Use Case Actors

An Actor models a type of role played by an entity that interacts with the subject (e.g., by exchanging signals and data), but which is external to the subject. Actors may represent roles played by human users, external hardware, or other subjects. Note that an actor does not necessarily represent a specific physical entity but merely a particular facet (i.e., "role") of some entity that is relevant to the specification of its associated use cases. Thus, a single physical instance may play the role of several different actors and, conversely, a given actor may be played by multiple different instances.

While UML 2 does not permit associations between Actors, this constraint is often violated in practice since the generalization/specialization relationship between actors is useful in modeling overlapping behaviours between actors. The actors below are represented as having a hierarchical relationship for ease of understanding; however, these relationships can easily be removed.

- **Cancer Researcher**: plans and performs activities related to discovery of new knowledge, drugs, and treatments in the field of oncology
    - **Clinical Researcher**: works directly with patients and/or patient data while performing cancer research
    - **Basic Science Researcher**: works with scientifically generated data while performing cancer research
    - **Protocol Designer**: defines the methods used to perform cancer research
- **Information Technologist**: designs, develops, and manages the software and hardware necessary to perform cancer research
    - **Business Analyst:** analyzes the business processes and describes the goals and activities of the user community
    - **Information Modeler**: designs, defines, and describes the data that will be captured during cancer research activities
    - **Software Engineer**: implements the software systems that are used to manage and perform cancer research
    - **Systems Architect**: designs the software and hardware systems that are used to manage and perform cancer research
    - **System Administrator**: manages the software and hardware systems that are used to perform cancer research
- **Metadata Specialist**: having a deep understanding of semantics and syntactic, assists Cancer Researchers and Information Technologists on modeling and managing metadata
    - **Forms Author**: constructs data collection forms based on a library of common data elements
    - **Metadata Curator**: works hands-on with Cancer Researchers and Information Technologists to model and manage their metadata
    - **Metadata Systems Specialist**: manages centralized metadata systems and assists with the design of metadata systems
    - **Terminologist**: a metadata expert that manages and maintains the semantic concepts that underlie information models
    - **Compatibility Reviewer**: while the nature of "caBIG Compatibility" may change as need dictates, the role of the Compatibility Reviewer will likely continue to be a Metadata Specialist that reviews a variety of documents/artifacts to determine the level of interoperability that a system meets
- **Patient**: any person who receives medical attention, care, or treatment
    - **Subject**: a Patient that is participating in Cancer Research