POSITION DESCRIPTION

Hays Hill Title: Database Administrator, Associate Level
Working Title: Application Analyst
Reports to: Director of LSRI
Evaluation: Evaluation occurs annually according to LSRI staff policies.

Position Overview:
The Lake Superior Research Institute (LSRI) is an applied environmental research unit at the University of Wisconsin-Superior. Its goals are to help identify, understand and solve environmental problems, perpetuate professional growth of associated staff, provide students with hands-on research experience, develop facilities and equipment to increase both research and instructional opportunities and serve as a resource on environmental issues.

In general, the Associate Database Administrator/Application Analyst is responsible for the direct development and management of databases for environmental research projects that are designed with Microsoft Access or other appropriate database software. A thorough understanding of Visual Basic programming language and its integration with Microsoft Access is essential for current and future data management projects. This position also requires management of environmental data entered into Microsoft Excel spreadsheets, portable document format (PDFs), and Microsoft Word documents. Specifically, the Associate Database Administrator/Analyst will work with a multidisciplinary team (engineers, biologists, and chemists) to develop a comprehensive database, using a platform that can accommodate multiple users at one time, capable of storing and querying water quality data from around the world, as well as water quality and results from the Great Ships Initiative land-based and shipboard testing. This position will also require one to develop, refine, troubleshoot, and maintain current Access-based databases for Great Lakes National Program Office (GLNPO; United States Environmental Protection Agency) based contracts.

This 12-month academic staff position is project-based and contingent upon available funding. Currently funding is available for one year, other funding is being pursued.

Roles and Responsibilities:
- Maintains previously-developed databases for current research projects and enforces standards and practices related to those databases.
- Designs new databases as needed for environmental research projects using Microsoft Access or other appropriate database software.
- Monitors developments of new data management systems to ensure current practices are in keeping with current information technology standards.
- May be involved with development of quality control checks for environmental data entered into new and future databases.
- Works with researchers, scientists, and engineers to develop data entry methods for current and new databases.
- Works with researchers, scientists, and engineers to extract and report data from database.
- Assists in resolving issues of effective data storage, such as data redundancy.
- Works cooperatively with campus IT and LSRI Director to support and maintain LSRI staff and LSRI laboratory software and computers.
**Knowledge, Skills, and Abilities:**

- Knowledge of basic principles, concepts, and methodology allowing for fulfillment of job duties.
- Ability to develop, refine, troubleshoot, and maintain Microsoft Access-based databases.
- Ability to keep current with information technology developments related to Microsoft Access, Visual Basic, and electronic data management and storage in general.
- Requires an understanding of Visual Basic programming language and its integration with Microsoft Access.
- Ability to work with diverse users of databases.
- Requires attention to detail and creative-thinking ability.
- Requires high level of interpersonal skills to establish and enhance positive relationships with project funders, co-workers, university staff, and others.
- Ability to accommodate a flexible work schedule and project deadlines.
- Ability to manage time effectively and prioritize tasks.
- Ability to work with principal investigators to develop budgets for future projects.

**Required Qualifications:**

- Bachelor’s degree in Computer Science, Information Systems, or equivalent field of study and 2 years of experience OR 5 years of experience working as a Systems Analyst or in a computer programming field.
- Thorough knowledge of programmatic methods and functionalities of Microsoft Access and Excel.
- Thorough knowledge of the functionalities of the Visual Basic programming language.
- Knowledge of Microsoft Windows operating system.

**Preferred Qualifications:**

- Experience with environmental science research.
- Experience with Geographic Information Systems.