

# Job Description Details



## JOB SUMMARY

*This section introduces the reader to the position. Briefly describe (3-4 sentences max.) the purpose of the position (i.e., explain the general reporting structure, what is done, how it is done and why it is done). The reader of this summary should come away with a good sense of the job's purpose in terms of both the major activities and critical end results.*

LAWSON JOB CODE	JOB TITLE	EFFECTIVE DATE	JOB STATUS
7277	Data Architect (GHRI)	5/8/2011	Active

DEPARTMENT	JOB CLASS	REGION
GROUP HEALTH RESEARCH INSTITUTE	IS	Western Washington

### SUMMARY

Initiates, coordinates and architects designs for research data strategic initiatives in the areas of data warehousing, meta-data management and data governance. Collaborates with colleagues within Group Health and with researchers at other organizations to design and implement common data structures across sites that meet the needs of researchers. Improves the efficiency and effectiveness of multi-site research projects by improving quality and use of data. Works with others to procure data resources to support research initiatives.

The role supports all data-related aspects of research business intelligence and application development. This includes the identification and documentation of business requirements related to data, data analysis, establishment of data naming conventions, custodianship responsibilities, modeling standards, and development of data policy and procedure. This job requires some local travel and occasional U.S. travel.

## PRINCIPAL DUTIES AND RESPONSIBILITIES

*In order of importance, describe each major set of responsibilities assigned to this position which would occupy at least 10% or more of the incumbent's time. Include percent of time for each responsibility. Duties must total 100%. Do not use "other duties as assigned." For each major responsibility, provide a clear concise statement, using action verbs, to describe what is done, with/or for whom the action is taken, and the purpose.*

PRINCIPAL DUTIES AND RESPONSIBILITIES	%
Assists in the development of continuous improvements to larger, more complex, strategic data practices. Leads in the formation and implementation of a multi-site research data governance program. Leads effort around technical architecture design to provide for the accessibility, security and integrity of research data.	20
Supports business intelligence and application development by assisting with identification and documentation of requirements with special emphasis on the information used in business processes and produces related deliverables (e.g., data models, data definitions, etc.).	20
Designs, reviews, administers, and participates in the use of meta data management tools, logical and physical diagrams, data definitions, glossary of business terms, data custodianship, and the sensitivity of data and other information. Includes logical data analysis and modeling; physical database design considerations, and problem resolution around large complex solutions. Acts as a consultant to colleagues in other departments at Group Health and at other research institutions concerning complex data-related issues.	20
Maintains the production environment for GHRI data warehouse resources. Manages the data warehouse load schedule. Monitors recurring processes and takes corrective action when necessary. Plans for inclusion of new data areas into the GHRI data warehouse. Determines physical architecture, indexing/access methods, ETL design and implementation	20
Provides training and mentoring to programmers at GHRI and at other institutions; offers formal presentations on programming topics both locally and at national research meetings; encourages project teams to use appropriate new technologies and new data sources. Collaborates with colleagues in other departments to plan for systems changes that impact data; works with others to procure needed data-related resources; advocates for needs of researchers.	20
<b>Total</b>	<b>100</b>

## JOB SPECIFICATIONS

### Education

*Indicate the level of education needed to successfully perform the job duties.*

REQUIRED	DESCRIPTION	PREFERRED	DESCRIPTION
Bachelors Degree	various	Masters Degree	Public Health, Epidemiology, Statistics, Computer Science or related field strongly preferred.

### Licenses, Certifications, or Other Essential Qualifications

*Identify any professional licenses, certificates, driver's license, etc. that are needed to successfully perform the job duties.*

REQUIRED	DESCRIPTION	PREFERRED	DESCRIPTION
None Required		None Required	

## Experience

*Identify the level and list of the experience needed to successfully perform the job duties*

REQUIRED	DESCRIPTION	PREFERRED	DESCRIPTION
10 or more years	Information systems experience, at least 5 years in data warehousing, data architecture, data governance, or similar fields.	10 or more years	Programming experience in comparable research environment.

## Knowledge & Skills

*Identify the level and list the knowledge and skills needed to successfully perform the job duties.*

*\* Knowledge: Areas of specialty or expertise (e.g., intermediate knowledge of research methodology and data collection modalities)*

*\* Skills: Abilities needed to execute job duties (e.g., advanced writing and documentation skills).*

REQUIRED	DESCRIPTION	PREFERRED	DESCRIPTION
Advanced	Expertise in analysis and programming using SAS and MS Access; understanding of computer programming languages & design concepts; understanding of and demonstrated experience with research methodology; logic and analytical ability; good communication skills; strong organizational skills.	Advanced	Demonstrated experience in driving organizational change around data resource management and meta-data management as well as success in translating business needs into complex logical data and process modes. Well-developed leadership qualities and excellent oral and written communication skills.

## JOB DEMANDS

Identify how often an individual in the job would be exposed to or required to perform each of the Job Demands below.

### Physical Demands

ADA DEMAND	FREQUENCY
Balancing	2 Occasionally (1 - 33%)
Carrying Items (distance 5 - 10 fee	1 Rarely (Less than 1%)
Climbing (stairs/ladders/scaffoldin	1 Rarely (Less than 1%)
Crawling	1 Rarely (Less than 1%)
Crouching (bend at knees)	1 Rarely (Less than 1%)
Grasping/Handling	1 Rarely (Less than 1%)
Keyboard Operation	4 Continuously (66 - 100%)
Kneeling	1 Rarely (Less than 1%)
Leg/Foot Use	1 Rarely (Less than 1%)
Lifting (average 50 lbs)	1 Rarely (Less than 1%)
Operation of Motorized Vehicle	1 Rarely (Less than 1%)
Patient Transfers/Lifting	1 Rarely (Less than 1%)
Pushing/Pulling	1 Rarely (Less than 1%)
Rapid Mental/Hand/Eye	4 Continuously (66 - 100%)
Reaching (overhead/extension)	2 Occasionally (1 - 33%)
Sitting	4 Continuously (66 - 100%)
Standing	2 Occasionally (1 - 33%)
Stooping (bend at waist)	1 Rarely (Less than 1%)
Twisting (knees/waist/neck)	1 Rarely (Less than 1%)
Walking	2 Occasionally (1 - 33%)

### Sensory Demands

ADA DEMAND	FREQUENCY
Hearing by Phone	3 Frequently (34 - 65%)
Hearing in Person	3 Frequently (34 - 65%)
Smell	2 Occasionally (1 - 33%)
Talking by Phone	3 Frequently (34 - 65%)
Talking in Person	3 Frequently (34 - 65%)
Vision: Computer Monitor	4 Continuously (66 - 100%)
Vision: Correctable	3 Frequently (34 - 65%)
Vision: Depth Perception	2 Occasionally (1 - 33%)
Vision: Distinguish Color	2 Occasionally (1 - 33%)

## Cognitive Demands

ADA DEMAND	FREQUENCY
Ability to Work Independently	4 Continuously (66 - 100%)
Attention to Detail	4 Continuously (66 - 100%)
High-Level Strategic/Creative Think	4 Continuously (66 - 100%)
Read/Understand/Analyze/Recall Comp	4 Continuously (66 - 100%)
Speak/Write/Communicate Effectively	4 Continuously (66 - 100%)

## Psychological Demands

ADA DEMAND	FREQUENCY
Deadlines/Fast-Paced Environment	4 Continuously (66 - 100%)
Deals with Patient/Family Stress	1 Rarely (Less than 1%)
Highly Repetitive Work	2 Occasionally (1 - 33%)
Interactions with Multiple People	3 Frequently (34 - 65%)
Multi-Tasking/Rotating Among Multip	3 Frequently (34 - 65%)

## Scheduling Demands

ADA DEMAND	FREQUENCY
Multiple Shifts	1 Rarely (Less than 1%)
On-Time Arrivals	1 Rarely (Less than 1%)
Overtime/Workweeks over 40 hours	3 Frequently (34 - 65%)
Presence at Work Site (No Telecommu	3 Frequently (34 - 65%)
Regular/Predicable Attendance	4 Continuously (66 - 100%)

## Environmental Demands

ADA DEMAND	FREQUENCY
Exposure to Fumes/Chemicals/Dust	1 Rarely (Less than 1%)
Exposure to Humidity/Cold/Heat	1 Rarely (Less than 1%)
Exposure to Noise/Vibrations	1 Rarely (Less than 1%)
Exposure to Radiation	1 Rarely (Less than 1%)
Exposure to Unusual Lighting	1 Rarely (Less than 1%)
Handling Tools	1 Rarely (Less than 1%)
Operation of Equipment	1 Rarely (Less than 1%)
Potential Exposure to Infectious/Ha	1 Rarely (Less than 1%)
Potential Exposure to OSHA/Blood/Bo	1 Rarely (Less than 1%)
Required Hygiene Standards	4 Continuously (66 - 100%)
Works in Sterile or Isolation Areas	1 Rarely (Less than 1%)
Works Indoors	4 Continuously (66 - 100%)
Works Outdoors (in all types of wea	1 Rarely (Less than 1%)

*DISCLAIMER: The above statements are intended to describe the general nature and level of work being performed by incumbents assigned to this job. This is not intended to be an exhaustive list of all of the responsibilities, duties, and skills required. The time devoted to the activities listed may be changed and other duties may be assigned.*