

## Bioinformatics Intern in Integrated Data Sciences Innovation

We are the Indiana Biosciences Research Institute (IBRI). We are a leading translational research institute that advances academic and industry science through collaboration to improve patient health outcomes. Building your career at the IBRI in Indianapolis' 16 Tech Innovation District, means being part of a team of renowned scientists, creative thinkers, and innovative leaders.

Today's research is being driven by significant advances in our abilities to study complex disease processes and propose new ways to improve patients' lives. To reflect the evolving nature of life sciences research and encourage synergies through collaboration, we're enhancing our integrated capabilities, adding depth to how we approach patient-informed translational science and pursuing four foundational areas of scientific focus. These four areas will provide us the core talent and capability to pursue translational science in this new patient-centric framework:

- **Disease, Systems, Pathways** – We're working to better understand diabetes and identify new ways to combat the disease. We're applying this learning to other diseases that share common systems and pathways.
- **Molecular Innovation** – We're developing new capabilities for molecular design and drug discovery to investigate disease processes and pursue new therapeutic approaches.
- **Integrated Data Sciences** – We're pursuing advanced data sciences to create novel end-user inspired solutions that address complex analysis, simulation, and prediction across the translational sciences.
- **Enabling Technologies** – We're building a rich platform of enabling technologies that give our scientists, partners, and collaborators access to the best tools to solve complex scientific problems.

The IBRI's vision is to build a world-class organization of researchers, innovators and business professionals that catalyze activities across the Indiana (and beyond) life sciences community. To achieve that vision, we look for curious and collaborative team members who are energized by innovation, guided by integrity, and inspired by diversity.

### The Opportunity:

The Integrated Data Sciences Innovation scientific area has an opportunity for a highly motivated student desiring to continue their training and gain experience in bioinformatics and computational biology. The student in this role will gain hands-on experience with commonly used bioinformatics pipelines to solve biological problems working closely with the Director of Bioinformatics and with the disease biologists at the IBRI.

This position will be an integral part of the Integrated Data Sciences Innovation group as it works to empower the IBRI strategy through applied bioinformatics analysis, implementation of bioinformatics pipelines, novel bioinformatics tool development to understand disease mechanisms and accelerate novel biomarker and therapeutic discovery.

This internship is for the period of Jan. 16, 2023, to April 14, 2023, and based on success within the current role, an ability to continue as an intern into the following semester if their schedule permits.

### **Responsibilities:**

Working under the Director of Bioinformatics:

- Provide bioinformatics and computational biology support to multi-disciplinary research teams comprised of biologists, chemists, immunologists, biostatisticians and/or clinicians.
- Develop innovative and robust pipelines for the extraction, interpretation and analyses of diverse data sources to inform disease team decision making.
- Support efforts delivering these workflows into tools or platforms for effective use of data searching, integration, sharing, analysis and visualization by research teams.
- Effectively communicate to collaborating researchers in other centers so that they understand their data, analysis workflow and the results of the analysis. Effective communication is key to this role so that researchers can leverage IBRI bioinformatics capabilities.

### **Qualifications:**

- High school diploma or equivalent is required.
- Must be presently enrolled as a student pursuing a bachelor's degree in informatics, bioinformatics, biology or another science-related field.
- Must have software programming or scripting experience relevant to this role (e.g., R, Python).
- Must have good reasoning and problem-solving skills.
- Must have strong interpersonal and communication skills.

### **Apply:**

Please visit us at <https://www.indianabiosciences.org/careers/> to learn more and/or apply for this opportunity.