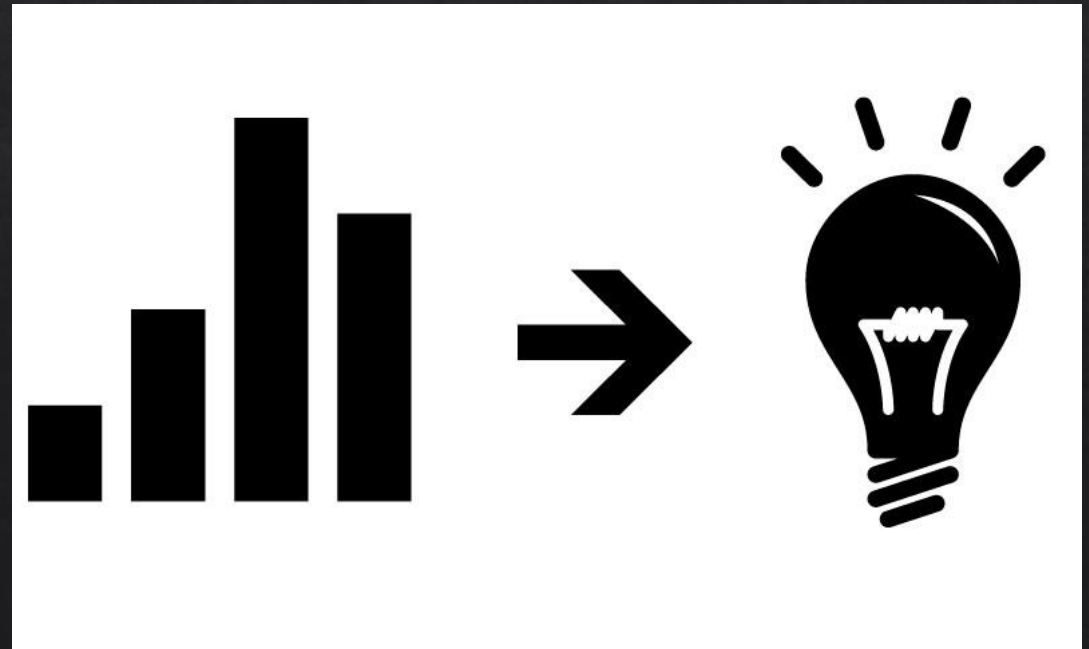


# Graph Classification using Signal-Subgraphs: Applications in Statistical Connectomics

Written by JT Vogelstein, WR Gray-Roncal, RJ Vogelstein, CE Priebe

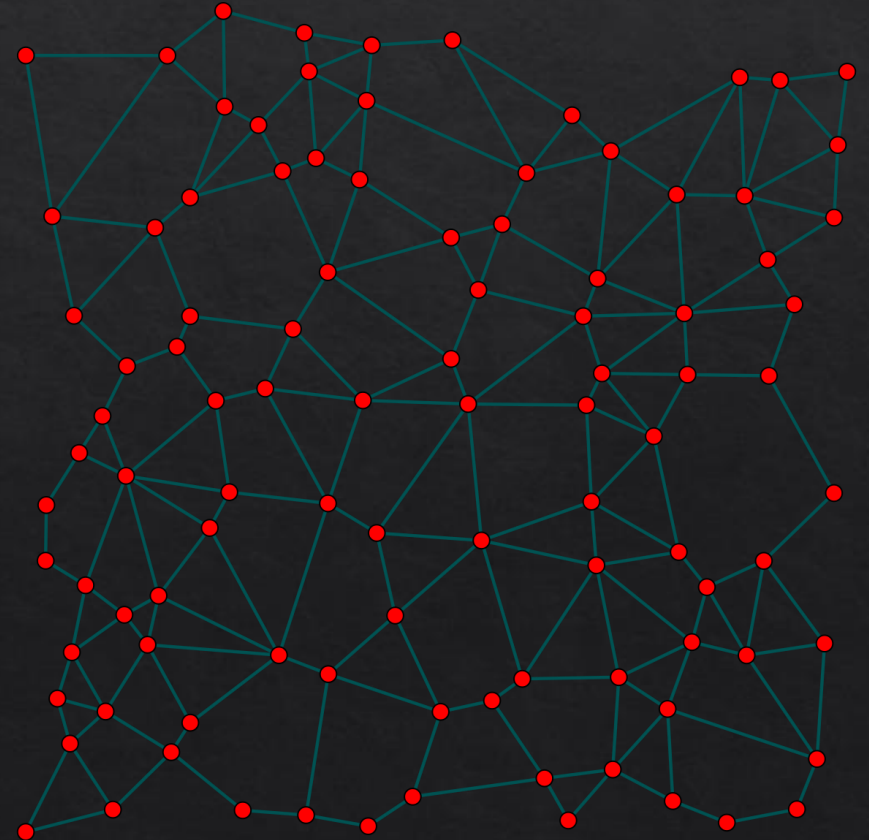
# Opportunity

- ◆ Connectome presents massive data
- ◆ Data presents insights



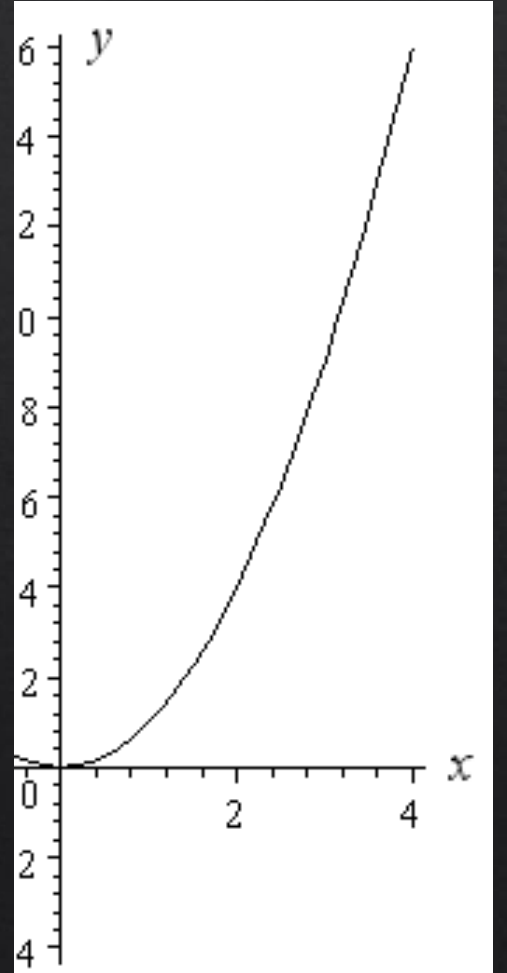
# Challenges

- ◆ Graph vs vector classification
- ◆ Connectivity matrix?
- ◆ Massive data downsides?



# Action

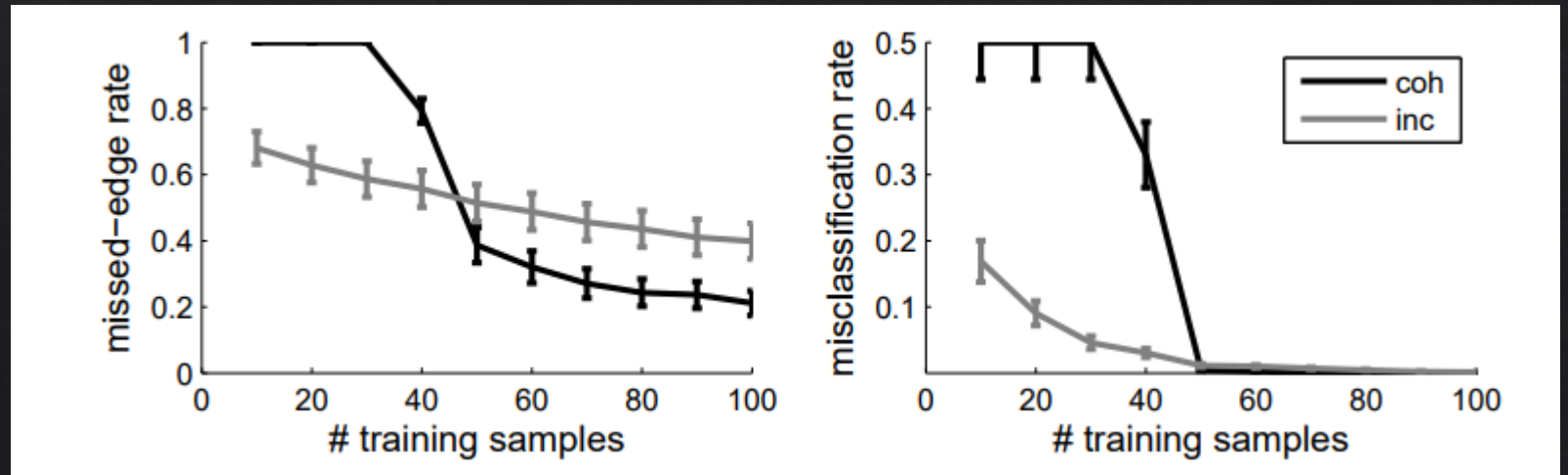
- ◆ Consider Signal-Subgraphs
- ◆ Constrain edges, vertices
- ◆ Quadratic in number of vertices





# Results

- ◆ Beats benchmark classifiers
- ◆ Missed edges in signal-subgraphs?
- ◆ More training samples?



# Feedback

- ◆ Liked paper
- ◆ Methods section very technical
- ◆ Signal-subgraph?