JOB DESCRIPTION

Biostatistician

OBJECTIVE:
Virtual Pediatric Systems, LLC, (“VPS”) is seeking a full time Ph.D. prepared experienced biostatistician familiar with the health care sector. The company is particularly interested in candidates whose interests focus on predictive algorithms, develop largely multivariate regression techniques, and are used daily by VPS for generation of standardized mortality ratios and severity of illness adjusted length of stay for participating intensive care units. The development and application of statistical methods for problems in topics dealing with, but not limited to, data mining, machine learning, multiple testing, high-dimensional data, computational statistics, and propensity score matching statistics. The successful candidate for this position will report to the CSO and is expected to direct the data management and statistical team in assuring the highest quality of the VPS product on a day-to-day and strategic basis.

COMPANY INFORMATION:
VPS is a web-based pediatric critical care network that develops, validates, and reports on quality metrics for more than 135 pediatric intensive care units (PICUs) across North America. The database uses standardized clinical data definitions, data quality control and data analysis. VPS is the largest international data warehouse for critically ill children (over 1 million pediatric ICU patients including more than 110,000 Cardiac ICU patients). The database has published well over 100 scientific papers in high-impact peer reviewed journals. The database is endorsed by the US News and World Report, American Academy of Pediatrics, Society of Critical Care Medicine and the State of California as a quality improvement tool. More details about the database can be found at: http://www.myvps.org.

ESSENTIAL FUNCTIONS:
The main function for VPS’s Biostatistician is to assure the overall scientific validity of VPS’s quality reports. This includes the essential periodic re-calibration of predictive models, collaboration with VPS data managers on optimal data collection systems, reporting, and interpretation of results and participation in research studies with access to VPS’s data with over 1 million patients. The Biostatistician will be expected to participate in generation of scientific publications and dissemination of novel findings. It is expected that the ideal candidate will continue to grow academically, develop reporting and benchmarking capabilities, design research, participate in it, and contribute to the literature across the areas mentioned. This job is based in Los Angeles, CA.
REQUIRED KNOWLEDGE AND SKILLS:

- Ph.D. Biostatistics, Statistics, Biomathematics, Mathematics or similar
- Strong skills with at least one of the following: R, Python, STATA, SPSS, MATLAB or SAS
- Strong knowledge of multiple regression with assessments of model fit and calibration
- Experience analyzing real-world data sets
- Familiarity with or willingness to learn databases (e.g., MySQL, SQL Server, Redshift)
- Familiarity with or willingness to learn modern project management tools (e.g., JIRA, subversion, Git/Github, Wikis)
- Passion for statistics, healthcare and keeping up to date on latest methods
- Excellent English communication skills, both written and spoken

PREFERRED SKILLS AND EXPERIENCE:

- Familiarity with clinical domain
- Strong familiarity with Frequentist statistics
- Previous experience working with interdisciplinary teams
- Experience building business intelligence dashboards
- Programming skills sufficient to build demos
- Track record of recalibration and collaborative research leading to peer-reviewed publications

* Salary will be commensurate with qualifications and experience. Application material are to be sent to breisner@myvps.org and should include a cover letter, curriculum vitae, research and teaching statements, transcripts, list of publications and letters of reference. Applications will be reviewed as they are received and continue until the position is filled.