

# **Intermountain Forensics**

SOP #

ORG-213

01

Revision #

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Issue Date

Forensic DNA Technical Leader Approval

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03/01/2023

## **Position Summary - Director of Bioinformatics**

#### 1. Purpose

To describe the roles and responsibilities of the position of the Director of Bioinformatics 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 Bioinformatics is responsible for the development and implementation of the bioinformatic pipeline used for the analysis of data generated from the multiparallel sequencing (MPS) technologies utilized by Intermountain Forensics. This position may perform managing responsibilities of personnel performing data analysis of MPS data, performs bioinformatic data analysis, and ensures appropriate documentation and accuracy of that analysis.

### 3. Procedure

### Minimum Educational Requirements

- 1. Bachelor's degree in Computer Science, Bioinformatics, or other related field
  - a. Requirements for a degree may be replaced by a combination of coursework and experience with one or more systems programming languages and/or scripting languages

#### Preferred Educational Requirements

- 1. Bachelor's degree which includes courses in natural, physical, or forensic sciences
- 2. Master's degree in a computer science, bioinformatics, or other related scientific field

# Minimum Experience Requirements

- 1. Three years of Bioinformatics experience:
  - a. Obtained with an organization that completes cases where multiparallel sequencing was conducted for the identification and evaluation of biological evidence in criminal matters or for the identification of unidentified human remains
- 2. Two years of management and/or supervisory experience

#### **Preferred Certification**

1. 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. Direct management of bioinformatician staff members, when necessary
- 2. Perform the duties of a bioinformatician:
  - a. Analysis of MPS data according to the IMF-validated data pipeline
    - b. Documentation of analysis according to SOPs
- 2. Participates in the IMF proficiency testing/monitoring program.
- 3. Participates in implementing and maintaining the quality assurance and quality control program, as well as laboratory safety, to ensure the integrity of analytical testing and results.



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# Additional Roles and Responsibilities

- 1. Serve as an administrator of the IMF IT infrastructure, where necessary
- 2. Participate in validation, as necessary
- 3. Participate in continuing education (workshops, training courses, conferences etc.) as per laboratory policy and applicable accreditation and certification requirements
- a. Maintain documentation of above participation as per policy

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- 4. Provide training to laboratory staff and external entities
- 5. Establish and maintain relationships with customers, vendors, and business partners
- 6. Maintain at least a minimum level of productivity as determined by management

#### 4. References

1. N/A

# 5. Definitions

N/A