**Name:** Michelle L. Collins (Gaines)  **Date of Last Update:** 12/4/2023

**Job Title:** Forensic Scientist IV - DNA, Forensic Biology Supervisor and CODIS State Administrator

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [ ]  | **Seized Drugs** |  | [ ]  | **Blood Alcohol (Toxicology – Testing)** |
| [x]  | **Biology** |  | [ ]  | **Firearms/Toolmarks** |
| [ ]  | **Latent Prints (Friction Ridge)** |  | [ ]  | **Crime Scene** |
| [ ]  | **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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| 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 Alabama at Birmingham  | 1994-1996  | Forensic Science  | M.S.F.S.  |
| Clarkson University  | 1990-1994  | Chemistry  | B.S.  |

**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 |
| Online Workshop Series: Probabilistic Genotyping of Evidentiary DNA Typing Results (Modules 3 (partial), 5 and 6 (partial) | Forensic Technology Center of Excellence webinar | November 2023 |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2023 |
| Touch DNA Evidence Collection in Sexual Assault Cases: Knowledge to Inform Practice | Forensic Technology Center of Excellence webinar | April 2023 |
| Triaging Cases – Case Management and All That Means | Forensic Technology Center of Excellence webinar | January 2023 |
| Leadership in Police Records | PRI Management Group | November 2022  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI) virtual conference  | November 2022  |
| Applied Biosystems™ RapidHIT ID System install training | HID university  | October 2022 |
| CODIS State Administrator's Meeting | Federal Bureau of Investigation (FBI)  | May 2022 |
| 74th American Academy of Forensic Sciences (AAFS) Annual conference  | AAFS  | February 2022  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI) virtual conference  | November 2021  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2021  |
| Minimizing Bias and Enhancing Forensic Decisions  | Itiel Dror, virtual workshop  | March 2021  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI) virtual conference  | December 2020  |
| Automation and Speed: Creating a Process for 2-week Turnaround of Sexual Assault Kit Evidence  | Bode Technology webinar  | October 2020  |
| Sexual Assault Kit Tracking: The Approach and Impact of Statewide Tracking  | Bode Technology webinar  | September 2020  |
| The 6 Pillars of Approaching Sexual Assault Kit Backlogs  | Bode Technology webinar  | September 2020  |
| 31st International Symposium for Human Identification (ISHI)  | Promega virtual conference  | September 2020  |
| Quality Assurance Standards and Auditor Training  | FBI online training  | June 2020  |
| Implementation of Rapid DNA in Law Enforcement  | Bode Technology webinar  | April 2020  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | December 2019  |
| HID future trends in forensic DNA technology  | HID university  | June 2019  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI) – virtual meeting  | December 2018  |
| SWGDAM Recommendations on Communicating Likelihood Ratios  | NIJ/RTI webinar - on demand  | December 2018   |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2018  |
| PowerPlex Y23 Discriminating Power in Stringent Endogamous and Consanguineous Situations  | Promega webinar – on demand  | May 2018   |
| Y Chromosome Haplotype Reference Database (YHRD)  | Promega webinar - on demand  | May 2018   |
| Optimized Approaches for Forensic Y-STR analysis  | Promega webinar – on demand  | April 2018  |
| Post Validation PowerPlex Y23 Training  | Jonelle Thompson  | March 2018  |
| ANAB Delta to AR 3028  | ANAB online training  | January 2018  |
| ANAB Forensic Auditing Principles  | ANAB online training  | January 2018  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2017  |
| Y-STR Training  | William Frank  | October 2017  |
| Science in the Courtroom  | Val VanBrocklin  | August 2017  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2017  |
| Quality Assurance Standards and Auditor Training  | FBI online training  | June 2016  |
| DNA Mixture Analysis with Armed Xpert  | NicheVision  | June 2016  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2016  |
| ASCLD/LAB Measurement Traceability Training  | ASCLD/LAB online training   | January 2016  |
| ASCLD/LAB Technical Assessor Refresher Training  | ASCLD/LAB online training  | January 2016  |
| Quantifiler Trio and Globalfiler Final Teachback  | Cheryl Duda, SCDL DNA Technical Leader  | November 2015  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2015  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2015  |
| Quantifiler Trio and Globalfiler Validation Teachback  | Jennifer Elliot, ThermoFisher Scientific  | March 2015  |
| American Academy of Forensic Sciences (AAFS) Annual conference  | AAFS  | February 2015  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2014  |
| ASCLD/LAB-International Assessor Training Course  | Emma Dutton, ASCLD/LAB  | September 2014  |
| Bloodstain Pattern Analysis I training course  | Ross Gardner and Tom Griffin of Bevel, Gardner & Associates  | August 2014  |
| Probabilistic Genotyping & Software Programs (Part 1)  | NIST sponsored webinar  | May 2014  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2014  |
| GlobalFiler Express PCR Amplification Kit Validation Teachback  | Jennifer Elliot, ThermoFisher Scientific  | February 2014  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2013  |
| DNA Mixture Interpretation Workshop & Webcast  | NIST sponsored webcast  | June 2013  |
| Paternity Statistics for Forensic Casework  | Pamela Jarman, Bode Technology  | May 2013  |
| CODIS State Administrator Meeting - webinar  | Federal Bureau of Investigation (FBI)  | May 2013  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Workshops - Calculating Likelihood Ratios Incorporating a Probability of Drop-Out: Introducing Lab Retriever - A Free and User-Friendly Software Program and DNA in Real Time: Amplifying Productivity in Today's Forensic Laboratory  | AAFS (Norah Rudin and Keith Inman, workshop)  | February 2013  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2012  |
| 3500xl, 7500 & Quantifiler training  | Kellie Fenesan and Melissa Kotkin, Life Technologies  | September 2012  |
| Qiagen QIASymphony and QIAgility training  | Dorothy Mei, Qiagen  | August 2012  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2012  |
| Combined DNA Index System (CODIS 7.0) training  | Aaron Colliver and Jacqueline Klinger, FBI  | April 2012  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2011  |
| DNA Interpretation and Statistics Workshop  | Bruce Budowle, UNT Health Science Center  | August 2011  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2011  |
| Microscopy of Sperm  | Kristin Denning, SCDL Biological Screener  | March 2011  |
| 38th Annual Crime Laboratory Development Symposium  |   | September 2010  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2010  |
| ASCLD/LAB International Preparation Course  | Anja Einseln, ASCLD/LAB  | November 2009  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | November 2009  |
| GeneMapper® ID-X v1.0 Software Training  | April Orbison, Life Technologies  | August 2008  |
| Expert Witness Testimony Techniques  | Ron Smith, Ron Smith and Associates  | July 2008  |
| Workshop for Laboratories Embarking on Validation of an Expert System  | Various instructors  | June 2008  |
| Familial Searching and Genetic Privacy Symposium  |   | March 2008  |
| Valuing Diversity  | Erin Shepherd-Ham, State of Alaska  | December 2007  |
| Performance Appraisal: The Basics  | Kimberly Gialopsos, State of Alaska  | December 2007  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | October 2007  |
| Academy for Supervisors  | Timothy Parker, State of Alaska  | October 2007  |
| Performance Coaching  | Timothy Parker, State of Alaska  | September 2007  |
| CODIS State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | May 2007  |
| National CODIS Conference and State Administrator Meeting  | Federal Bureau of Investigation (FBI)  | October 2006  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Advanced Topics in STR DNA Analysis Workshop  | AAFS (John Butler and Bruce McCord, workshop)  | February 2006  |
| National CODIS Conference  | Federal Bureau of Investigation (FBI)  | November 2005  |
| CODIS v5.7.2 Training  | Meghan Carlin and Inez Kendall, SAIC  | October 2005  |
| FBI QAS Auditor Training  | Richard Guerrieri and Heather Seubert, FBI  | September 2005  |
| Statistical Analysis of Forensic DNA Evidence  | George Carmody and Ray Wickenheiser  | August 2005  |
| National CODIS Conference  | Federal Bureau of Investigation (FBI)  | November 2004  |
| Death Investigation Seminar  | Sponsored by AK State Medical Examiner  | August 2004  |
| Quantitative PCR Seminar  | Stratagene Corporation  | March 2004  |
| Quantitative Methods Using RT-PCR  | Stratagene webinar  | December 2003  |
| CODIS Talk: NDIS DNA Data Acceptance Standards  | Chris Beheim, SCDL Lab Manager and CODIS Administrator  | December 2003  |
| Association of Forensic DNA Analysts and Administrators (AFDAA) regional conference  | AFDAA  | July 2002  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Forensic Photography Workshop  | AAFS (Robert Carruthers, workshop)  | February 2002  |
| Southern Association of Forensic Scientists (SAFS) regional conference  | SAFS  | Spring 2001  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Winter 2001  |
| Effective Courtroom Communication Skills  | Raymond Davis and Louis Maucieri  | January 2001  |
| Southern Association of Forensic Scientists (SAFS) regional conference  | SAFS  | Fall 2000  |
| Forensic Biological Microscopy  | Edwin Jones  | September 2000  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Winter 2000  |
| Statistics and Population Genetics for Forensic Scientists  | Bruce Weir, NC State graduate course  | Aug-Dec 1999  |
| Southern Association of Forensic Scientists (SAFS) regional conference  | SAFS  | Fall 1999  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Workshops - DNA Proficiency Testing as a Quality Assurance Tool and Internet for Forensic Scientists  | AAFS  | February 1999  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Winter 1999  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Spring 1998  |
| Southern Association of Forensic Scientists (SAFS) regional conference  | SAFS  | Spring 1998  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Developments in Trace Evidence Examinations: Interpretation of Material Transfers Workshop  | AAFS  | February 1998  |
| Forensic Microscopy  | John Delly, McCrone Research Institute  | October 1997  |
| 8th International Symposium on Human Identification (ISHI) and Presenting DNA Statistics in Court Workshop  | Promega (George Carmody and Bruce Weir, workshop)  | September 1997  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Fall 1997  |
| American Academy of Forensic Sciences (AAFS) Annual conference and Advanced DNA Technologies: Automation and Application Workshop  | AAFS  | February1997  |
| Louisiana Association of Forensic Scientists (LAFS) regional conference  | LAFS  | Winter 1997  |
| Southern Association of Forensic Scientists (SAFS) regional conference and workshops on STR Technology and Chemiluminescence  | SAFS   | October 1996  |
| Bloodstain Pattern Interpretation  | Paulette Sutton, Steven A. Symes and Lisa Elrod  | August 1996  |
| American Academy of Forensic Sciences (AAFS) Annual conference   | AAFS  | February 1996  |

**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 |
| Biology, Nuclear DNA  | 1997-current | 145 |

**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 Academy of Forensic Sciences  | 1995-current  | None  |
| Southern Association of Forensic Scientists  | >20 years ago, while employed in Louisiana  | None  |
| Louisiana Association of Forensic Scientists  | >20 years ago, while employed in Louisiana  | None  |

**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 IV-DNA      | **Tenure** | 11/07 - present  |
| **Employer** | Alaska Department of Public Safety - Scientific Crime Detection Laboratory  |
| Provide a brief description of principal duties: |
| Supervise the Forensic Biology discipline of the laboratory. Serve as the AK State CODIS Administrator. Grant writing and purchasing of supplies.  Perform scientific techniques in the identification of body fluids ( i.e., blood and semen) and analyze evidence to generate DNA profiles, interpret DNA profiles, prepare written reports and perform technical and administrative reviews. Provide expert witness testimony. Assist with validations and writing discipline manuals. Assist with internal audits and ensure compliance with ASCLD/LAB and FBI QAS requirements.   |

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| **Job Title** | Criminalist III       | **Tenure** | 09/03 – 11/07  |
| **Employer** | Alaska Department of Public Safety - Scientific Crime Detection Laboratory  |
| Provide a brief description of principal duties: |
| Perform DNA analysis on forensic casework.  Perform scientific techniques in the identification of body fluids, i.e., blood and semen. Perform validations, technical and administrative review of validations and casework, prepare written reports and provide expert witness testimony.  |

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| **Job Title** | Forensic Scientist I/II  | **Tenure** | 07/01/1996 – 06/30/2003  |
| **Employer** | North Louisiana Criminalistics Laboratory  |
| Provide a brief description of principal duties: |
| Evidence storage, tracking and examination – DNA analysis by PCR method, STR typing using a 377 DNA Sequencer and GeneScan and GenoTyper software, report preparation and court testimony, validation of methods and reagents, technical review of DNA case files, purchasing of reagents and supplies for the DNA section, Administrative review and organization of proficiency testing for the DNA section, conducting internal laboratory audits to ensure compliance with ASCLD/LAB requirements, method and protocol development.  |

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| **Job Title** | Student Intern  | **Tenure** | 09/95 – 05/96  |
| **Employer** | Alabama Department of Forensic Sciences  |
| Provide a brief description of principal duties: |
| Processed blood samples for the Combined DNA Index System (CODIS) and assisted in validation of Restriction Fragment Length Polymorphism (RFLP) typing.  |

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| **Job Title** | Graduate Assistant  | **Tenure** | 08/94 – 08/95  |
| **Employer** | University of Alabama at Birmingham  |
| Provide a brief description of principal duties: |
| Conducted research on the external vs. internal cocaine contamination of hair.  |

**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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| --- |
| **QAS Auditor (Testing and Database) since 2005** **ANAB Assessor (formerly ASCLD/LAB) since 2014**Workshops and Classes Taught: June 2, 2017     DNA 101, Class for local prosecutors, held at the Alaska Scientific Crime Detection Laboratory in Anchorage, AK  October 19, 2016     ABC’s of Forensic Biology, Class for local law enforcement held at the Alaska Scientific Crime Detection Laboratory in Anchorage, AK  Sept.8-11, 2014     Trial Advocacy in Domestic Violence and Sexual Assault Cases, Workshop held at the Alaska Scientific Crime Detection Laboratory in Anchorage, AK  Sept.27, 1999      Interpreting STR Results of Mixed Samples, Workshop at the SAFS Fall 1999 Meeting in Myrtle Beach, SC  Jan.11-15, 1999     DNA Evidence: Evaluating, Interpreting, Reporting & Presenting, Class at the North Louisiana Criminalistics Laboratory in Shreveport, Louisiana.    May 25, 1998      Implementation of DNA in the Forensic Laboratory, Workshop at the SAFS Spring 1998 meeting in New Orleans, LA  Aug.11-15, 1997      Forensic DNA Analysis, Class at the North Louisiana Criminalistics Laboratory in Shreveport, Louisiana.    Presentations: February 2015        "Integration of the QIAcube into the Laboratory Workflow for Efficient Processing of Sexual Assault Casework", AAFS Meeting, Orlando, FL.  February 2006      “Blood Brothers”: A Case of “Identical Non-Twins”, AAFS Meeting, Seattle, WA.  July 2002      Reduced Volume PCR Amplification Reactions Using the AmpFlSTR Profiler Plus Kit, Association of Forensic DNA Analysts and Administrators, Austin, TX.   February 2002     Reduced Volume PCR Amplification Reactions Using the AmpFlSTR Profiler Plus Kit, AAFS Annual Meeting, Atlanta, GA.    April 2001      Validation of Reduced Volume PCR Amplification Reactions Using the AmpFlSTR Kits, SAFS Meeting, Williamsburg, VA.  February 1999 Internal Validation of the AmpFlSTR Profiler Plus and COfiler PCR Amplification Kits, AAFS Meeting, Orlando, FL.  February 1999 A Validation Regimen in the DNA Laboratory, LAFS Meeting, Alexandria, LA.  September 1997     Validation of AmpFlSTR Blue, Green I, and Profiler, 8th International Symposium on Human Identification, Scottsdale, AZ.  October 1996 The Effect of Hae III Digestion on PCR Based Typing Systems, SAFS Meeting, Raleigh, NC.  Publications: Reduced Volume PCR Amplification Reactions Using the AmpFlSTR Profiler Plus Kit, Journal of Forensic Sciences (2002) 47(6): 1224-37; Gaines ML, Wojtkiewicz PW, Valentine JA, Brown CL.  Preparation and Evaluation of Arylazide-Substituted Pyridine Adenine Dinucleotides for Photoaffinity Labeling Experiments, Photochemistry and Photobiology (1996); 63(6): 793-799; Liu W, Gaines M, Bao R, Clifford J, Li Y.  High Performance Liquid Chromatographic Analysis of Enantiomeric Composition of Abused Drugs, Forensic Sci Rev (1996); 8(2): 91-109; Sellers JK, Duffit GL, Gaines ML, Liu RH.   |