

TCGAbrowser

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TCGA Data

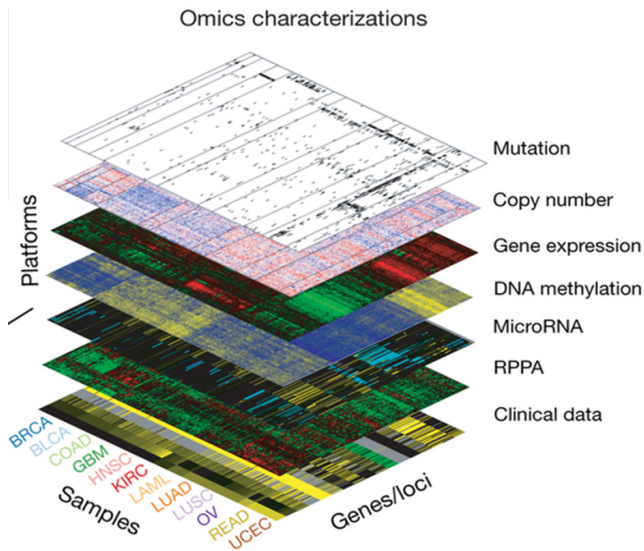


Figure 1: picture of TCGA

TCGA Bioconductor Packages

- ▶ TCGAAbiolinks
- ▶ RTCGAToolbox
- ▶ RTCGA
- ▶ TCGA2STAT
- ▶ TCGA-Assembler
- ▶ MultiAssayExperiment

What does TCGAbrowser have to offer

- ▶ Analyses based on gene expression subsetting
- ▶ Analyses based on mutation subsetting
- ▶ Convenience wrappers for limma/voom RNAseq analysis, GSVA and Reactome pathway analysis
- ▶ Differential mutation and copy number analysis
- ▶ Survival analysis
- ▶ Visualization by heatmap, oncoprint-like plots
- ▶ Shiny app for automated analysis

TCGAbrowser workflow

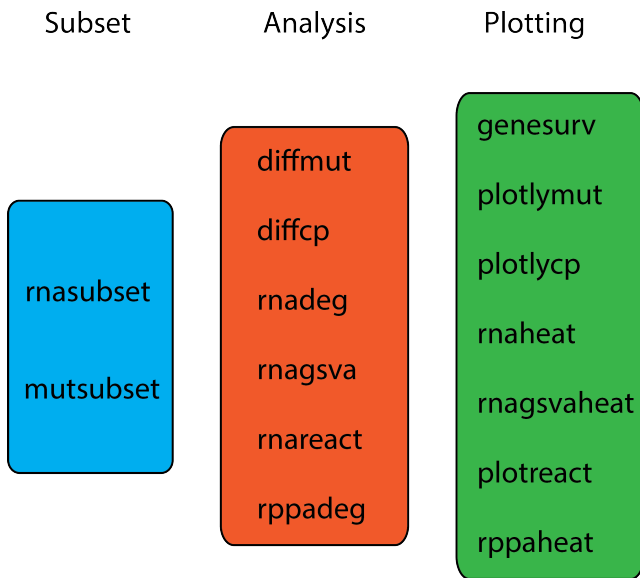


Figure 2: picture of workflow

TCGAbrowser app in action

tcgabrowser.com

Outlook

- ▶ Differential methylation analysis
- ▶ Differential miRNA analysis
- ▶ Update to GDC GRCh38 harmonized data

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<http://github.com/pcheng84/TCGAbrowser>

<http://tcgabrowser.com>