

**ASCLD/LAB-International**

**STATEMENT OF QUALIFICATIONS**

<b>Name</b>	Sara L. Graziano	<b>Date</b>	June 6, 2011
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<b>Laboratory</b>	State of Alaska Scientific Crime Detection Laboratory
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<b>Job Title</b>	Forensic Scientist II
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**Indicate all disciplines in which you do casework:**

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|---|--|
| <input type="checkbox"/> <b>Controlled Substances</b> | <input type="checkbox"/> <b>Toxicology</b>           |
| <input type="checkbox"/> <b>Firearms/Toolmarks</b>    | <input checked="" type="checkbox"/> <b>Biology</b>   |
| <input type="checkbox"/> <b>Trace Evidence</b>        | <input type="checkbox"/> <b>Questioned Documents</b> |
| <input type="checkbox"/> <b>Latent Prints</b>         | <input type="checkbox"/> <b>Crime Scene</b>          |
| <input type="checkbox"/> <b>Digital Evidence</b>      |  |

**List all sub-disciplines in which you do casework:**

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

Institution	Dates Attended	Major	Degree Completed
Miami University of Ohio	8/1990 – 5/1992	Zoology	n/a
Coastal Carolina University	10/1992 – 5/1995	Marine Science/biology	B.S.
Auburn University	8/1996 – 5/1998	Fisheries & Aquaculture	n/a
Georgia Inst. of Technology	8/1999 – 12/2001	Applied Biology	M.S.

**Other Training:** List continuing education, workshops, in-service and other formal training received.

<p>Microscopy of Sperm Training (Anchorage, AK - March 21, 2011) -general microscope use and calibration, spermatogenesis, sperm identification and identifying non-sperm cells (instructor: Kristin Denning)</p> <p>DNA Mixture Interpretation Conference (Clearwater, FL - March 15-17, 2011) -an overview of validation studies, SWGDAM Guidelines, forensic DNA statistical approaches (CPI, RMP and LR), practical exercises and examples (main instructors: John Buckleton, Mike Coble, Todd Bille, Karin Crenshaw, Chris Maguire, Jack Ballentyne and Brad Jenkins)</p> <p>Documenting and Collecting Snow Impression Evidence (Anchorage, AK - January 20, 2011) -crime scene evaluation, documentation, photography, casting techniques (by Jim Wolfe)</p> <p>FBI CODIS Software Training (Vienna, VA - September 20-24, 2010) -Overview of all CODIS programs, utilities, examples and exercises (by Meghan Carlin)</p> <p>Joint Association of Forensic Scientists Meeting (Orlando, FL – October 18-23, 2009) -Full-day workshop on Y-STR technology (by Jack Ballentyne, Univ. of Central Florida - 8 hours) -Half-day workshop on DNA Identification for missing persons/disasters (by Mike Hennessey, GeneCodes Corporation - 4 hours)</p> <p>NIJ Annual Conference (Arlington, VA – June 15-17, 2009) -Symposia on mobile DNA technology, DNA backlog reduction, microscopic/laser separation of</p>
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spermatozoa, genetics and phenotypic profiling, and other topics

Applied Biosystems GeneMapper® ID-X v1.0 Software Training (Anchorage, AK – Oct. 28-30, 2008)  
-Installation, Data Analysis, Validation, and Use as an Expert System (by April Orbison - 18 hours)

Summer Institute of Statistical Genetics directed by Dr. Bruce Weir (Seattle, WA – June 14-23, 2006)  
-Population Genetic Data Analysis for Natural Populations (by Bruce Weir, Kent Holsinger - 20 hours)  
-MCMC for Genetics (by Eric Anderson, Matthew Stephens - 20 hours)  
-Advanced Pedigree Analysis using MCMC (by Elizabeth Thompson, Shili Lin - 20 hours)

**Courtroom Experience:** List the discipline(s) in which you have qualified to testify as an expert witness and indicate over what period of time and approximately how many times you have testified in each.

none

**Professional Affiliations:** List any 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.

American Society of Microbiology, 1998 – 2001  
American Fisheries Society, 2004 – 2008

**Employment History:** List all scientific or technical positions held, particularly those related to forensic science. List current position first. Be sure to indicate employer and give a brief summary of principal duties and tenure in each position.

<b>Job Title</b>	Forensic Scientist II	<b>Tenure</b>	9/2009 – present
<b>Employer</b>	Alaska Scientific Crime Detection Laboratory		
Provide a brief description of principal duties:			
Generate, interpret and report genetic results for forensic evidence, conduct technical and administrative reviews of cases, conduct validation studies as needed.			

<b>Job Title</b>	Forensic Scientist I	<b>Tenure</b>	9/2008 – 9/2009
<b>Employer</b>	Alaska Scientific Crime Detection Laboratory		
Provide a brief description of principal duties:			
Generate, interpret and report genetic results for forensic evidence.			

<b>Job Title</b>	Geneticist, GS-11	<b>Tenure</b>	9/2003 – 9/2008
<b>Employer</b>	U.S. Geological Survey		
Provide a brief description of principal duties:			
Generate, interpret and report genetic results for wildlife populations (STR analysis, mtDNA and gene sequencing).			

<b>Job Title</b>	PhD student - microbiology	<b>Tenure</b>	1/2002 – 5/2003
<b>Employer</b>	Georgia Institute of Technology		
Provide a brief description of principal duties:			
Molecular microbiology research.			

<b>Job Title</b>	Animal Care Specialist/Research Facility Technician	<b>Tenure</b>	5/2001 – 1/2002
<b>Employer</b>	Zygogen LLC.		
Provide a brief description of principal duties:			
Maintain and operate a fish rearing facility for molecular research.			

**Other Qualifications:** List below any scientific publication and/or presentation 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 qualification as a forensic scientist.  
(Use additional sheets if necessary.)

**PEER REVIEWED PUBLICATIONS:**

Nielsen, J.L., A. Byrne, S.L. Graziano and C. Kofzcay. 2009. Steelhead genetic diversity at multiple scales in a managed basin: Snake River, Idaho. *North America Journal of Fisheries Management* 29:680-701.

Nielsen, J.L., S.L. Graziano and A.C. Seitz. 2009. Fine-scale population structure in Alaskan Pacific halibut (*Hippoglossus stenolepis*). *Conservation Genetics* 11(3):999-1012.

Ramey, A., S.L. Graziano and J.L. Nielsen. 2008. Isolation and characterization of microsatellite loci from the Arctic Cisco (*Coregonus autumnalis*). *Molecular Ecology Resources* 8:357-359.

Williams, I., G.H. Reeves, S.L. Graziano, J.L. Nielsen. 2007. Genetic investigation of natural hybridization between rainbow trout and cutthroat trout in the Copper River Delta, Alaska. *Transactions of the American Fisheries Society* 136:926-942.

Graziano, S.L., K.H. Brown and J.L. Nielsen. 2005. Nomenclature of mitochondrial DNA haplotypes for *Oncorhynchus mykiss*. *Transactions of the American Fisheries Society* 134:1271-1273.

Plumb, J. A., A.D. Noyes, S. Graziano, J. Wang, J. Mao and V.G. Chinchar. 1999. Isolation and identification of viruses from adult largemouth bass during a 1997-1998 survey in the southeastern United States. *Journal of Aquatic Animal Health* 11:391-399.

**TECHNICAL REPORTS:**

Nielsen, J.L., C.E. Zimmerman, S.L. Graziano, A. Ramey, and V. VanBiela. 2008. Testing molecular and otolith tools to investigate population-of-origin and migration in Arctic Cisco found in the Colville River, Alaska. Annual technical report submitted to Minerals Management Services (MMS), Anchorage, AK, April 2008.

Graziano, S.L. and J.L. Nielsen. 2008. Assessment of individual genotypes, genetic lineages and circadian rhythm genes in brown bears (*Ursus arctos*) at Brooks River, Katmai National Park and Preserve, AK. NRPP PMIS-5561: Progress Report 2008.

Nielsen, J.L., C.E. Zimmerman, S.L. Graziano and A. Ramey. 2007. Testing molecular and otolith tools to investigate population-of-origin and migration in Arctic Cisco found in the Colville River, Alaska. Pilot study progress report submitted to Minerals Management Services (MMS), Anchorage, AK, April 2007.

Graziano, S.L. and J.L. Nielsen. 2006. Brooks River brown bear project: Progress Report 2006. Technical report submitted to National Park Service, King Salmon, AK, October 2006.

Nielsen, J.L., S.L. Graziano, I. Williams and A. Byrne. 2005. Genetic population structure of Snake River basin steelhead in Idaho. Final technical report submitted to Idaho Department of Fish and Game, Boise, ID, March 2005.

Nielsen, J.L., T.C. Wiacek and S.L. Graziano. 2005. Population genetic structure of rainbow trout in the upper Ventura River watershed based on microsatellite and mtDNA analyses. Final technical report submitted to U.S.G.S. Western Fisheries Research Center, Seattle, WA, August 2005.

Graziano, S.L. and J.L. Nielsen. 2004. Genetic population structure of rainbow trout from the White Salmon River sub-drainage: Including inference on hybridization with coastal cutthroat trout. Technical report submitted to U.S. Forest Service, Gifford Pinchot National Forest, Wind River, WA, June 2004.

**POSTERS and PRESENTATIONS:**

S.L. Graziano, A. Chidambaram and M.L. Collins. "Success Stories Using NIJ Funding". Poster presented at the National Institute of Justice Annual Meeting, Arlington, VA, June 2009.

S.L. Graziano and J.L. Nielsen. "Population Genetic Survey of Brown Bears at Brooks River". Poster presented at the Alaska Chapter of the Wildlife Society Annual Meeting, Anchorage, AK, April 2008.

S.L. Graziano and J.L. Nielsen. "Genetic Analysis of Alaskan Pacific Halibut". Poster presentation at the American Fisheries Society Annual Meeting, San Francisco, CA, September 2007.

Ramey, A., S.L. Graziano and J.L. Nielsen. "Testing molecular tools to investigate population-of-origin and migration of Arctic Cisco (*Coregonus autumnalis*) collected in the Colville River, Alaska." Poster presentation at the American Fisheries Society Annual Meeting, San Francisco, CA, September 2007.

S.L. Graziano, J.L. Nielsen, R. Valenzuela, and A. Byrne. "Genetic Population Structure of Snake River Basin Steelhead in Idaho". Invited presentation given at the Coastwide Salmonid Genetics Conference, Newport, OR, June 2004.

S.L. Graziano, I. Williams, G.K. Sage, C.E. Zimmerman, and J.L. Nielsen. "The importance of genetic verification for determination of Atlantic salmon in North Pacific waters." Invited poster presented at the Invasive species symposium – The Western section of the Wildlife Society, Sacramento, CA, October 2003.

S.L. Graziano, C.A Haller, C. Moore and T. DiChrisina. "Anaerobic iron respiration in *Shewanella putrefaciens*." Poster presented at the American Microbiology Society Annual Meeting, Salt Lake City, UT, April 2003.