Tutorial: Interactive Next-Generation Clustered Heat Maps

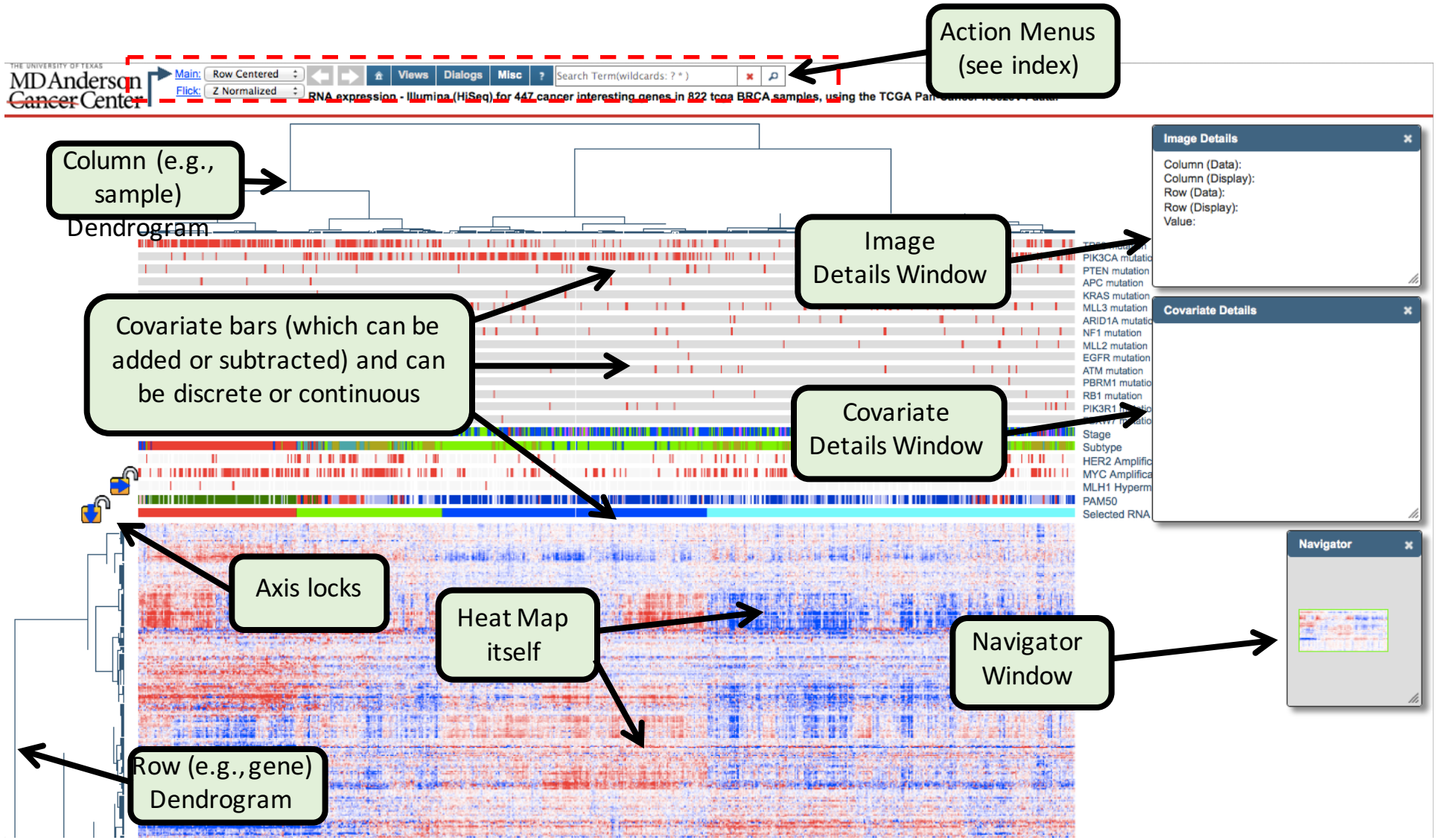
This slide deck introduces many, but by no means all, features of Next-Generation clustered Heat Maps (NG-CHMs). For concreteness, it's based on:

- A TCGA mRNA expression (rows) vs. samples (columns) NG-CHM for breast cancer (as part of our TCGA NG-CHM Compendium: http://bioinformatics.mdanderson.org/TCGA/NGCHMPortal/
- The specific map:http://bioinformatics.mdanderson.org/chm/chm.html?name=tcga_rnaseq_brca_v1.0_gene_sample&collectionHome=http%3A%2F%2Fbioinformatics.mdanderson.org%2FTCGA%2FNGCHMPortal%3Fview%3D0%26p0DiseaseInput%3Dbrca (too long, sorry)
- If you have a large monitor or two monitors, you might want to open the breast cancer map in a separate window to explore while you're going through the tutorial.
- Each index entry on slide 2 link to the corresponding slide – which links back to slide 2.
- Note: not all features are pertinent to any given map in the compendium (e.g., a gene-name link-out to GeneCards wouldn't be pertinent to for a copy number variation map.
- A more complete, detailed tutorial plus other videos can be found at http://bioinformatics.mdanderson.org/main/Navigating_Clustered_Heatmaps

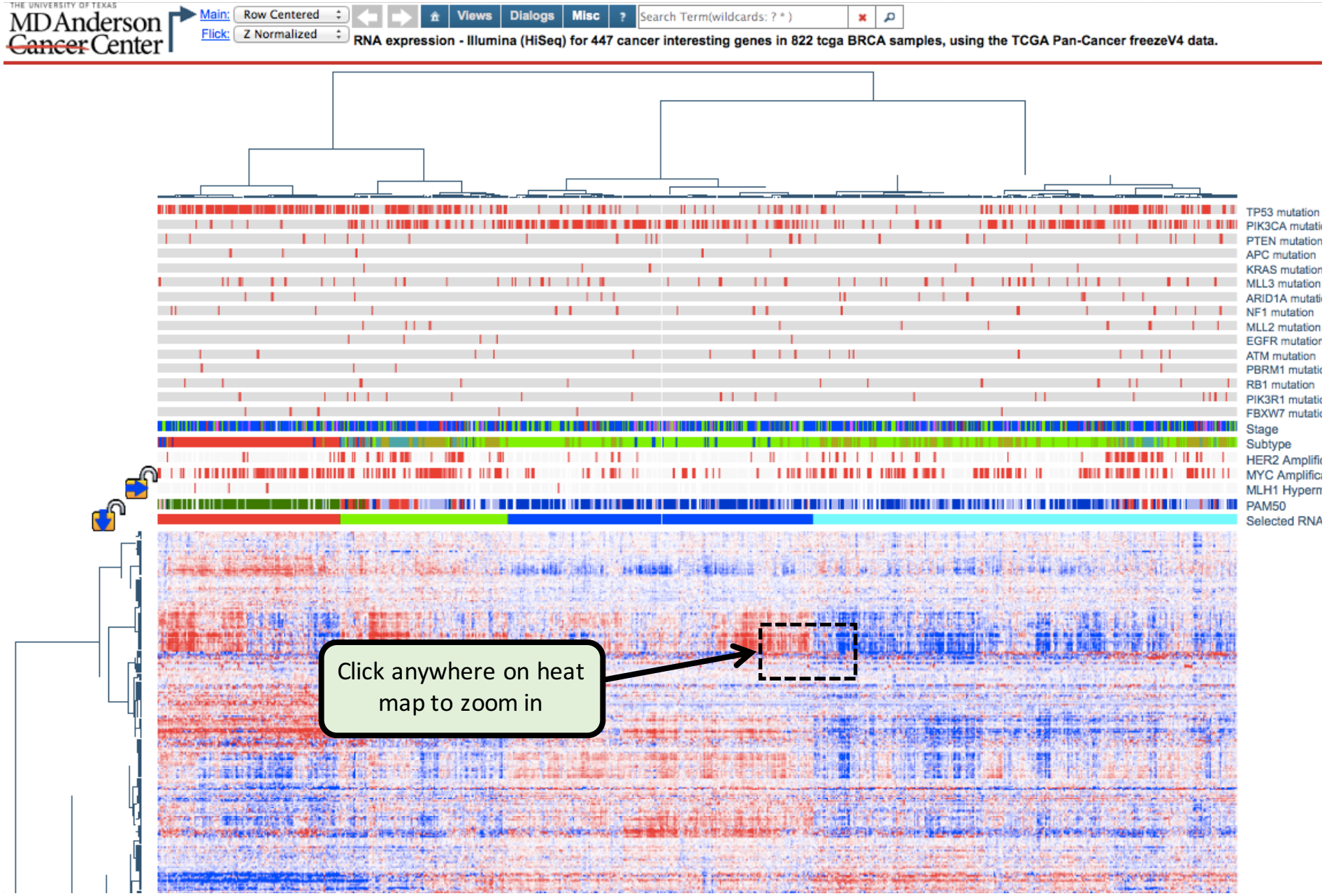
Index of Slides (with live links to them)

Slide 1: Title Slide
Slide 2: Index of slides
Slide 3: Annotated summary screen shot
Slide 4: Zooming in
Slide 5: Gene labels show up
Slide 6: Navigating in the map
Slide 7: Zooming out
Slide 8: The Row Label Menu
Slide 9: Link to Box plot
Slide 10: Link to Distribution plot
Slide 11: Link to Ideogram
Slide 12: The Matrix Menu
Slide 13: The horizontal axis lock
Slide 14: The vertical axis lock
Slide 15: Toggling among CHMs
Slide 16: Go back/Go forward (i.e., Un-do/Re-do)
Slide 17: Return to home page
Slide 18: Views Menu
Slides 19 – 26: Dialogs Menu
Slide 19: Navigator Window
Slide 20: Image Details Window
Slide 21: Color scheme change on the fly
Slide 22: Annotations
Slide 23: Advanced search
Slide 24: Covariate Bar Details
Slide 25: Covariate Bar Control Panels
Slide 26: Credits
Slide 27: TCGA publication guidelines
Slide 28: Miscellaneous menu
Slide 28: PDF maker
Slide 28: Metadata for reproducibility
Slide 29: ? Menu (basic instructions)
Slide 30: Search (enter term/abort search/search)
Slide 31: End of Quick Tutorial

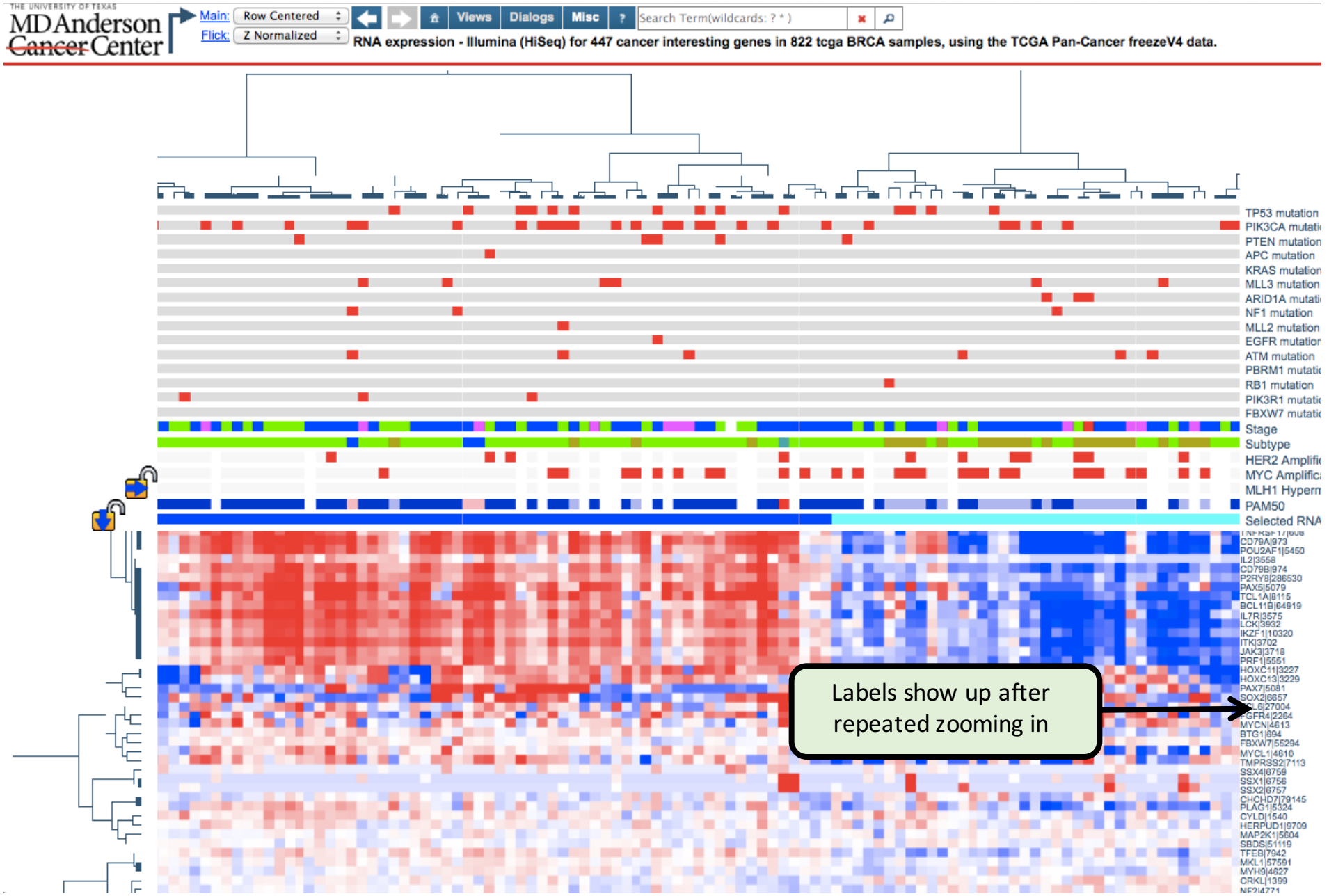
Main Components of the NG-CHM Viewer



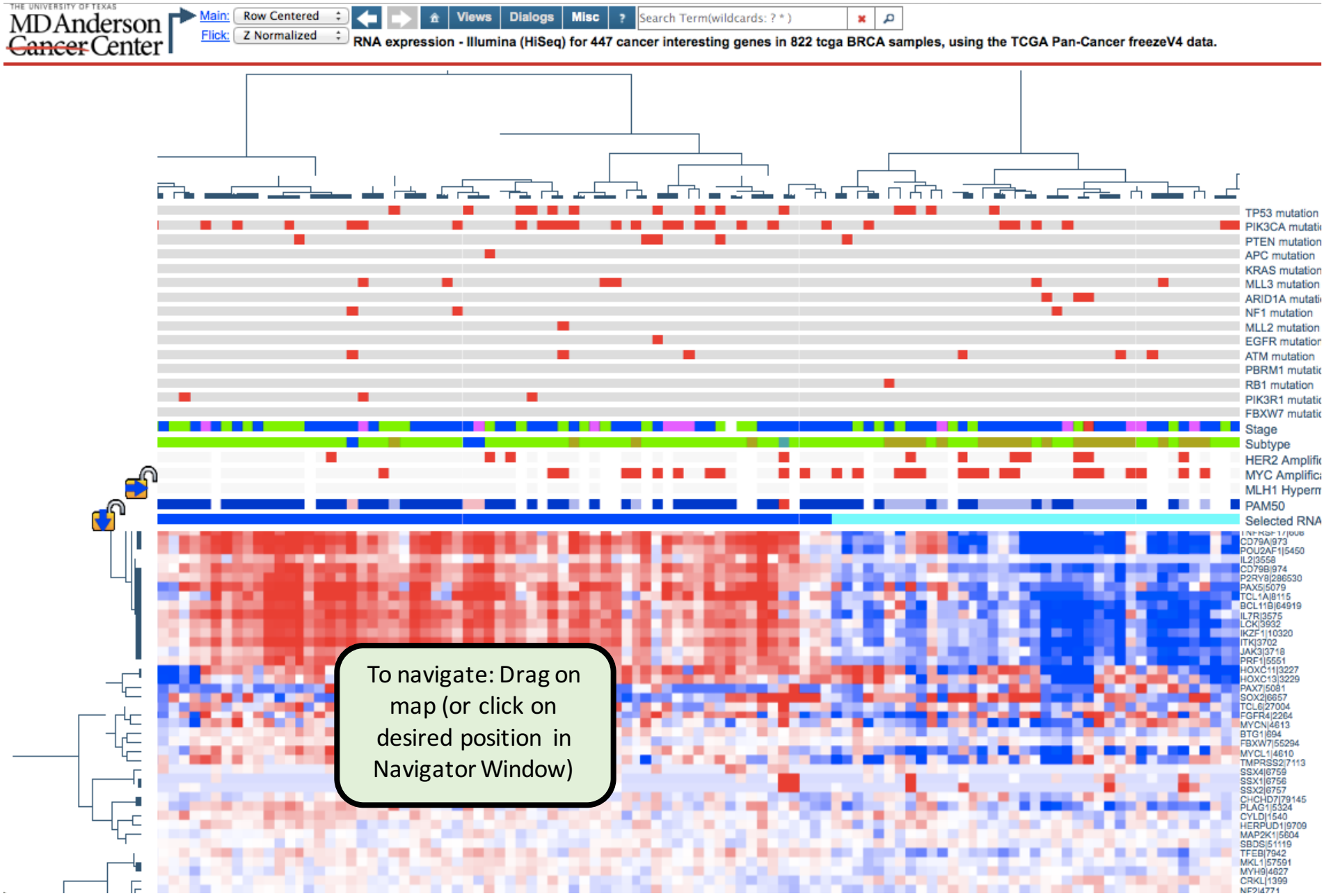
[Back to Index Slide]



Back to Index Slide



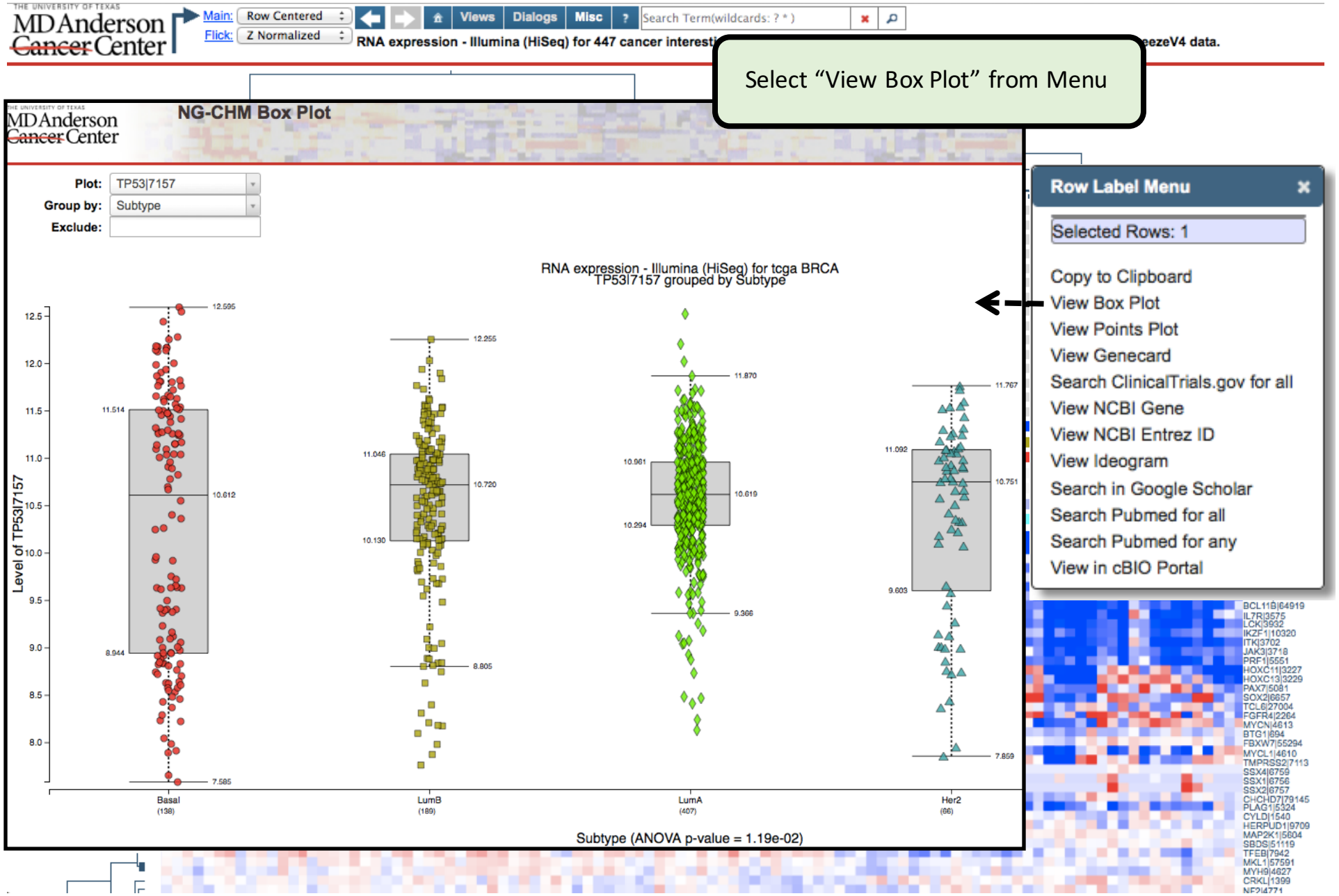
Back to Index Slide



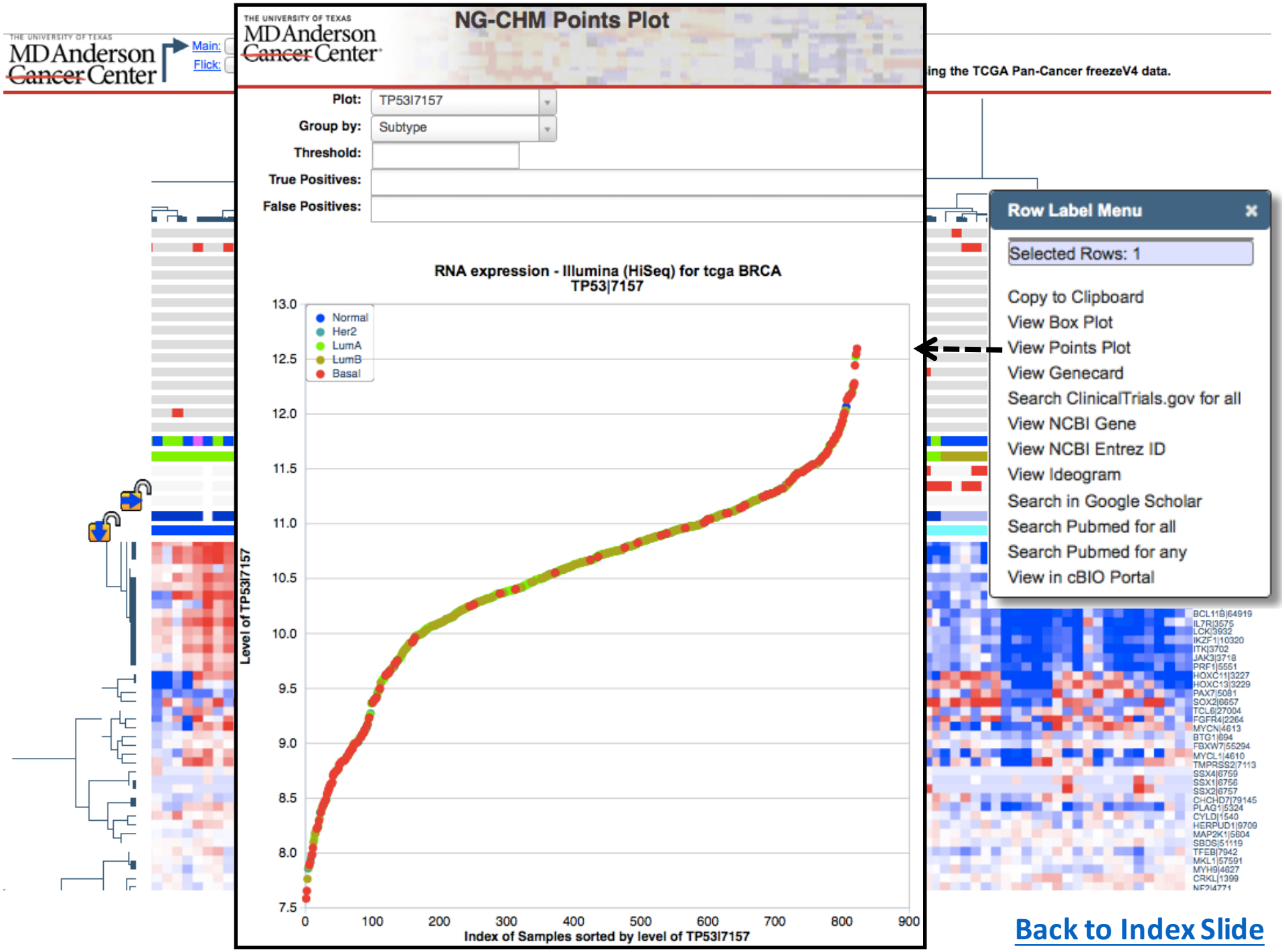
[Back to Index Slide]

Back to Index Slide

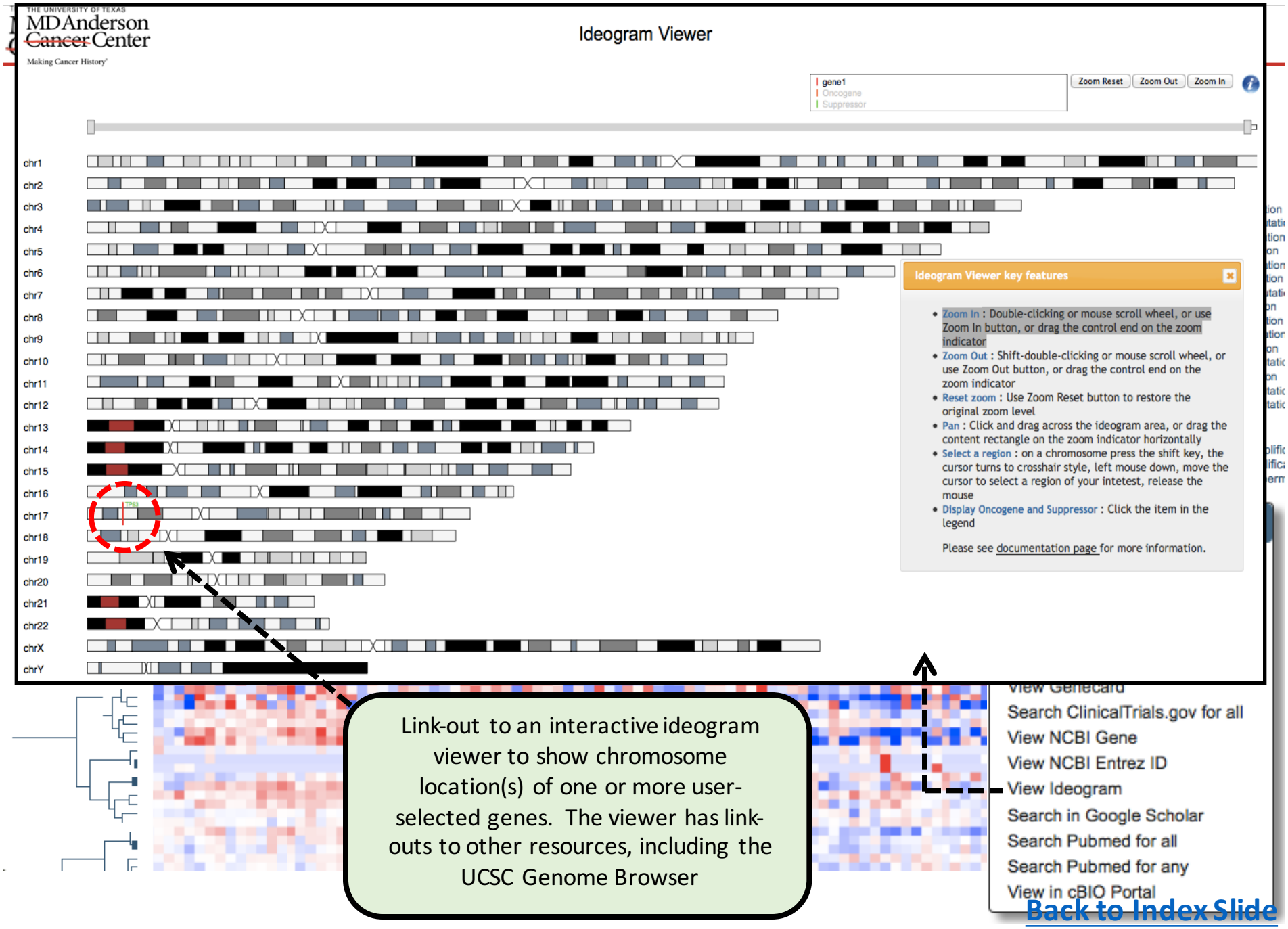
Back to Index Slide



Back to Index Slide

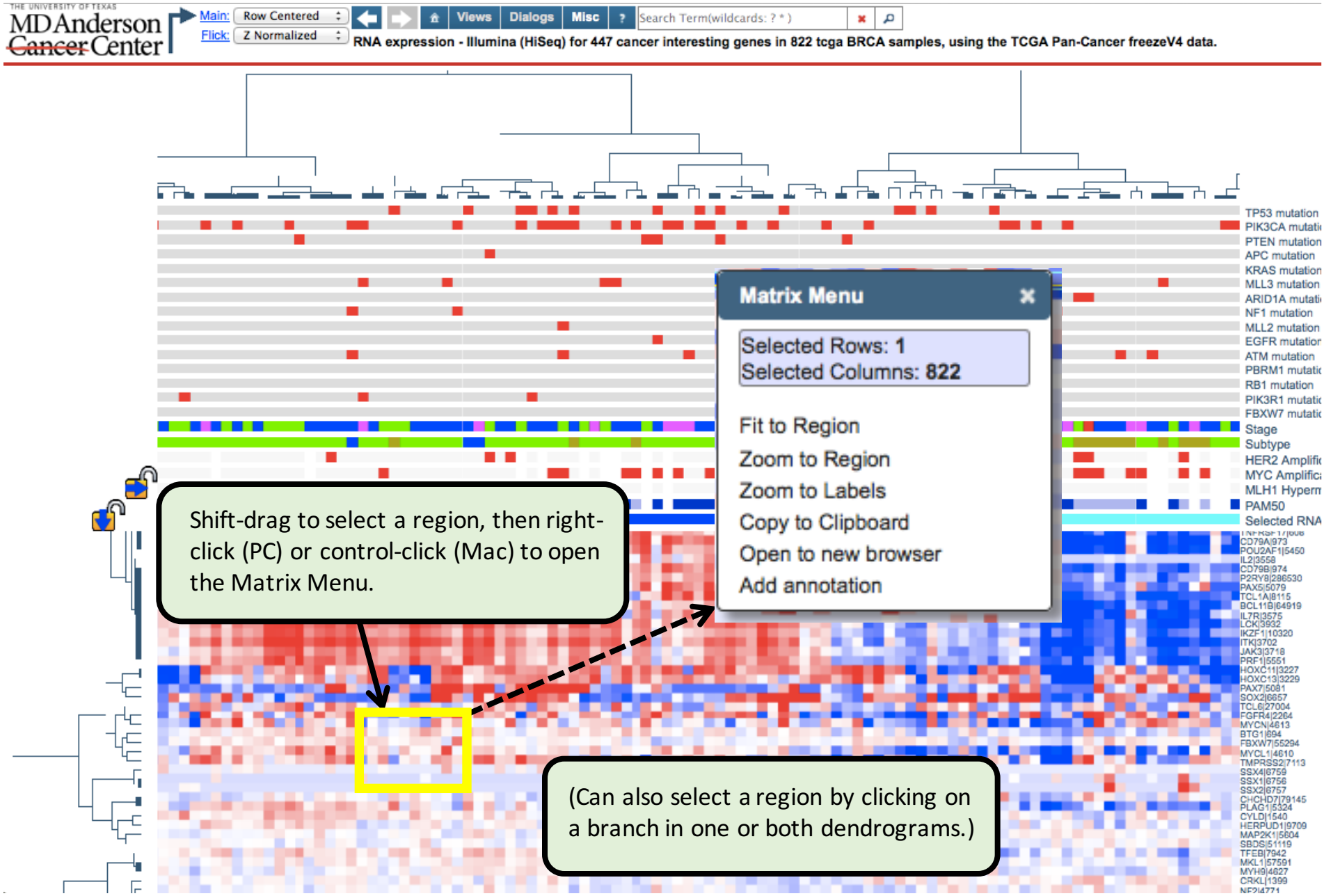


[Back to Index Slide]

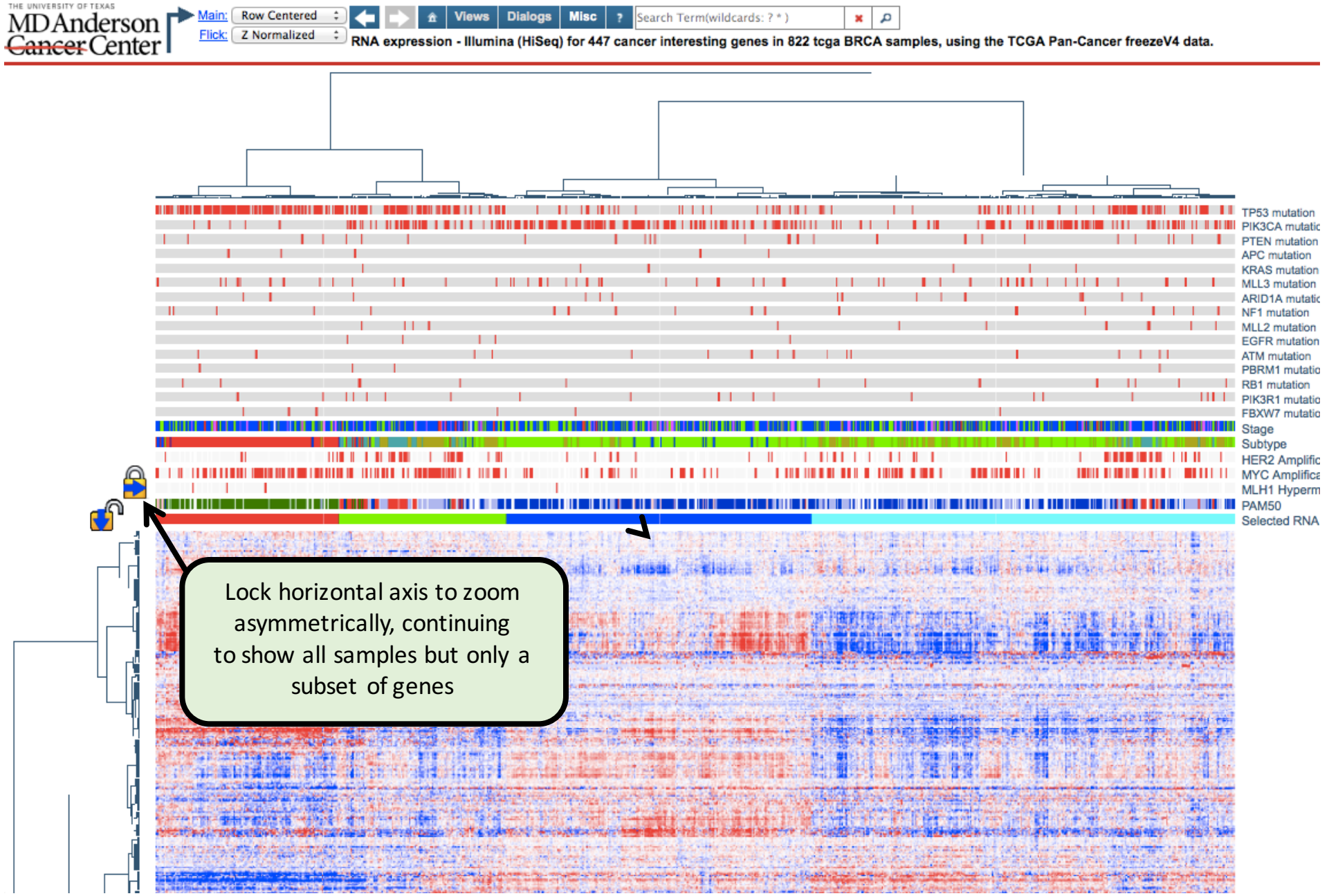


Link-out to an interactive ideogram viewer to show chromosome location(s) of one or more user-selected genes. The viewer has link-outs to other resources, including the UCSC Genome Browser

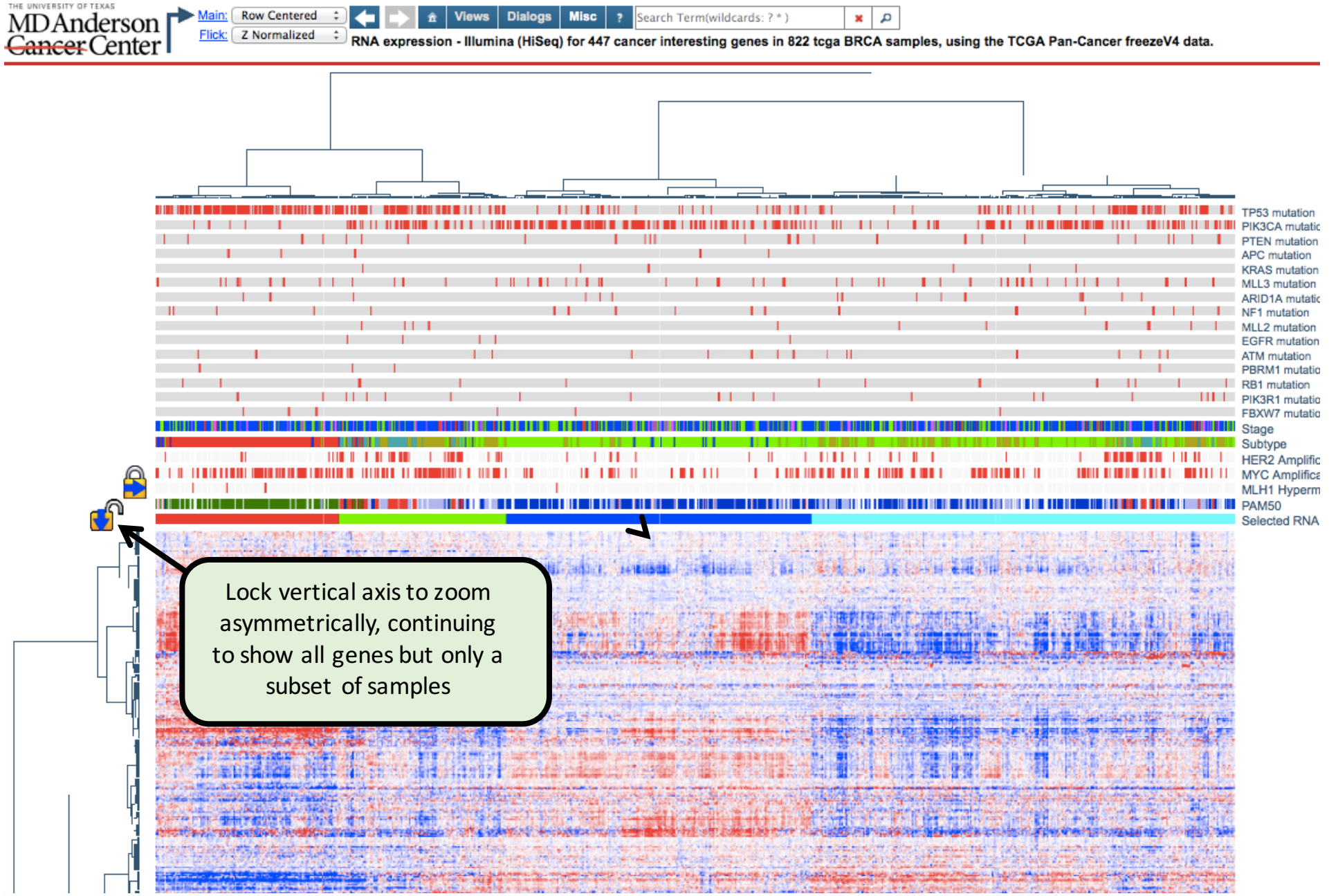
Back to Index Slide



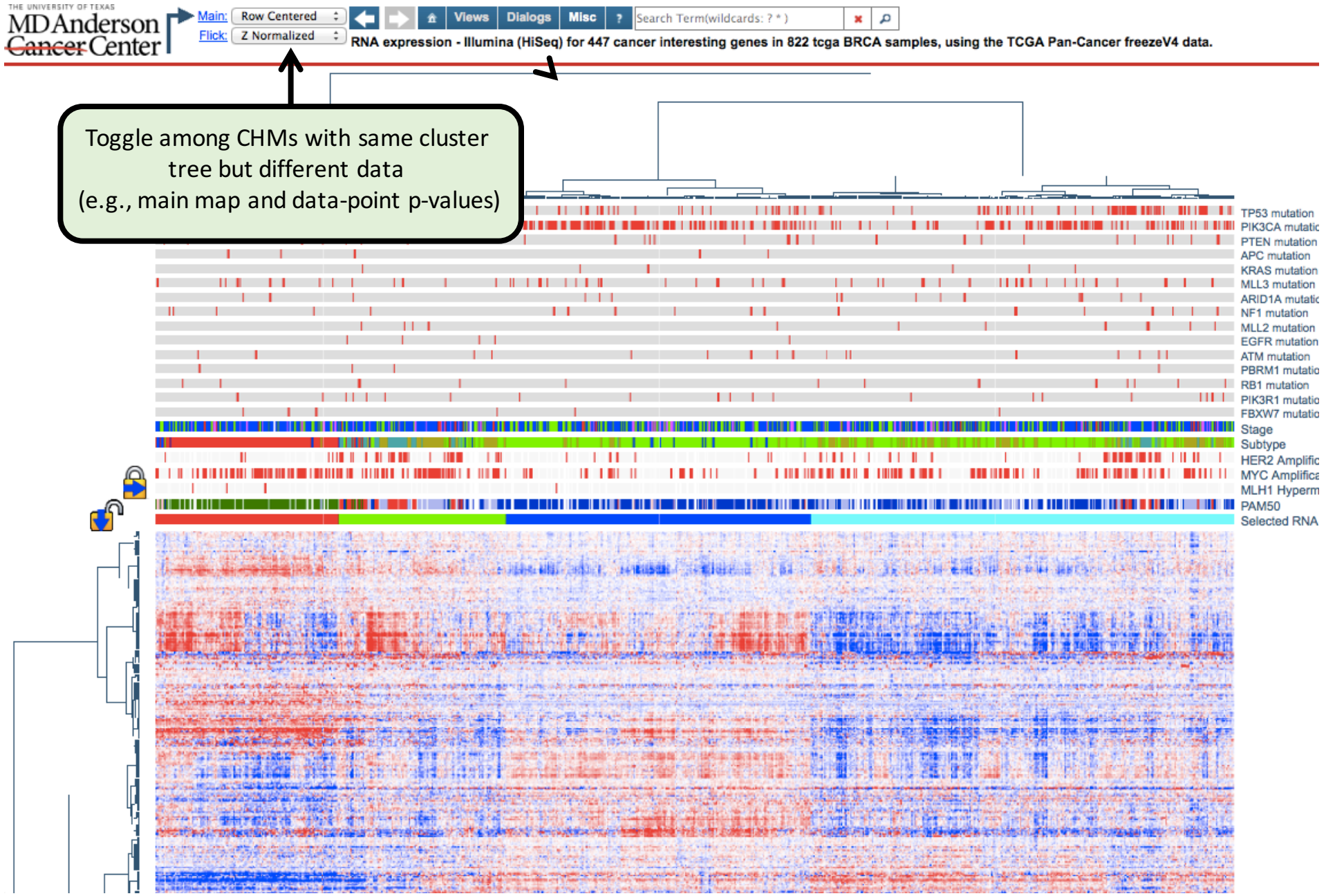
Back to Index Slide



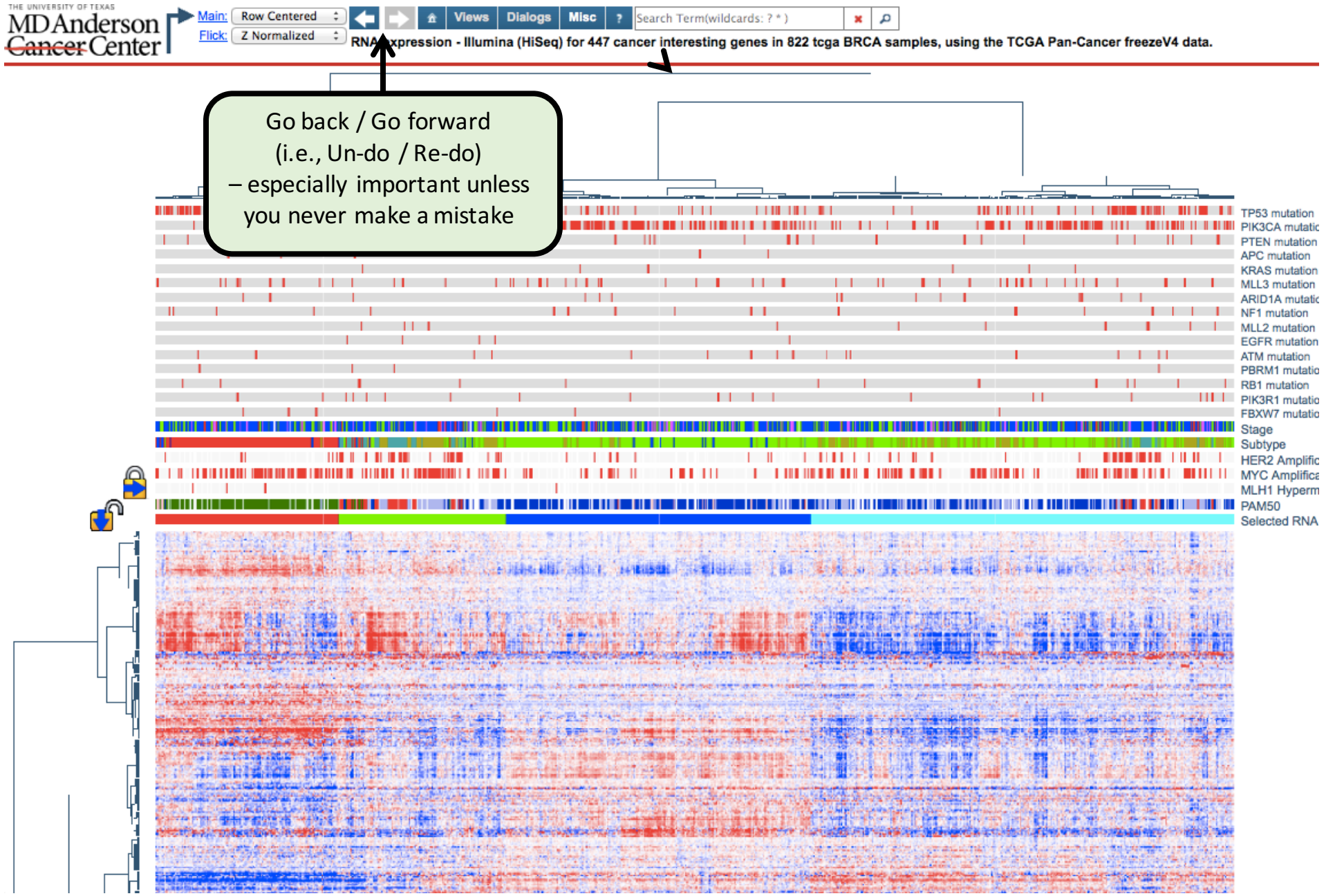
Back to Index Slide



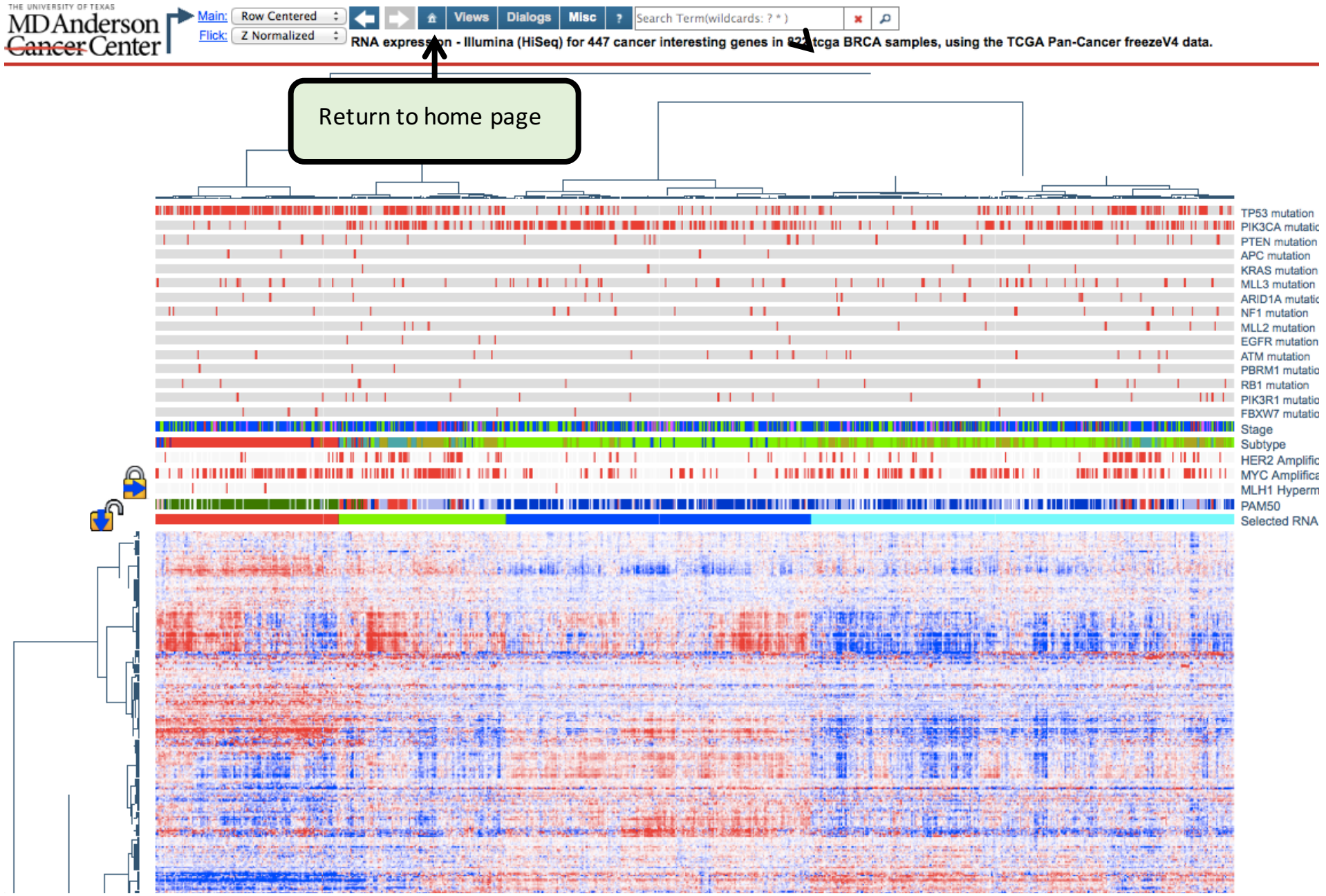
Back to Index Slide



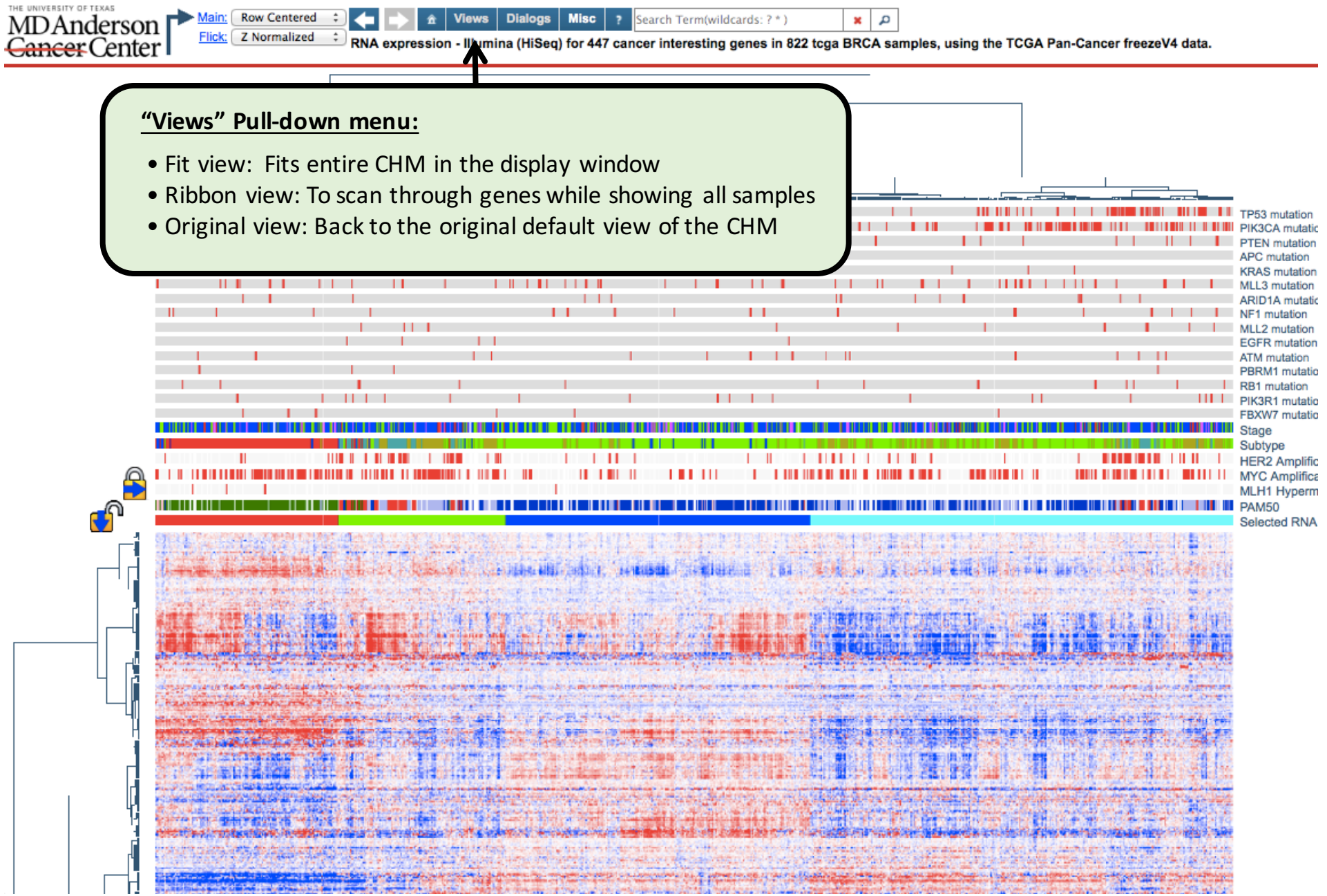
Back to Index Slide



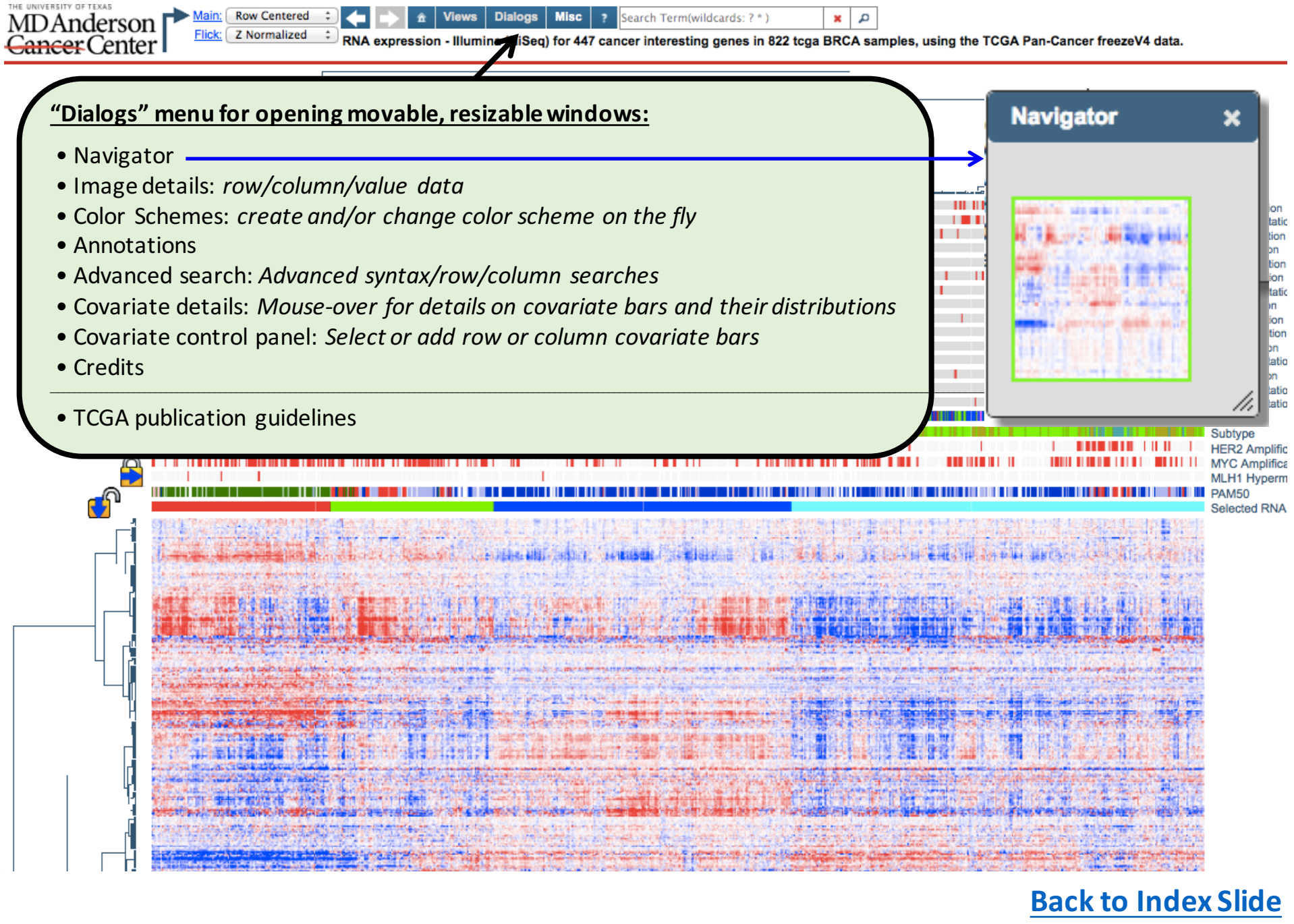
Back to Index Slide



Back to Index Slide

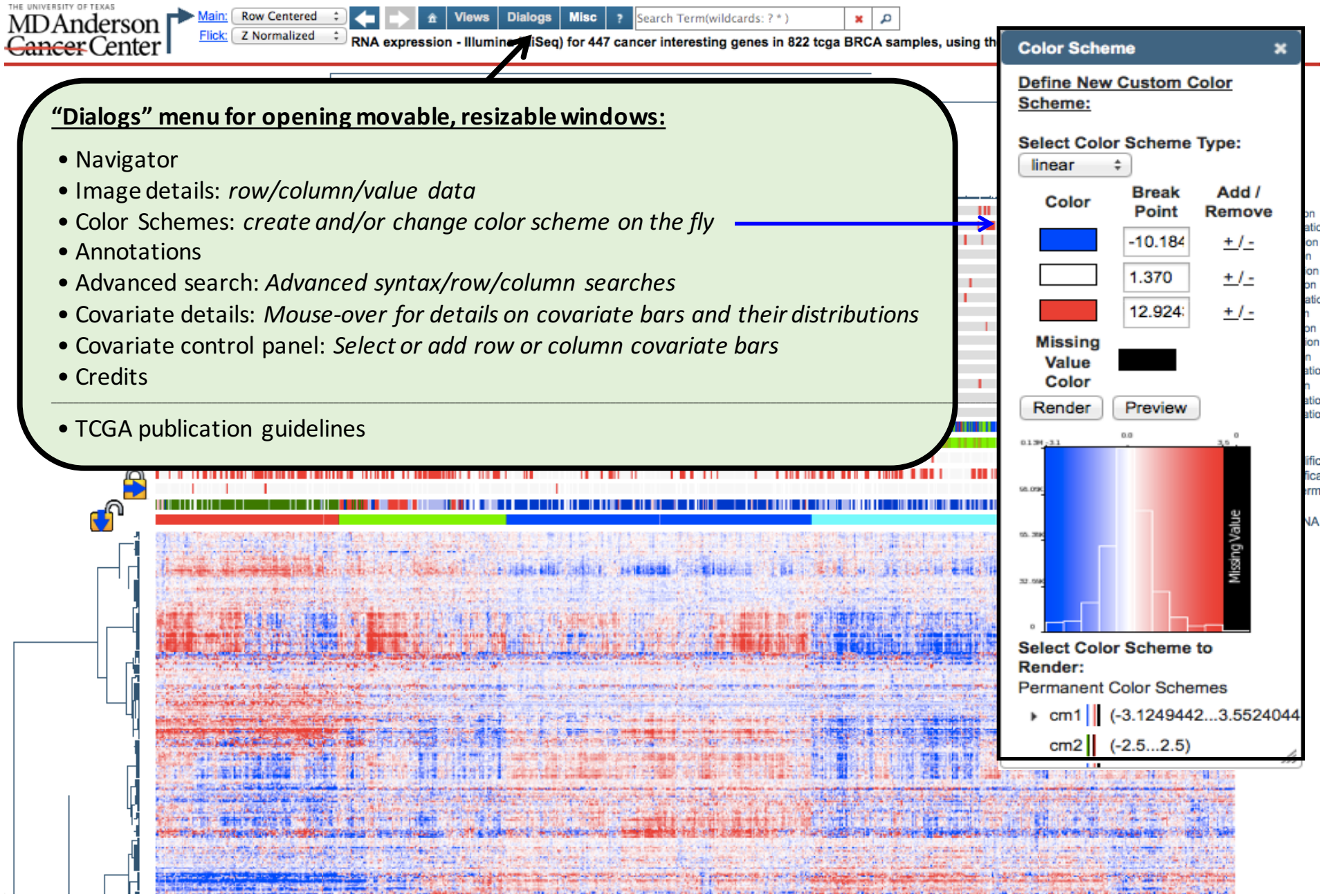


Back to Index Slide



Back to Index Slide

Back to Index Slide

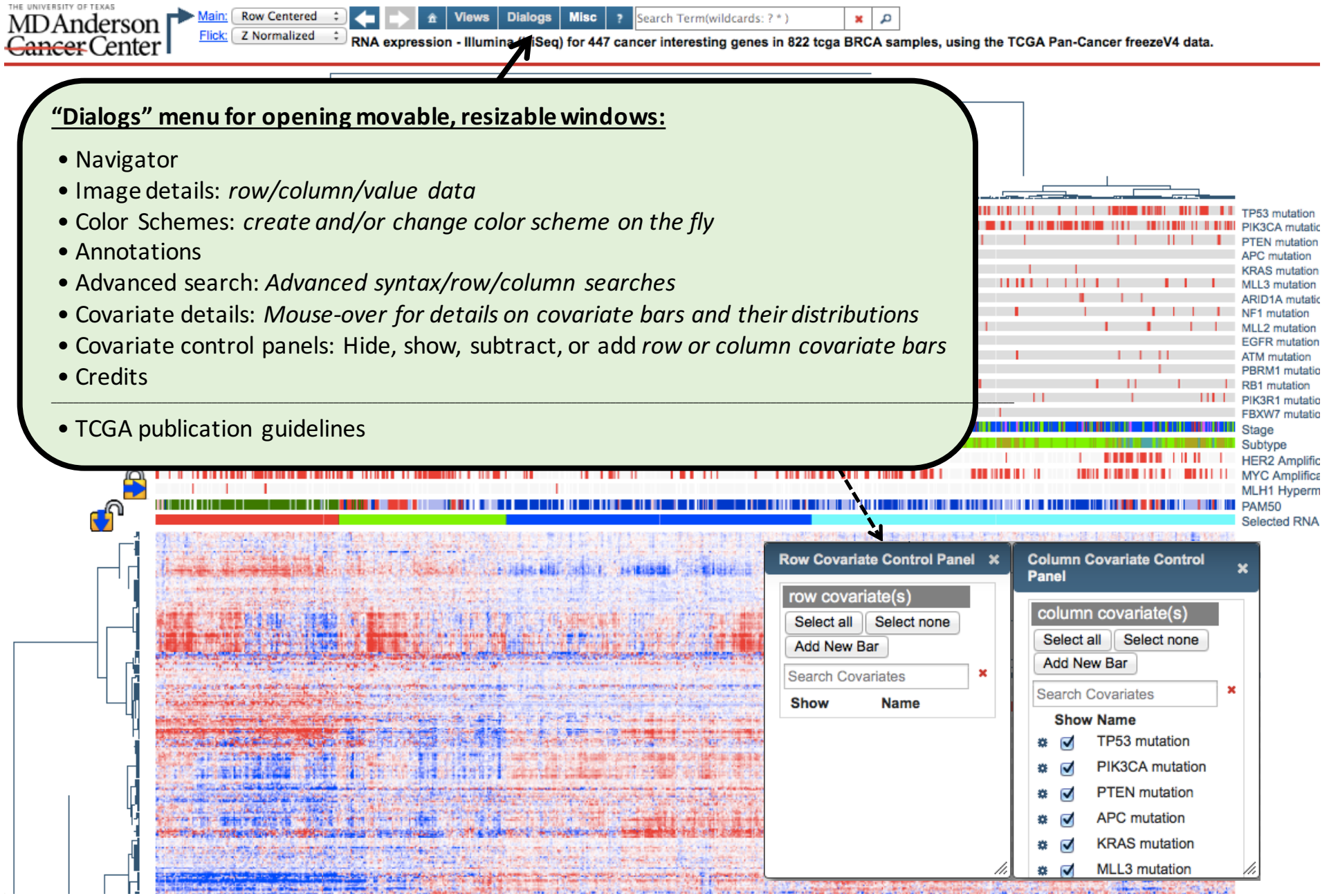


Back to Index Slide

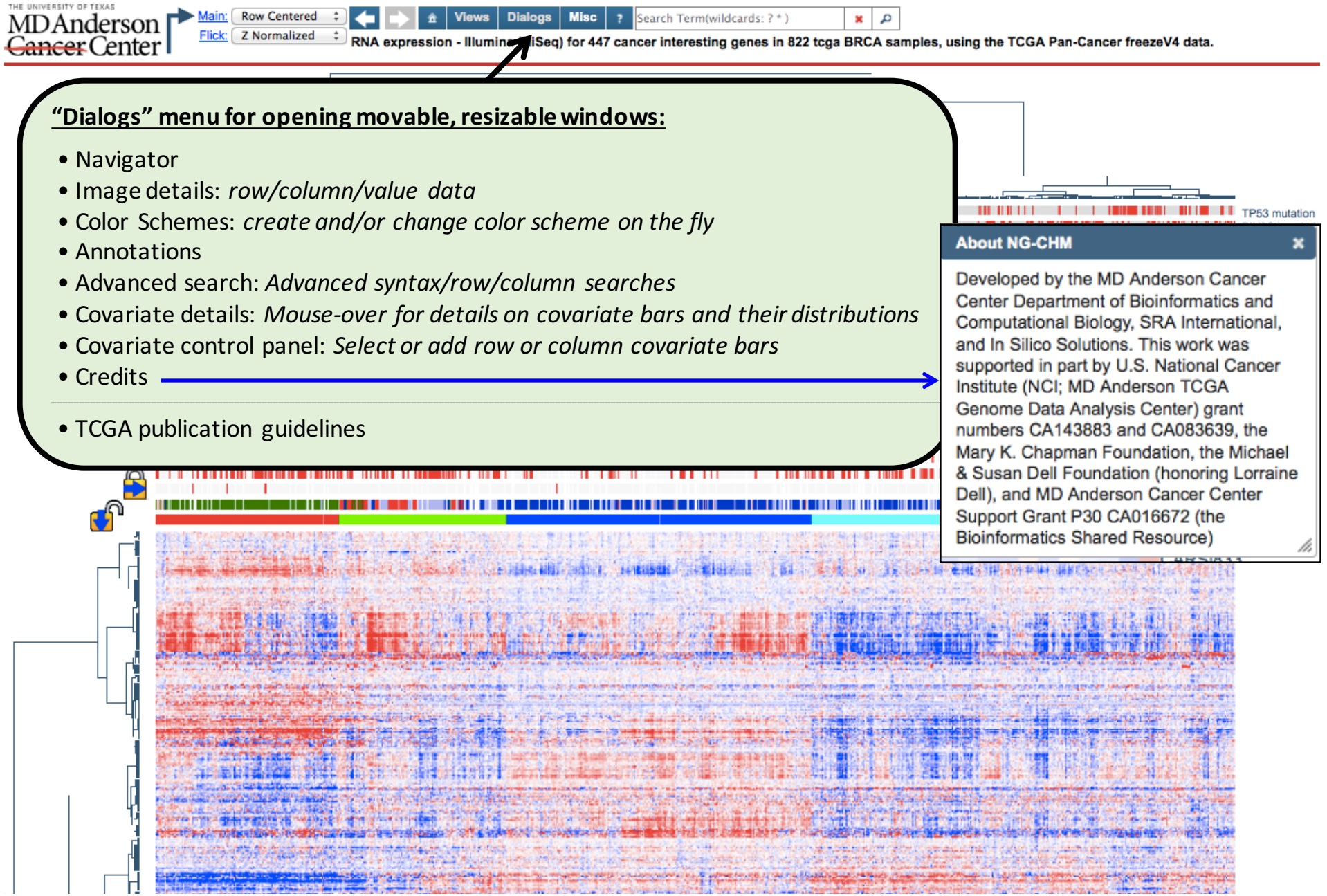
Back to Index Slide

Back to Index Slide

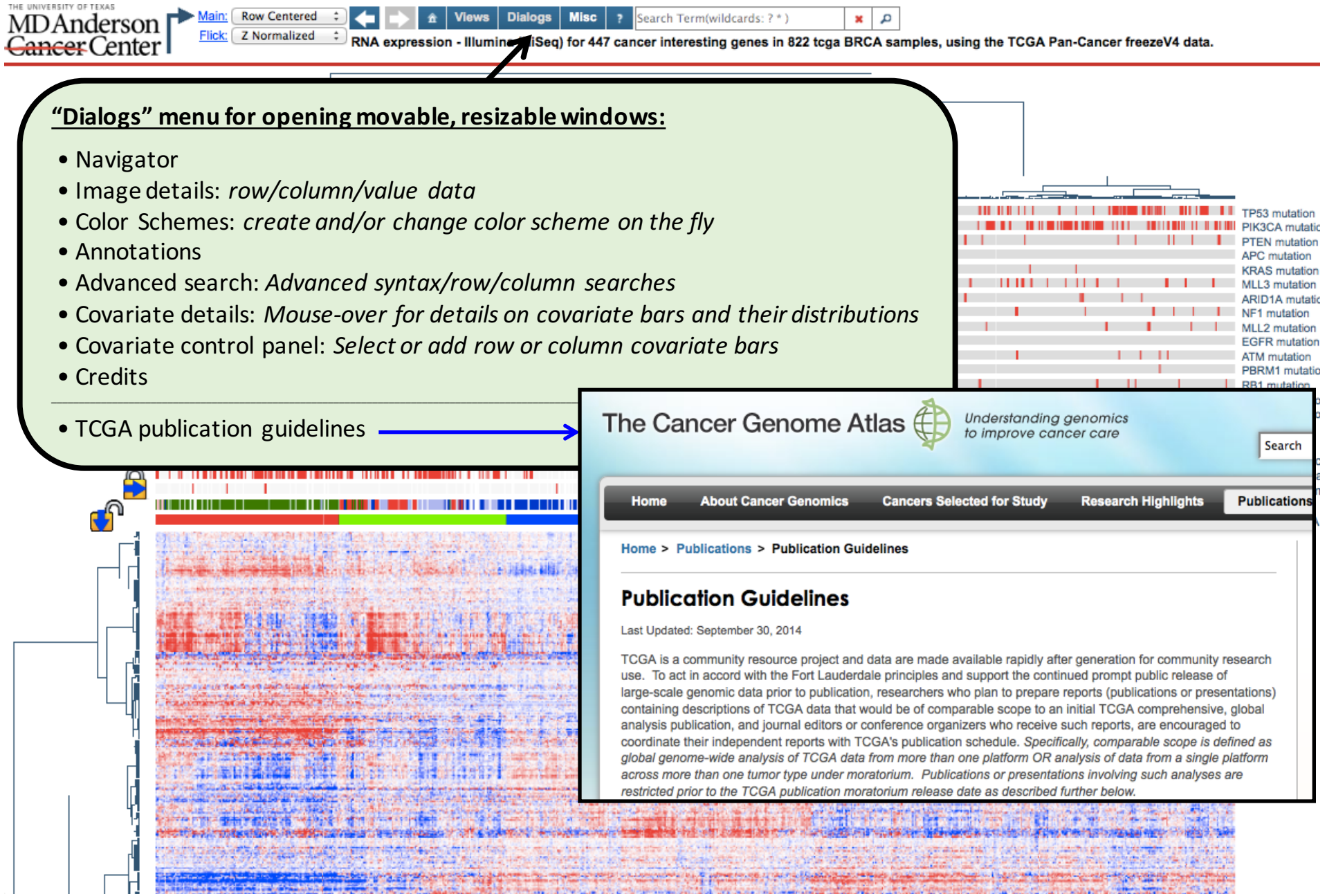
Back to Index Slide



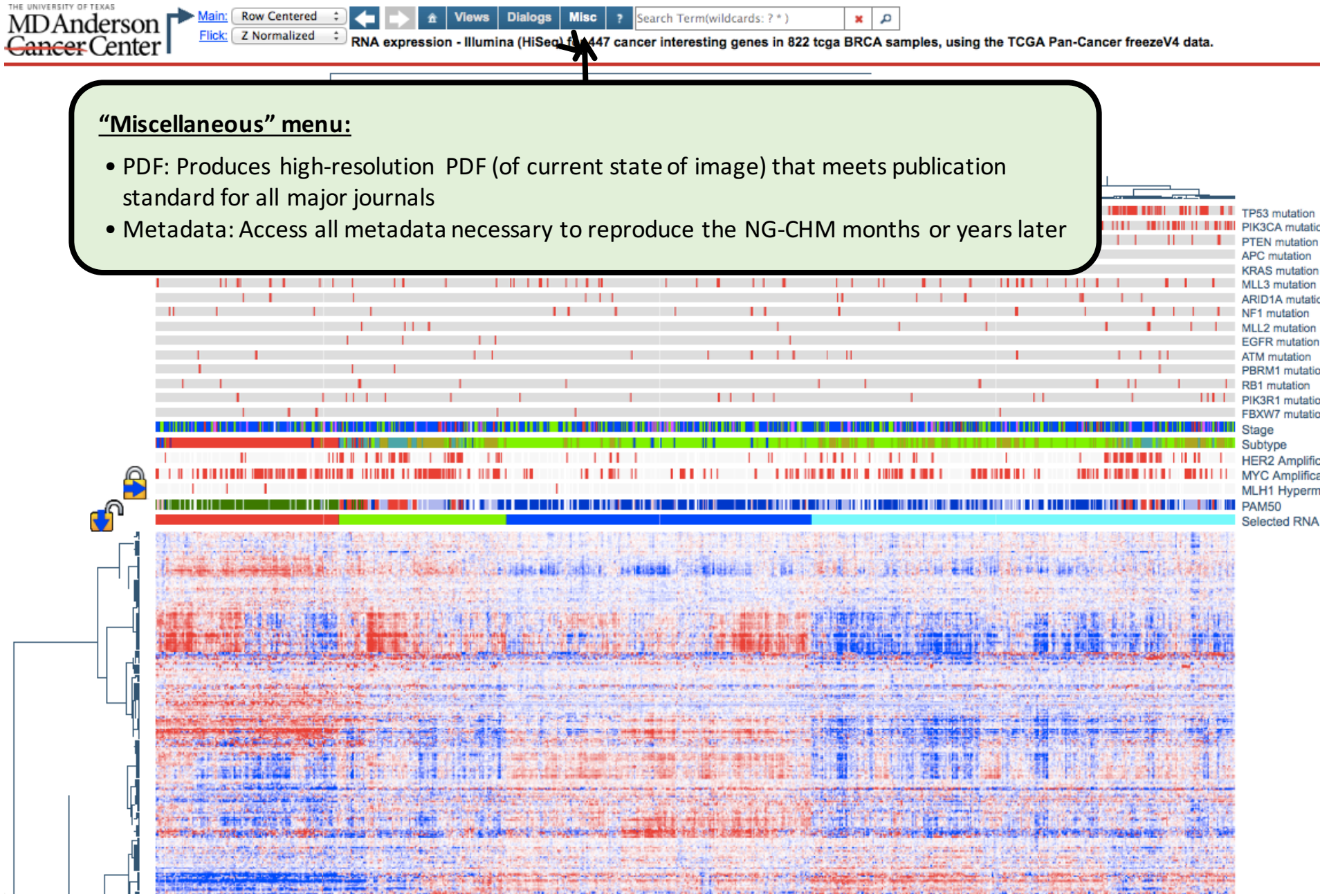
Back to Index Slide



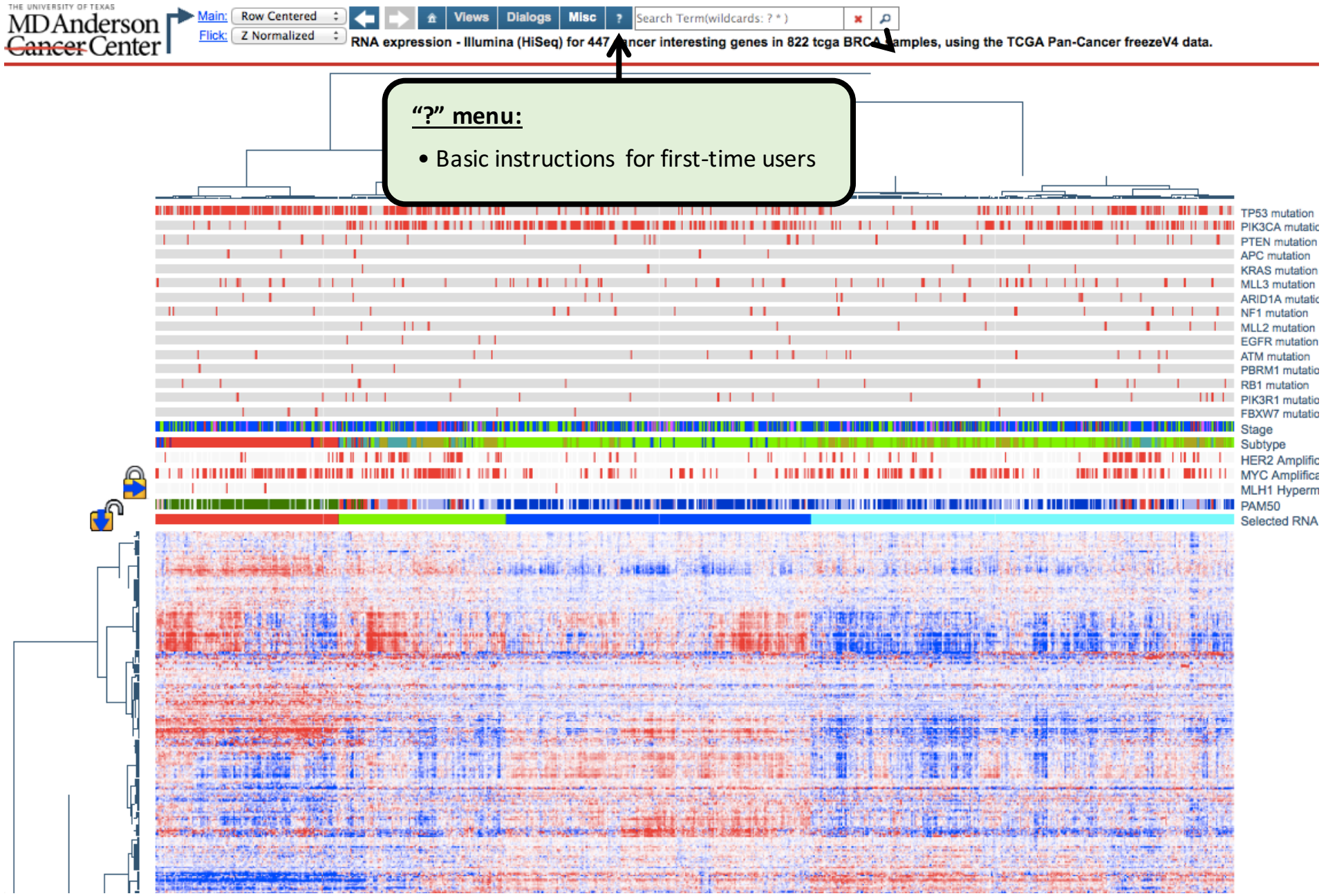
Back to Index Slide



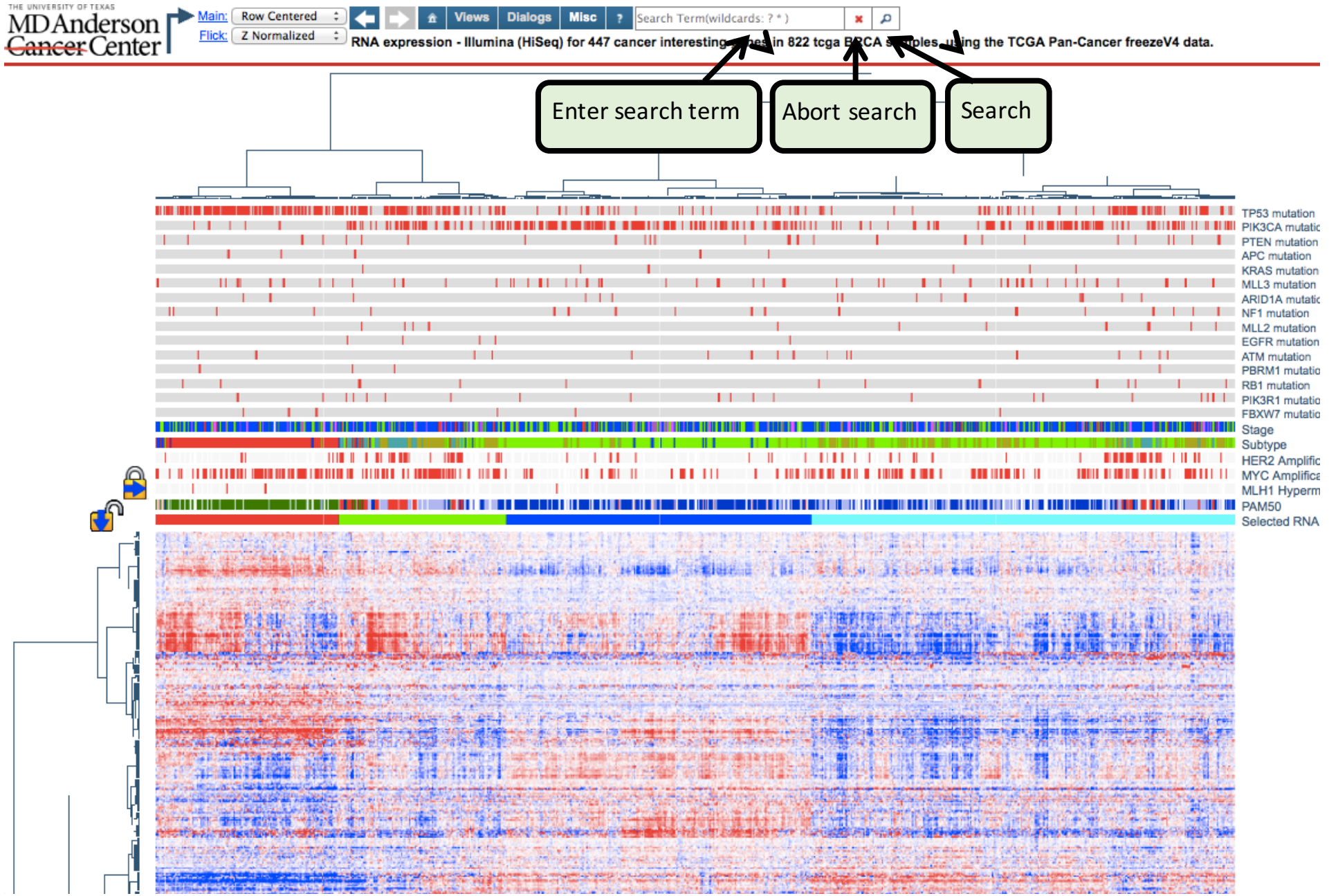
Back to Index Slide



Back to Index Slide



Back to Index Slide



Back to Index Slide