



## **Data Science & Biodiversity Informatics Research Technician/Research Associate (Full Time, One-Year)**

**Job Category:** Research

Full-Time

On-site

Rate: \$50,000/year

### **Summary**

The Memphis Zoo is seeking a motivated and creative **Bioinformatics & Research Technician / Research Associate** for a one-year appointment focused on **applying data science, bioinformatics, and quantitative methods to zoo data and increasing connectivity between zoo and museum biodiversity research**. This position will collaborate closely with the Arctos Consortium to support the establishment and advancement of an accessible database for the Memphis Zoo Genome Resource Bank.

This position will contribute to a project focused on increasing the accessibility, interoperability, and long-term impact of biological collections and cryopreserved samples by modernizing biobank data infrastructure and integrating zoo collections into global biodiversity information networks. Working at the interface of museum science, biodiversity informatics, conservation biology, and data management, the successful candidate will help develop scalable systems that support scientific discovery, species conservation, and cross-institutional collaboration.

### **Project Overview**

The successful candidate will support efforts to:

- Restructure and modernize the Memphis Zoo Genome Resource Bank (MZGRB) database.
- Migrate existing collection records into the Arctos Collections Management System.
- Standardize data using Darwin Core Data Standards and FAIR Data Principles (Findable, Accessible, Interoperable, and Reusable).
- Increase discoverability of biobank records through integration with global biodiversity infrastructure.
- Support development of a searchable, public-facing web portal for MZGRB collections.
- Establish workflows and best practices that can serve as a model for zoo and aquarium biobanking networks.

### **Essential Job Functions/Primary Responsibilities**

- Organize, curate, clean, and standardize biological collections and cryobank metadata.
- Assist with migration of legacy sample records into Arctos.
- Develop and maintain workflows for data entry, validation, curation, and long-term data stewardship.
- Apply biodiversity informatics standards, including Darwin Core and FAIR data practices.
- Support implementation of barcode-based sample and storage tracking systems.
- Assist with management and documentation of cryopreserved sample inventories.

- Contribute to cross-institutional data integration of collection records with biodiversity aggregators and data-sharing platforms.
- Collaborate in development and testing of a public-facing database portal.
- Assist with analysis and reporting of database usage, accessibility, and project outcomes.
- Develop and document standard operating procedures (SOPs) for physical collection curation, sample management, and associated database workflows.
- Contribute to preparation of presentations, protocols, training materials, and dissemination activities.

#### **Minimum Education and Experience**

- Bachelor's degree in Bioinformatics, Data Science, Computer Science, Information Science, Zoo/Museum Studies, or a related field.
- Experience working with structured datasets and relational databases.
- Proficiency in at least one analytical or scripting language (Python, R, SQL, or equivalent).
- Strong attention to detail and ability to manage complex records.
- Excellent written and verbal communication skills.

#### **Preferred Education and Experience**

- Experience with biodiversity, museum, biobank, genomic, or collections datasets.
- Familiarity with Arctos collection management systems and metadata standards.
- Knowledge of FAIR Data Principles and/or Darwin Core standards.
- Experience with database migration, data pipelines, or web-based data platforms.
- Interest in open science and collaborative data infrastructure.

#### **Competencies**

- Data Normalization and Relational Database Concepts
- Familiarity with Darwin Core (DwC) Data Standards, Biodiversity Data Aggregators, & FAIR Principles
- Experience with Biological Specimen Data Migration & Bulkloading
- Inventory Management & Barcoding Workflow Implementation
- Oral and written communication
- Critical thinking and analysis
- Stress Management/Composure
- Flexibility
- Teamwork Orientation

#### **Supervisory Responsibility**

Students and interns may be the supervisory responsibility of this position.

#### **Reporting Structure**

Reports to the Curator of Research, Dr. Sinlan Poo.

#### **Starting Date**

August 1, 2026.

#### **Position Type**

This is a full-time, one-year, salary position. Position is based in Memphis, Tennessee. This position is considered exempt under the federal and state wage and hour laws.

### **Compensation**

\$50,000 annually.

### **Work Environment**

While performing the duties of the job, the employee will primarily be stationed in an office or lab space.

### **Physical Demands**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

This position requires frequent sitting, moving, and standing, and may occasionally move or lift objects up to 20 pounds. Occasional reaching, stooping, kneeling, crouching, and climbing ladders is required.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

### **Other Duties**

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice.

### **Other Requirements**

- 21 years or older.
- Clear background check.
- Clear drug screening.
- Valid driver's license.
- Clear MVR screening.
- Proof of current automobile insurance.

### **Benefits & Perks**

The Memphis Zoo has a comprehensive benefits and employee perks package. Please see our [Memphis Zoo Careers](#) page for details.

The Memphis Zoo is an equal opportunity employer. Applicants will not be discriminated against because of race, color, creed, sex, sexual orientation, gender identity or expression, age, religion, national origin, citizenship status, disability, ancestry, marital status, veteran status, medical condition, or any protected category prohibited by local, state or federal laws.

If you need to request any accommodations for the interview or hiring process, please let your hiring manager or HR know. Human resources can be contacted by emailing: [HRteam@memphiszoo.org](mailto:HRteam@memphiszoo.org)

*All offers of employment are contingent upon the successful completion of a pre-employment drug screening and background check.*

The Memphis Zoo participates in e-verify and is an EOE/ad/vet employer.

### **How to Apply**

Please read the application instructions carefully.

Please submit:

1. Cover letter describing interest and relevant experience (1 page max)
2. Curriculum vitae or résumé
3. Contact information for three professional references who are ready to send recommendation letters upon request
4. Optional: GitHub, portfolio, publications, or examples of database or analytical work

All files should be submitted as a single PDF with the file named "Bioinformatics\_LastName" and should be submitted online at [www.memphiszoo.org](http://www.memphiszoo.org). Incomplete applications will not be considered.

### **Application webpage**

See Memphis Zoo's career webpage.

### **Inquiries**

Inquiries about the positions should be directed to Dr. Sinlan Poo ([spoo@memphiszoo.org](mailto:spoo@memphiszoo.org)).

### **Application Deadline**

The application deadline is **July 10th, 2026**. Late applicants will be considered until the position is filled.