TCPA: An Integrated Bioinformatics Resource for Functional Cancer Proteomic Data

Jun Li

Han Liang (PI)

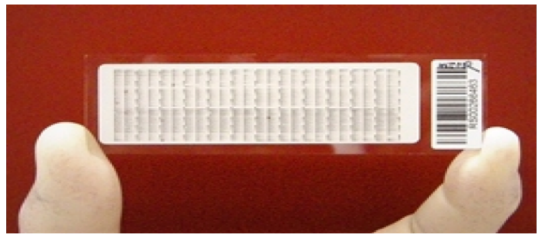
Bioinformatics and Computational Biology

The University of Texas MD Anderson Cancer Center

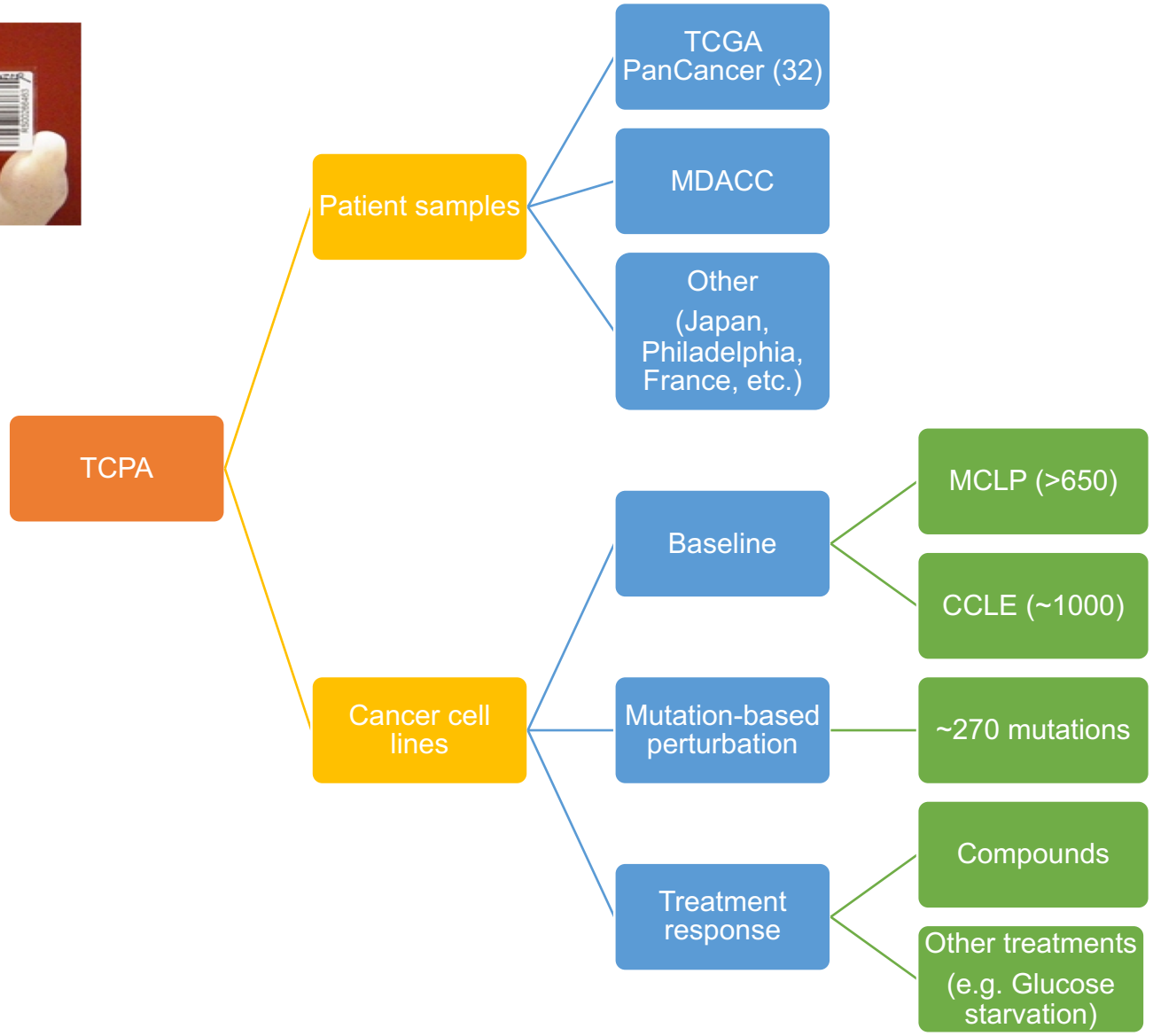
September, 2021

TCPA http://tcpaportal.org

The Cancer Proteome Atlas project (TCPA)

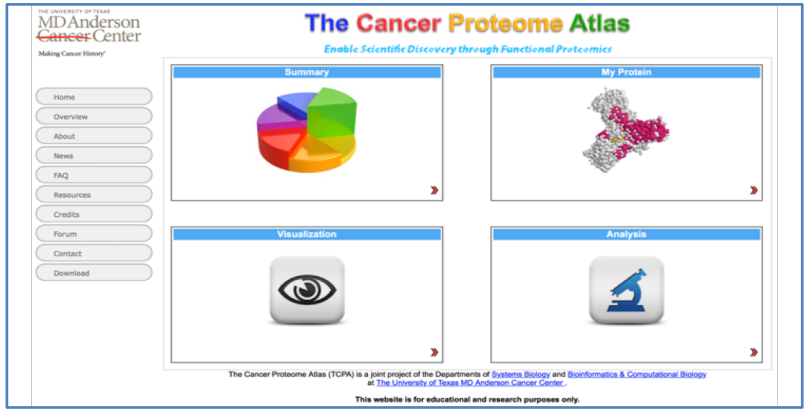


RPPA



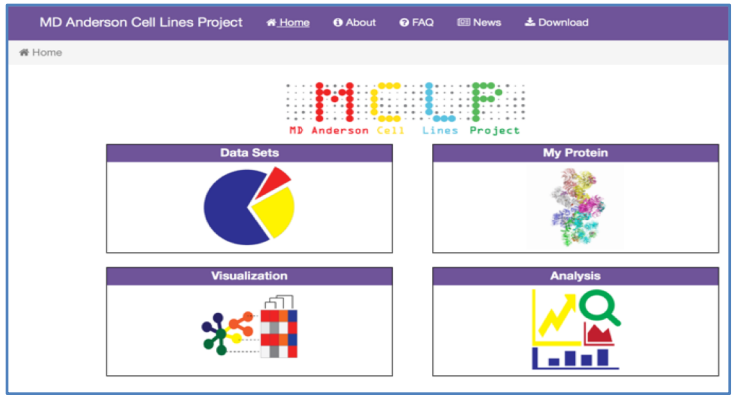
Three open platforms

TCPA-patient



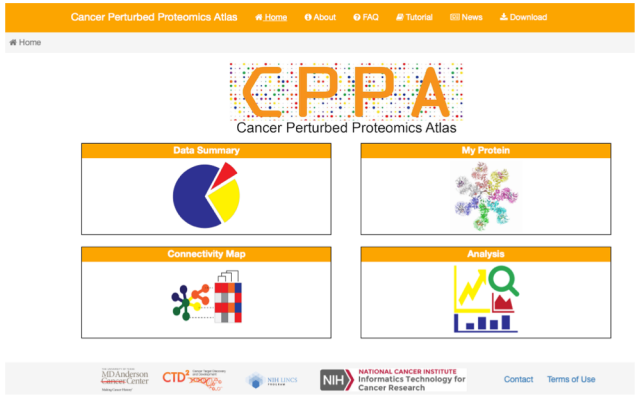
http://tcpaportal.org/tcpa/

TCPA-cell line (MCLP)



http://tcpaportal.org/mclp/

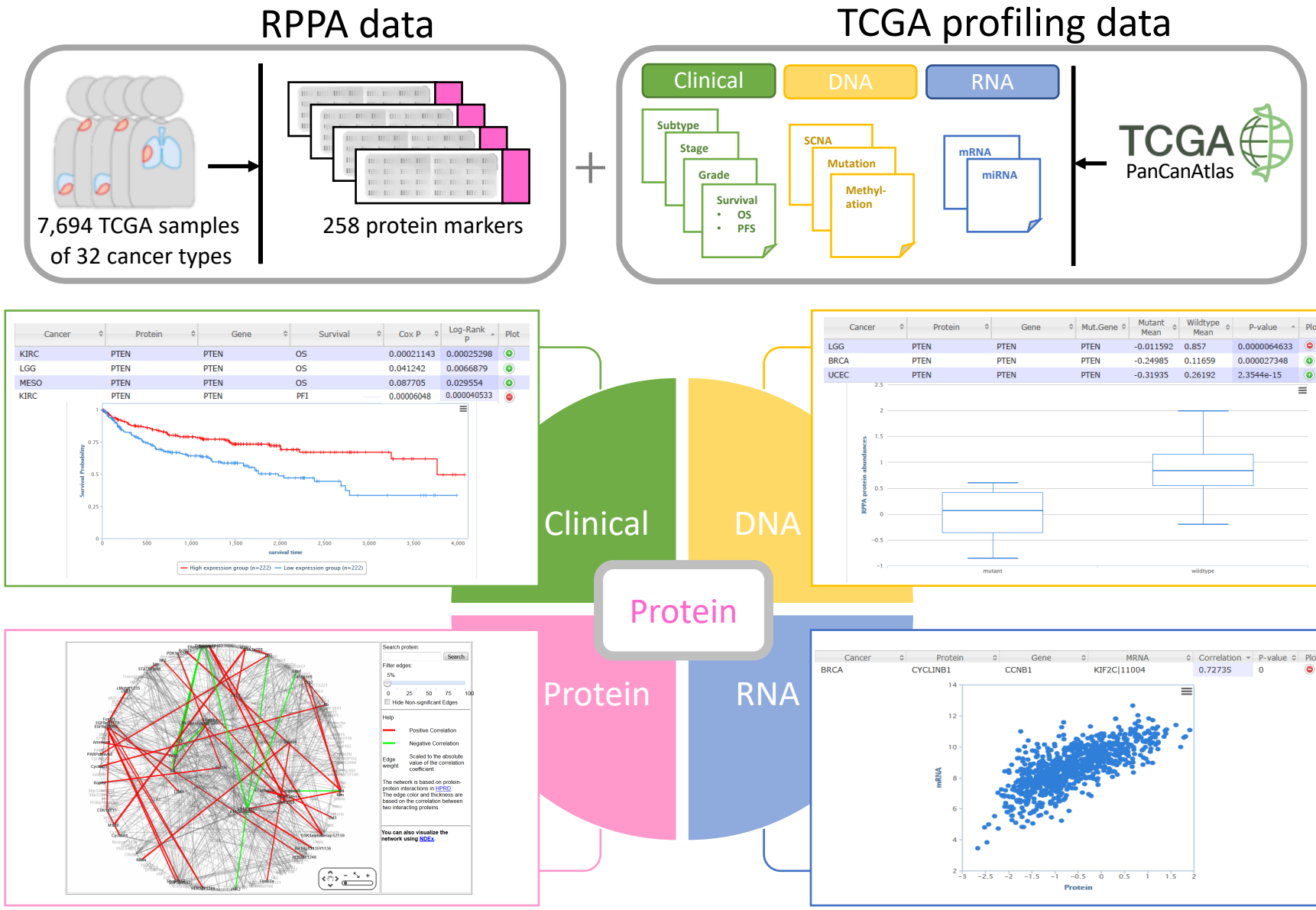
TCPA-perturbation (CPPA)



http://tcpaportal.org/cppa/

Li et al., Nature Methods, 2013
Li et al., Cancer Cell, 2017
Li et al., Cancer Research, 2017
Chen et al., Mol Cell Proteomics, 2019
Chen et al., JCO Clin Cancer Inform., 2020
Zhao et al., Cancer Cell, 2020

TCPA - pan-cancer analysis

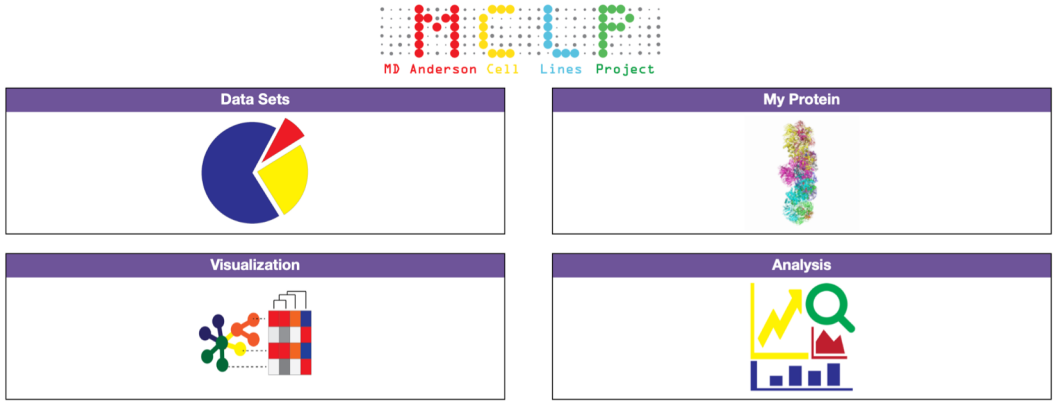


Chen, Li, Akbani, Mills, and Liang. Mol Cell Proteomics, 2019

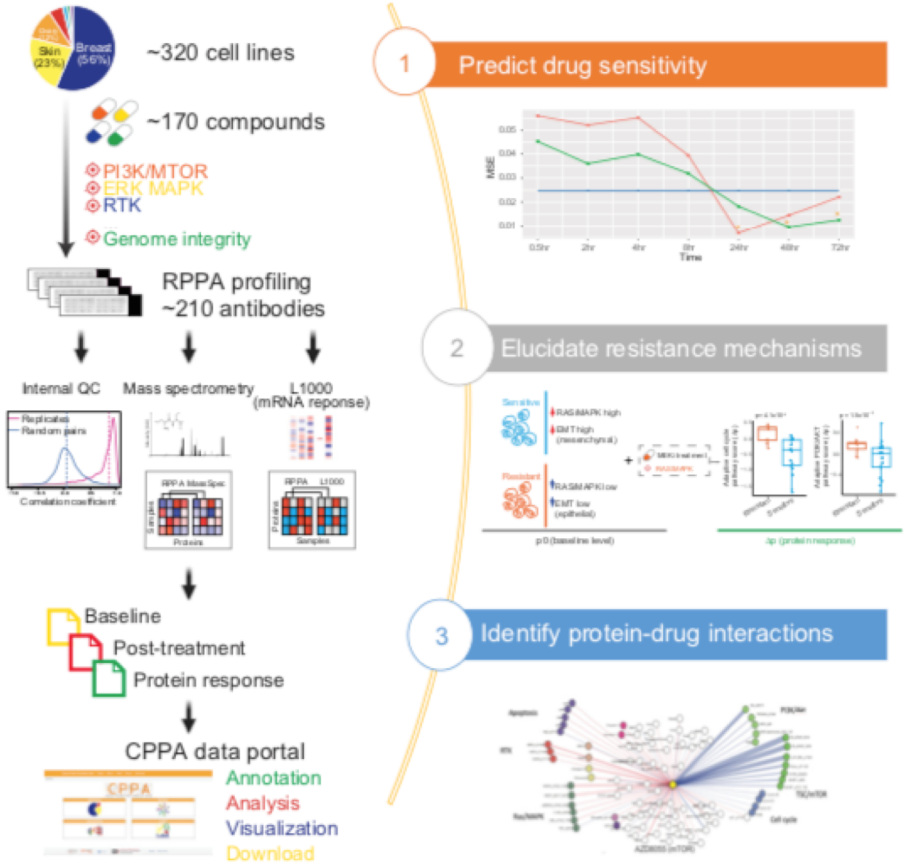
CCLE RPPA dataset

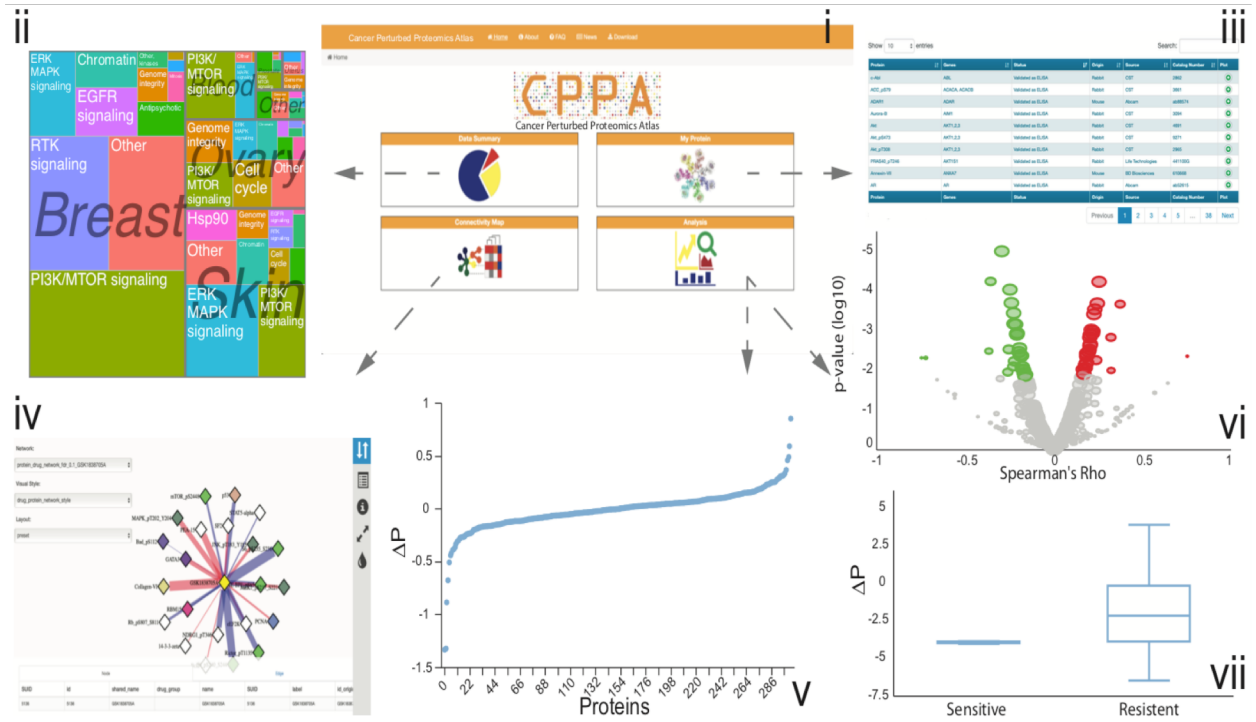
~900 cell lines

>200 protein markers



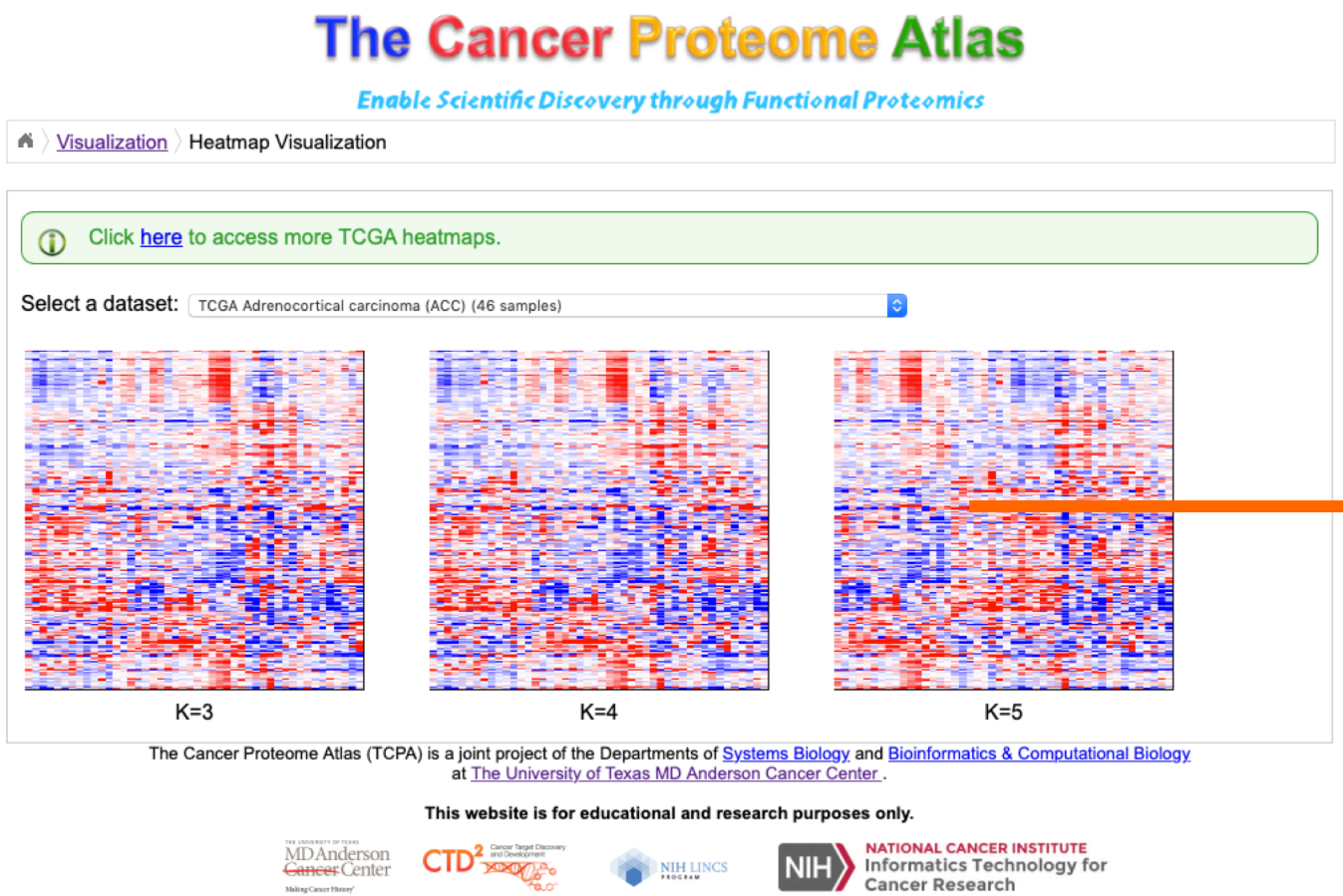
Cancer Perturbed Proteomics Atlas

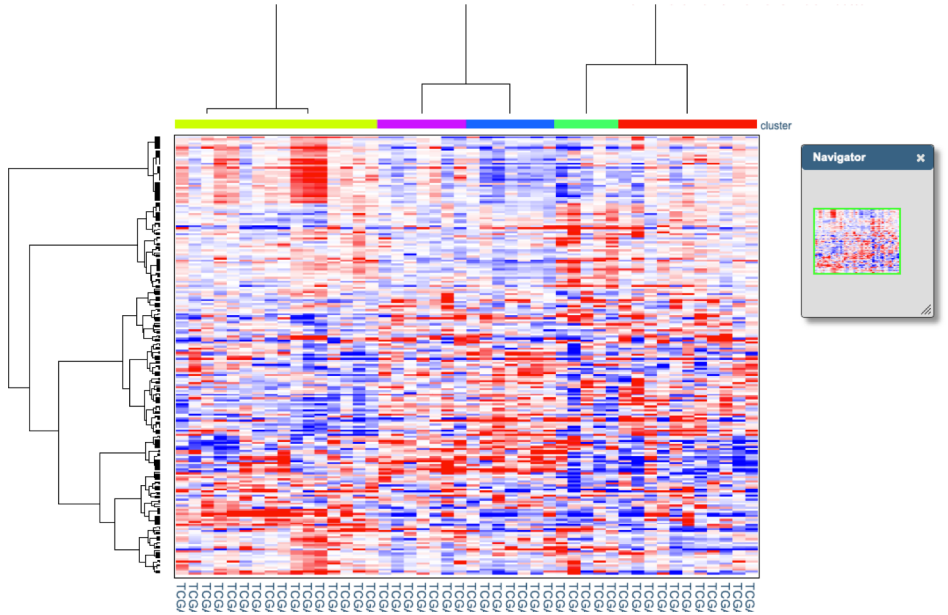




Zhao et al., Cancer Cell, 2020

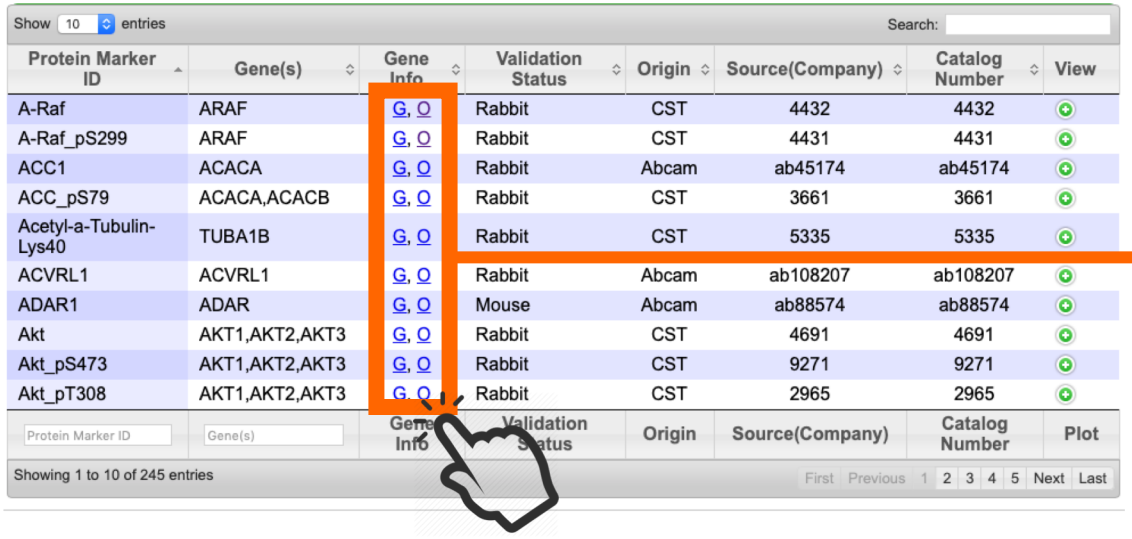
TCPA & NGCHM

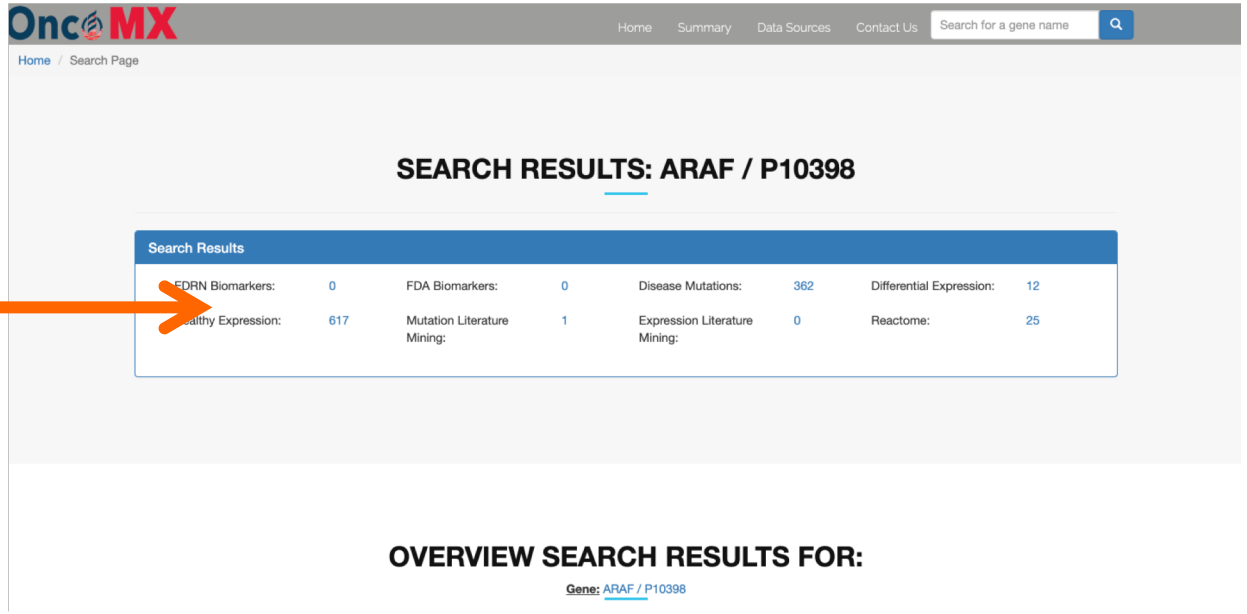




PI: John Weinstein and Bradley Broom (MDACC)

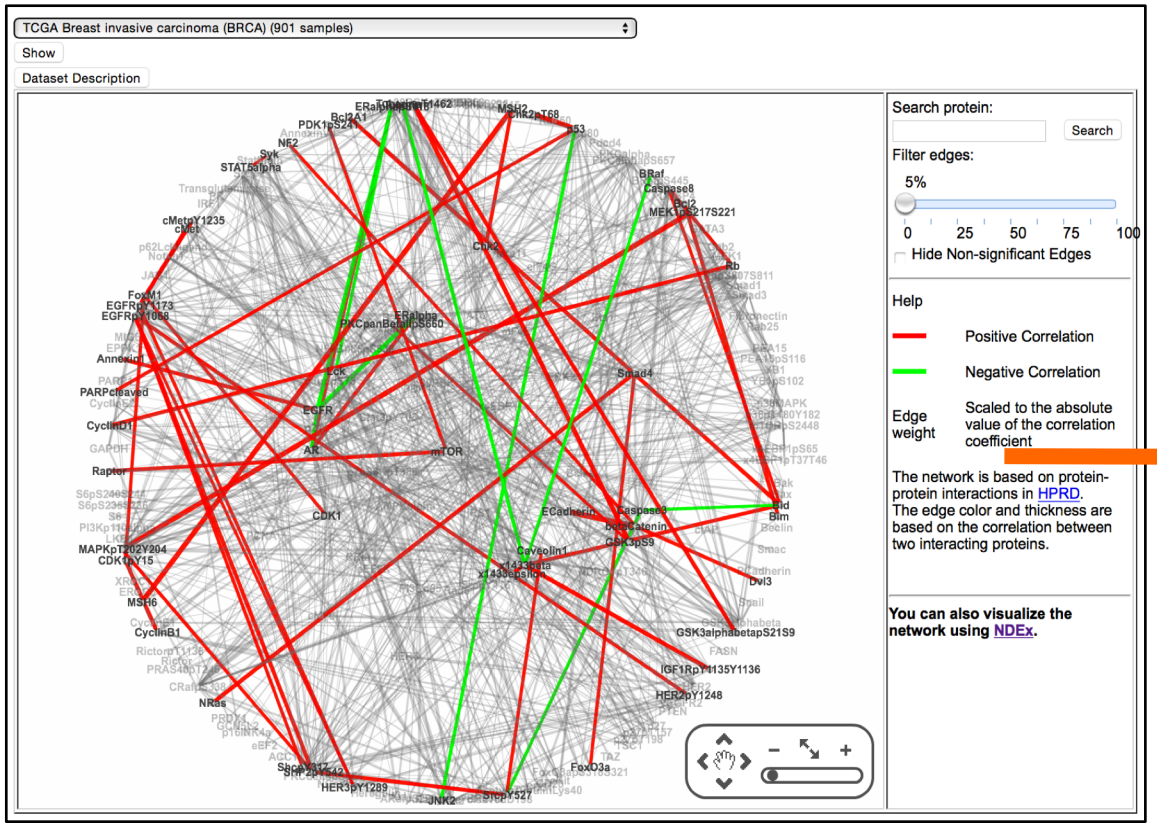
TCPA & OncoMX

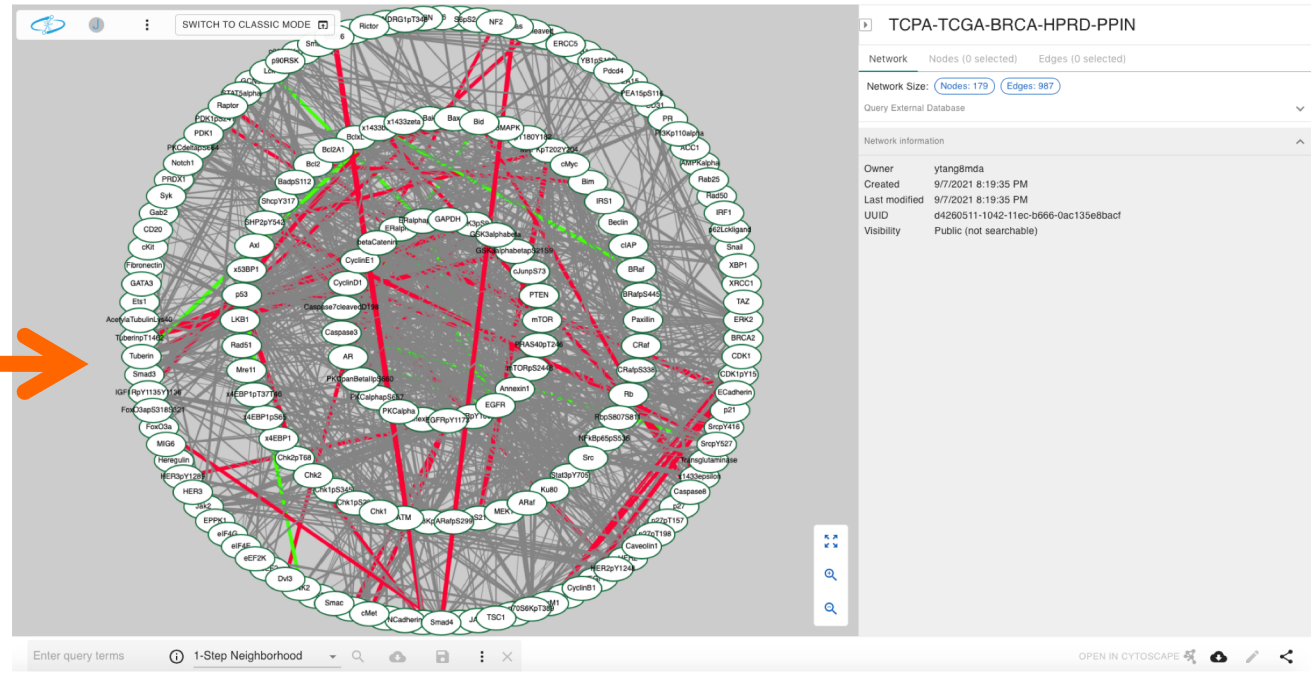




PI: Daniel Crichton and Raja Mazumder

TCPA & NDEx





PI: Trey Ideker and Dexter Pratt (UCSD)

THE UNIVERSITY OF TEXAS
MD Anderson Cancer Center

Acknowledgements

- **Han Liang**
- Mei-Ju Chen
- Rehan Akbani
- Shiyun Ling
- All lab members

- **Gordon B Mills**
- Wei Zhao
- Yiling Lu
- Wenbin Liu
- Zhenlin Ju
- Chris Vellano
- Patrick Ng

NCI ITCR program U24CA209851

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