non-accredited discipline)		

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

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).

Institution	Dates Attended	Major	Degree Completed
University of California, Santa Barbara	09/2005 – 03/2012	Molecular, Cellular, & 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

Continuing Education: List formal coursework, conferences, workshops, in-service and other training received applicable to past and current forensic related positions.

Course Title	Source of Training	Date(s) of Training
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
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
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.

Discipline or Category of Testimony	Period of Time in Which Testimony Occurred	Approximate Number of Times Testified
Forensic Bio (Body Fluid ID/DNA)	2017-2019	4

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.

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. Add additional sections as necessary.

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.			

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.			

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.			

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.			

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.

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 (06/20024-07/2004) – 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.