BIOSTATISTICIAN III

(CTSI – Biostatistics Core)

Occupational Summary

Under the guidance of the CTSI Biostatistics Core management team in the Department of Biostatistics and Bioinformatics, perform intermediate and advanced level statistical analysis and programming for a broad range of medical research projects. Collaborate closely with a cross-functional project team, physicians, lab scientists, and graduate students with regard to statistical aspects of each project. Demonstrate expertise in statistical and clinical areas in order to serve as a resource for other Biostatisticians in the Core.

Responsibilities

Collaboration, communication, leadership, and project management

- Collaborate effectively with programmers, statisticians (both junior and senior), medical personnel, and representatives within the business community under limiting guidance of a supervising Biostatistician investigator.
- Represent the functional group in project team meetings and contribute constructively to project discussions.
- Develop leadership and communication skills and share them with others.
- Serve as a resource for other statisticians.
- Adhere to standard operating procedures (SOPs) of the functional department as they apply to documentation and validation of clinical research statistics.
- Manage project responsibilities with decreasing levels of supervision or regular support.
- Take initiative to complete project-specific responsibilities with minimal supervision.
- Demonstrate ability to multi-task and meet deadlines as appropriate.
- Build documentation and organizational skills to effectively return to a trial or manuscript project after long intervals during which no progress was made by other members of the project team.
- Supervise junior statistician on collaborative projects.

Statistical analysis planning, generation, and interpretation

- Participate in most statistical aspects of a medical research project.
- Evaluate research studies and recommend statistical procedures, including, but not limited to, hypothesis tests, regression models and multivariate analysis to analyze the data.
- Contribute meaningfully to discussions of analyses and identify next steps for analyses.
- Prepare statistical analysis plans independently.
- Prepare comprehensive statistical reports to communicate findings with investigators.
- Be able to work on any phase of a manuscript project, from initial meeting with an investigator to final review of a manuscript prior to submission for publication, with guidance.
- Prepare statistical components of presentations, abstracts, study protocols, and manuscripts.
- Learn new statistical methods as needed, and apply new skills to future projects.
- Perform intermediate and advanced statistical analyses, including but not limited to generating descriptive and test statistics, and performing regression modelling.
- Check results for accuracy and consistency.

- Demonstrate clinical/statistical area of expertise and serve as resource in this area for junior statisticians in the Core.
- Participate in grant preparation as key personnel on a variety of medical studies under direct guidance of faculty Biostatistician.

Programming and data documentation

- Program analysis datasets using SAS or R; combine multiple disparate raw databases and derive analysis variables accurately.
- Design analysis data set specifications through writing own programming code.
- Demonstrate good programming practices through proper documentation, commenting, and readability.
- Perform complex programming using advanced options in SAS procedures and macros, and R functions with increasing efficiency.
- Participate actively in the statistical team responsible for designing and validating analysis data sets, programs, and statistical output products (tables, listings, figures).
- Perform appropriate and adequate code checks to ensure accuracy of results

Education

Position requires a minimum of a Doctoral degree in (bio) statistics or related field and no relevant experience, or a Master's degree in (bio) statistics or related field and 2 years relevant experience, or a Bachelor's degree in (bio) statistics or related field and 4 years relevant experience.

Experience

Contribution to analysis of clinical trials and/or clinical research projects, and/or participation in preparation of academic manuscripts or other written summaries of analysis results, thorough experience with SAS and R, experience with observation, survival, longitudinal, categorical, and generalized linear models, and solid command of the English language is required. Desirable experience includes prior role as a lead statistician on clinical trials and/or clinical research projects that have delivered the agreed-upon end products on time, and prior guidance of lower level or less experienced staff.