

Job tile: Specialist, ETL and Application Developer

Starting March 1st 2014

Duration 18 months

General Summary

Installs, configures and loads clinical data into tranSMART in support of the Phelan-McDermid Syndrome Data Network at the Center of Biomedical Informatics, Harvard Medical School. The open source tranSMART platform is an i2b2 based research environment providing researchers a single self-service web portal with access to phenotypic, 'omics, and unstructured text-based data from multiple internal and external sources, combined with search and analysis capabilities.

The goal of the Phelan-McDermid Syndrome Data Network is to collect all available medical and research data from individuals diagnosed with Phelan-McDermid Syndrome to make meaningful, well-annotated clinical data available to researchers and to share insights with members of the PCORI network. This will help researchers to mine much more meaningful information for future studies of those diagnosed with Phelan-McDermid Syndrome. This short video presents our work using tranSMART on an Autism pilot.

Duties Notice

The statements below describe the essential duties of the person assigned to this job. They are not intended as an exhaustive list of all job duties and responsibilities.

Principal Duties and Responsibilities

- 1. Installs tranSMART and configures it to utilize an Oracle database.
- 2. Develops loading programs and procedures to handle data from different clinical and computational sources. Data will be loaded into the existing tranSMART schema
- 3. If it requires, extends the existing tranSMART schema to handle new data formats.
- 4. Installs PopMedNet™ software
- 5. Configure the interface between <u>i2b2/tranSMART and PopMedNet™</u>
- 6. Works closely with researchers to understand data derived from both healthcare providers and computational methods.
- 7. Works independently and self-manages different aspects of the project lifecycle.
- 8. May assist team members in database administration, maintenance, and preparing reports.
- 9. Documents any software written to inform end users of its functionality, and developers for support purposes.





Minimum Knowledge and Skills Required

- 1. Work requires the knowledge of theories, principles, and concepts typically acquired through completion of a Bachelor's degree in Computer Science and/or Biomedical Informatics or a closely related field and three to four years of experience.
- 2. Work requires knowledge biomedical terminologies and ontologies.
- 3. Work requires a strong knowledge of Oracle database design and development.
- 4. Work requires knowledge of Java, Perl and Pentaho Data Integration (Kettle).
- 5. Work requires the analytical skills to collect information from diverse sources, apply professional principles in performing various analyses, and summarize the data in order to solve problems.
- 6. Work requires the ability to communicate effectively both orally and in writing.
- 7. Work requires the ability to manage projects in a self-starting, nearly autonomous fashion.
- 8. Works requires the ability to work well on a team, communicating effectively and supporting team members as needed.
- 9. Work requires that incumbent works on-site for most or all of the workweek, being available for frequent in-person meetings.
- 10. Work requires the ability to interact with outside collaborators, providing prompt and professional service, support and communication.

For additional information contact:

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