



Bio- & chemi-informatic tools for large-scale genomic data analysis

Pediatric cancers (relapsed or metastatic tissue if available) & matched normal tissue

Adult & pediatric cancers & matched normal tissue

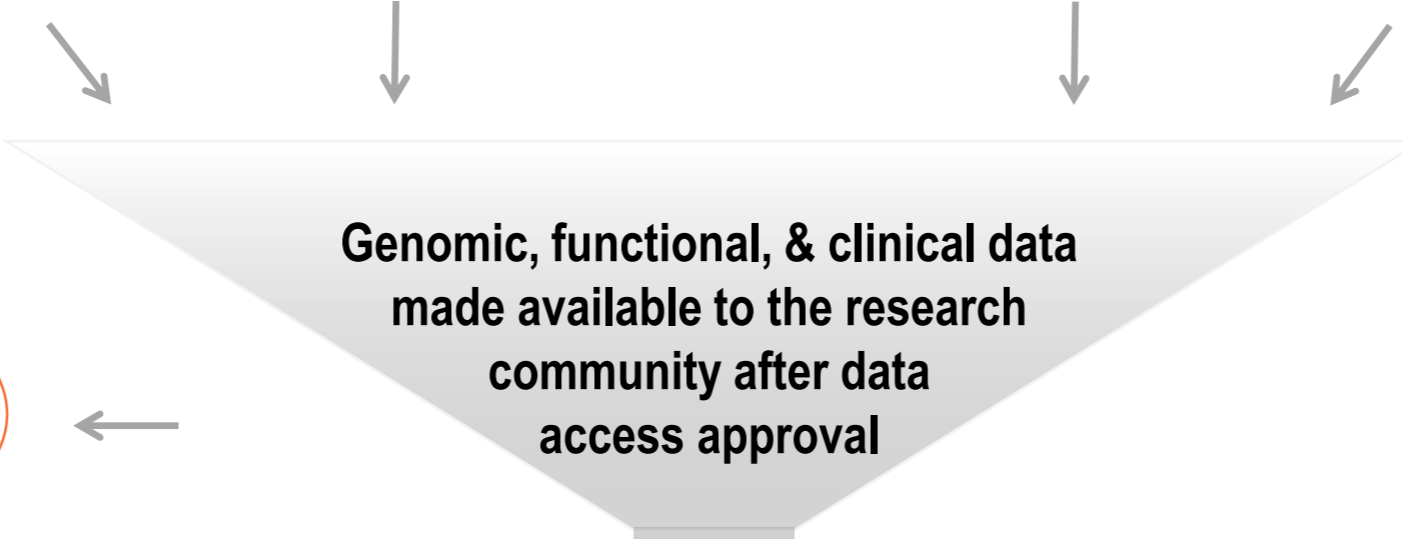
Generate cancer models from patient-derived tissue using next-generation cell culture technologies

Generate tools & reagents (i.e. shRNA, CRISPR, & small molecule screens)

Genome-wide molecular characterization including sequencing

Genome-wide molecular characterization by sequencing & analysis

Molecular characterization by sequencing of models, primary tumor, & matched normal tissue



Functional validation of targets in various types of cancer

Cancer models made available to the research community

Data, reagents, & tools made available to the research community

Mining of large scale genomic data sets for alterations important for cancer etiology & treatment

CTD² Network & others use the models in research

Identification of candidate alterations for therapeutic targets, biomarkers for disease classification, & risk stratification

Translating molecular information generated from TARGET, CGCI, The Cancer Genome Atlas, & other large scale genomics initiatives into patient-based treatment strategies

Support the development of novel targeted therapies & associated therapeutic biomarkers

**Dashed arrows represent efforts not directly supported by OCG