

# PROTEIN DATA BANK: 53 years young and transforming science and society

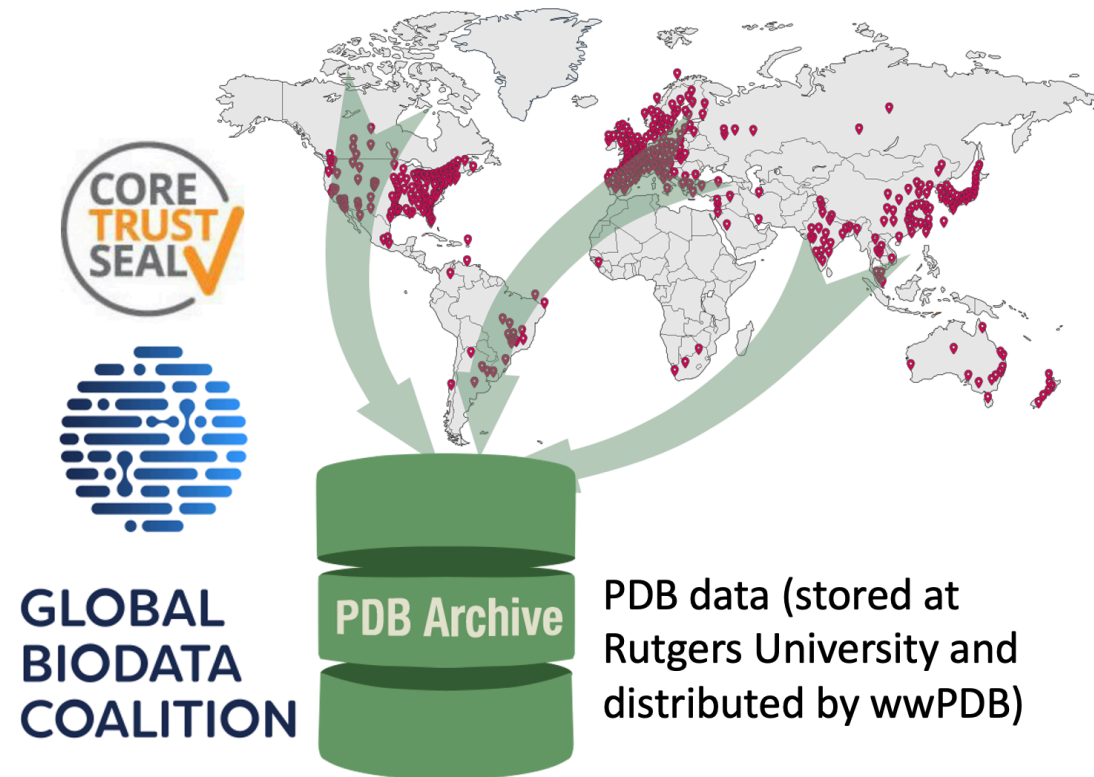
Stephen K. Burley, M.D., D.Phil.

SAS-Chemistry and Chemical Biology/Institute for Quantitative Biomedicine

SKB104@IQB.Rutgers.Edu

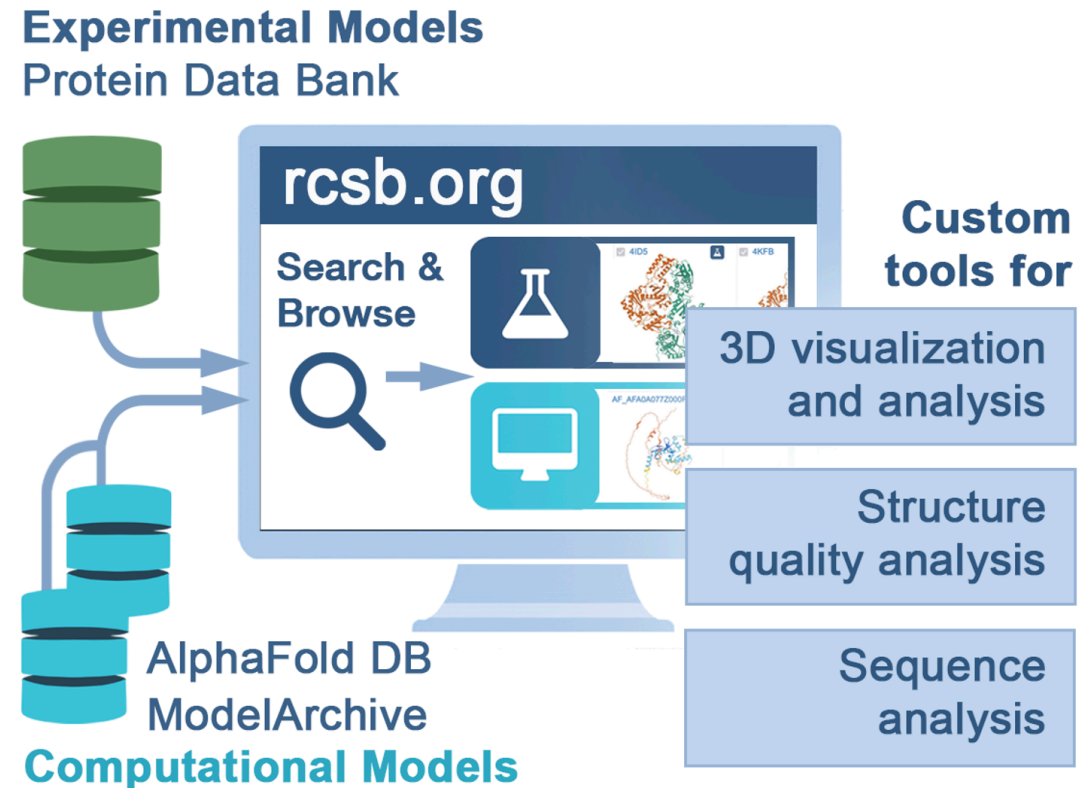
## Protein Data Bank is “Crucial for Sustaining the Broader Biodata Infrastructure”

- FAIR/FACT compliant global archive established in 1971
- Open Access to experimental 3D biostructures (>230,000)
- Impacting all of biomedicine from Agriculture to Zoology
- RCSB Protein Data Bank at Rutgers is the US data center for the Worldwide Protein Data Bank supported by NSF, NIH, and DOE



## RCSB.org Research-focused Web Portal: One-Stop-Shop for Public 3D Biostructure Data

- RCSB.org delivers
  - >230,000 PDB structures
  - >1 million Computed Structure Models (CSMs) from AlphaFold DB and the ModelArchive
- RCSB.org data exploration and visualization tools used by many millions of researchers, educators, and students worldwide
- Provenance/reliability of both data types are clearly identified



Burley *et al.* (2022) *Protein Science* 31, E4482.

Burley *et al.* (2025) *Nucleic Acids Research* 53, D564–D574.