Job Title: Statistician Senior / Intermediate

Job/Career Family: Research
Market Title: Statistician Senior / Intermediate
FLSA: Exempt
Salary Range: $45,000 - $65,000
Hours/Week: 40 Hours
Shift/Hours/Days: Regular Business

A unit of the Institute for Social Research at the University of Michigan, the Inter-university Consortium for Political and Social Research (ICPSR) is an international membership organization that provides web-based access to empirical social science data for research and teaching, and offers classroom training in quantitative methods to facilitate effective data use. ICPSR also provides user support and preserves data to ensure their long-term availability. Over 600 institutions from around the world are members of ICPSR.

The work environment is a combination of the best aspects of a small nonprofit or business within a university setting. ICPSR is small enough that each person can make a difference, yet large enough to offer a variety of career opportunities. We have a relaxed, collegial atmosphere that fosters communication and networking within and between departments. We are family-friendly, offering flexibility with work hours, and we have a diverse staff that enriches the workplace with their skills and experience.

**Project Description**

The Substance Abuse and Mental Health Data Archive (SAMHDA) at ICPSR acquires and distributes quantitative substance abuse and mental health data, makes the data publicly available via a web site on the Internet, provides user support, and facilitates data use with an online data analysis system (SDA) and through mailings and conference attendance. For more information please visit the project web site at http://www.icpsr.umich.edu/SAMHDA/.

**Position Summary**

Using statistical and management skills provide day-to-day oversight of two tasks to launch new capabilities providing restricted-use data to users. The first task will provide data behind a secure online data analysis system (R-DAS). The second task will provide access to data via a virtual “data portal.” Work as a member of the data group to create workflow and processing efficiencies in order to integrate these tasks into the project. Use superior organization and management skills to keep task and detailed subtask completion on time and ensure completion of cross-unit tasks. Using statistical skill and working with senior statistician and other project team members, ensure integrity of systems.

Use programming skill to automate data processing efficiencies in SPSS and/or SAS.

**Major Areas of Responsibility**

**Statistical Data Analysis (35%)**

Quickly and accurately produce Web site text and help documentation for statistical issues such as appropriate corrections for surveys with complex sample designs and for other survey designs (SRS, experimental). Work with senior statistician and project team members to quickly and efficiently respond to detailed statistical analysis questions from funding agency and subcontractors.

**Technical Oversight of Restricted-use Data Systems (30%)**

Ensure fidelity and security of new restricted-use data systems. Launch systems, track any defects, oversee implementation and testing of solutions; report results. Manage restricted contracting system; ensure users are CIPSEA certified.

For the data portal, coordinate closely with the project director, the project’s data group, and the disclosure review board (DRB) to review user applications, conduct disclosure reviews of analytic output, and communicate decisions to users. For the R-DAS, oversee implementation and testing of disclosure specifications for the R-

User support (5%)

Once restricted-use data systems are launched, respond to user questions involving statistical modeling, complex sampling design, questions involving data hosted on data portal.

Disclosure Review and Analysis (15%)

Assess data for disclosure risk to respondent confidentiality using standard processes and agreed upon procedures; work with project director, project team members, and DRB to conduct disclosure reviews and analyses. Draft disclosure analysis reports summarizing risks to confidentiality; attend Disclosure Review Board (DRB) meetings; work with project statistician to apply recommended statistical disclosure control techniques to data collections, such as data swapping, blank (edit) and impute; run pre- and post-results; recommend modification as necessary; write draft and final reports summarizing results.

Automation (5%)

Write programs to automate data processing routines for annual and one-time data collections; improve processes by developing programming routines to streamline work. Programs are currently written in SPSS, Excel and SQL.

Other work, as assigned (5%)

Work independently and collaboratively with project director and other project team members to accomplish other project tasks as required. Assist with proposal development.

Professional Development (5%)

Attend professional development seminars or related training programs.

Qualifications

Master’s degree in statistics or a social science field with extensive statistical applications. Five or more years experience programming solutions and data manipulation in SPSS and SAS; demonstrated knowledge of social science research methods and concepts; experience with primary survey data collection, coding, processing and data management. Ability to accurately and efficiently assess technical problems and program solutions. Understanding of different (complex) survey designs and statistical tools and procedures for correct analysis of each (e.g. complex sampling design, SRS, etc.). Understanding of analytic capabilities and different strengths of SUDAAN, SAS, and Stata. Must have outstanding attention to detail, be well organized, and have the ability to manage multiple projects. Ability to manage the work of others, set priorities, follow-through, ensure deadlines are met.

Excellent communication skills, both oral and written, in the English language. Must have good interpersonal skills. Have experience working collaboratively with team members having different skills and expertise; experience with projects involving iterative work processes. Must have proven ability to write technical documentation for use by others clearly and concisely.

Desired: Five or more years of progressively responsible task management experience in a social science setting; experience with UNIX/Linux; knowledge of mental health and/or substance abuse issues or an interest in these fields of study. Experience in a statistical consulting environment; publication and research records. Work experience related to the confidentiality of records and disclosure risk. Demonstrated ability using SQL programming with Excel, Access and SAS.

Reports to the SAMHDA Data Manager.