



Intermountain Forensics

SOP #

ORG-210

Revision #

01

Forensic DNA Technical Leader Approval

Issue Date

11/28/2022

Position Summary: Director of Laboratory Development

1. Purpose

To describe the roles and responsibilities of the position of the Director of Laboratory Development within the organization and provide the minimum and preferred education, experience, certification, knowledge, skills and abilities required for the position.

2. Summary

The Director of Laboratory Development is responsible for the activity of pursuing strategic opportunities by cultivating professional partnerships and other relationships for the laboratory and identifying new markets for the laboratory's services. This position performs client consultations, manages contract bids and awards, and interacts with vendor representatives. Additionally, this position ensures community outreach through management of social media and website content as well as education, webinars, and company representation at trade shows and conferences to promote the laboratory's culture, mission and vision.

3. Procedure

Minimum Educational Requirements

1. Bachelor's degree in a natural, physical, or forensic science area
2. Successful completion of twelve semester (or equivalent) credit hours from a combination of the following subject areas:
 - a. Biochemistry
 - b. Genetics
 - c. Molecular Biology
 - d. Statistics and/or Population Genetics
3. Coursework with titles other than the above listed subject areas may be substituted provided it can be demonstrated to be compliant with the FBI's Quality Assurance Standards
 - a. Compliance and documentation may be demonstrated with pertinent materials such as:
 - i. Transcripts
 - ii. Syllabus
 - iii. Letter from the instructor
 - iv. Other relevant documentation that supports course content

Preferred Educational Requirements

1. Master's degree in a natural, physical, or forensic science area
2. Successful completion of one graduate level course registering three or more semester credit hours (or equivalent) in one of the following subject areas:
 - a. Biochemistry
 - b. Genetics
 - c. Molecular Biology
 - d. Statistics and/or Population Genetics
3. Coursework with titles other than the above listed subject areas may be substituted provided it can be demonstrated to be compliant with the FBI's Quality Assurance Standards
 - a. Compliance and documentation may be demonstrated with pertinent materials such as:



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- i. Transcripts
- ii. Syllabus
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- iv. Other relevant documentation that supports course content

Minimum Experience Requirements

1. Five years of Forensic DNA laboratory experience:
 - a. Obtained at a laboratory where DNA testing was conducted for the identification and evaluation of biological evidence in criminal matters
 - b. Obtained as a **qualified** DNA analyst in human DNA testing on forensic samples
2. Two years of management and/or supervisory experience:
 - a. Obtained at a laboratory where DNA testing was conducted for the identification and evaluation of biological evidence in criminal matters

Minimum Training Requirements

1. Federal Bureau of Investigation Quality Assurance Standards (FBI QAS) auditor training
 - a. May be obtained within one calendar year of appointment to the position
2. ISO 17025 ANSI National Accrediting Board (ANAB) Technical Assessor (or equivalent)
 - a. May be obtained within two calendar years of appointment to the position

Preferred Certification

1. American Board of Criminalists (ABC) certification in an applicable field (or equivalent)
 - a. Applicable fields include Biological Evidence Screening (ABC-BIO), Forensic DNA (ABC-DNA), and Molecular Biology (ABC-MB)
2. Yellow Belt, Green Belt, or Black Belt in a Process Improvement methodology (i.e., Lean Six Sigma, Lean, Six Sigma, Total Quality Management)

Mandatory Roles and Responsibilities

1. Establish and maintain relationships with customers, vendors, and business partners
 - a. Case Consulting and Management
 - b. Authoring contract bids
 - c. Management of awarded contracts
 - d. Negotiation of contracts for equipment and supplies
2. Participate in the establishment and maintenance of a laboratory operations budget
 - a. Ensure budgets, cost analysis, purchase requests above \$3000 be reviewed by key stakeholders
3. Participate in the design and implementation of laboratory strategies, plans and procedures to align with the laboratory mission, vision and culture
4. Perform all administrative duties that include billing, accounts receivable, QC documentation, etc.
5. Represent the laboratory at trade shows and conferences
6. Perform outreach through the following outlets:
 - a. Social media
 - b. Website development and maintenance
 - c. Webinars, workshops, and presentations
7. Participates in the Quality Management System including, but not limited to:
 - a. Support of the yearly management reviews concerning audit status, lab operations, and other pertinent items
 - b. Support of internal and external audits
 - c. Support of the deviation, conflict resolution, and non-compliance processes, as required



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Additional Roles and Responsibilities

1. Serve as the Forensic DNA Technical Leader during extended time periods when the position is vacant or the current Forensic DNA Technical leader is otherwise unavailable (vacation, illness etc.), if qualified
2. Perform the duties of a qualified Forensic DNA Analyst:
 - a. Perform scientific examination, all laboratory efforts, and STR DNA analysis of biological evidence collected in connection with death and criminal investigations, including comparison and interpretation of STR DNA profiles as well as statistical analysis as applicable
 - i. Other relevant DNA interpretation and analysis (SNP, NGS, mtDNA) may be required as needed
 - ii. Non-criminal casework (private DNA testing, research, genealogy studies etc.) may be required as needed
 - b. Crafting and authorizing a laboratory report as a result of testing, interpretation and analysis
 - c. Provide Forensic DNA technical and/or administrative peer review
 - d. Testify as an expert witness in court proceedings
 - e. Successfully complete proficiency testing requirements
3. Participate in continuing education (workshops, training courses, conferences etc.) as per laboratory policy and applicable accreditation, certification, and FBI QAS requirements
 - f. Maintain documentation of above participation, as required by laboratory policy
4. Provide training to laboratory staff
5. Maintain at least a minimum level of productivity as determined by scientific board for review
6. Adhere to all safety procedures and protocols as mandated by the laboratory management system

4. References

1. Federal Bureau of Investigation, "Quality Assurance Standards for Forensic DNA Testing Laboratories"
2. ISO/IEC 17025:2017 – Forensic Science Testing and Calibration Laboratories

5. Definitions

N/A