

**APPENDIX A**  
**ACT Functions**

Function	Responsibilities	Recommended Qualifications	Interaction Points	Duration of Role
<b>Site Lead</b>	Overall responsibility for site's activities in the ACT network.	Institutional approval to be PI of subcontract.	ACT Leadership. Oversees other roles.	Throughout project.
<b>System Administrator (application and infrastructure)</b>	<b>Application</b> -Installation, implementation, maintenance of SHRINE and i2b2 systems -Ability to provide deep level troubleshooting when needed -Communicate with project sponsors, leadership, other local technical resources, end users on an as needed basis <b>Infrastructure</b> -Well rounded knowledge of servers, operating systems -Familiarity with local (institutional) network operations, local IT policy, and experience with top-tier infrastructure and front-line service support	<b>Basic Qualifications</b> -BA / BS in Computer Science / Engineering or related field -Have at least 3+ years of system / network administration <b>Additional Qualifications</b> -Knowledge of Linux / Unix systems -Scripting (bash, python, etc.) -Database Administration (SQL, Postgres, Oracle, etc.) -Networking skills (firewalls, proxies, certificate / encryption methods, port configuration) -Web services (Apache Tomcat, Axis, WildFly, JDK)	-Works closely with SOC, other local technology contacts	-Focused effort in the early stages of joining the ACT Network to implement i2b2, SHRINE -Continued role in regular health and maintenance once on ACT production network
<b>Site Operations Coordinator (SOC)</b>	-Institution's main, day-to-day, point of contact for network operations, administration -Report status of routine network activities (software upgrades, data refresh activities) -Assist in compiling audit information for Data Steward -Assist in creating and deactivating users in accordance with local and network policy -Serve as point of contact for local end users	-Familiarity with project management concepts -Experience with Atlassian JIRA -Attention to detail -Good communication skills	-Works closely with System Administrator, Data Steward, Research Data Curator	-Necessary for duration of ACT network participation
<b>Research Data Curator</b>	-Ensuring accuracy and compliance of research data available to the ACT network -Perform data mappings as needed -Provide feedback on local data availability to assist in development of ACT ontology -Respond / troubleshoot data	-Prior experience with i2b2, SHRINE, ontologies, ETL and data mapping -Have at least 2+ years of database administration -Knowledge of scripting methods (SQL, Python, etc.) -Familiarity with local EHR and research data handling processes	-Works closely with SOC	-Necessary for duration of ACT network participation

	anomalies discovered on the network	-Familiarity with scientific research topics highly valuable		
<b>Data Steward (User Liaison)</b>	<ul style="list-style-type: none"> <li>-Serve as contact for users (researchers) with questions or problems using the network</li> <li>-Monitors research network behavior per the Terms of Query Access</li> <li>-Ensures appropriate use of the network</li> <li>-Serves as point of contact for other institution Data Stewards, as necessary</li> </ul>	<ul style="list-style-type: none"> <li>-Experience with biomedical research topics</li> <li>-Bachelor's or Master's degree in a related field is desired</li> <li>-Good communication skills</li> <li>-Attention to detail</li> </ul>	-Works closely with the System Administrator and/or Site Operations Coordinator	<ul style="list-style-type: none"> <li>-Onboarded prior to local dissemination of ACT to end users</li> <li>-Regular role throughout participation in ACT network</li> </ul>
<b>Dissemination Lead</b>	<ul style="list-style-type: none"> <li>-Conducts ACT related communication and outreach activities to local CTSA investigators</li> </ul>	<ul style="list-style-type: none"> <li>-Good communication skills</li> <li>-Ability to facilitate rollout of ACT to local end users</li> </ul>	-ACT Dissemination & Evaluation Work Group	<ul style="list-style-type: none"> <li>-Immediately following the technical implementation of ACT, if not before, and continue through participation in the network</li> </ul>
<b>Ontologist (if available)</b>	<ul style="list-style-type: none"> <li>-Mapping local terminologies to standards</li> <li>-Collaboration on ACT ontology development and participation in the ACT Data Harmonization Work Group</li> </ul>	<ul style="list-style-type: none"> <li>-Understanding of ontology principles</li> <li>-Patient care and/or health systems domain knowledge</li> </ul>	<ul style="list-style-type: none"> <li>-Research Data Coordinator</li> <li>-ACT Data Harmonization Workgroup</li> </ul>	<ul style="list-style-type: none"> <li>-Immediate and for duration of project</li> <li>-This is an optional role; mapping tasks could be carried initially as a team effort (with extra resources) and then handled by research data curator in maintenance mode</li> </ul>