# Module Review

MED676 Bioinformatics Module

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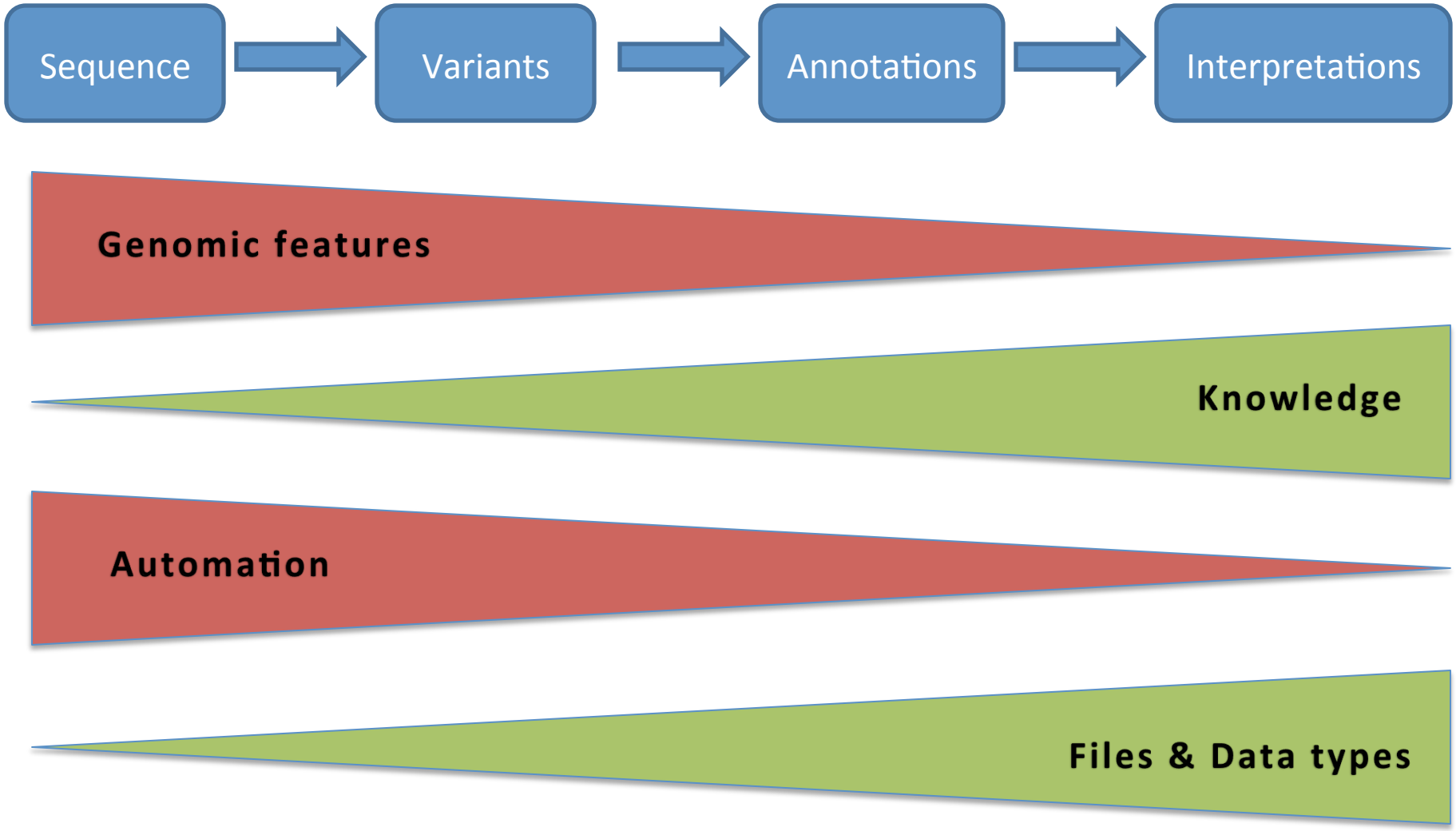
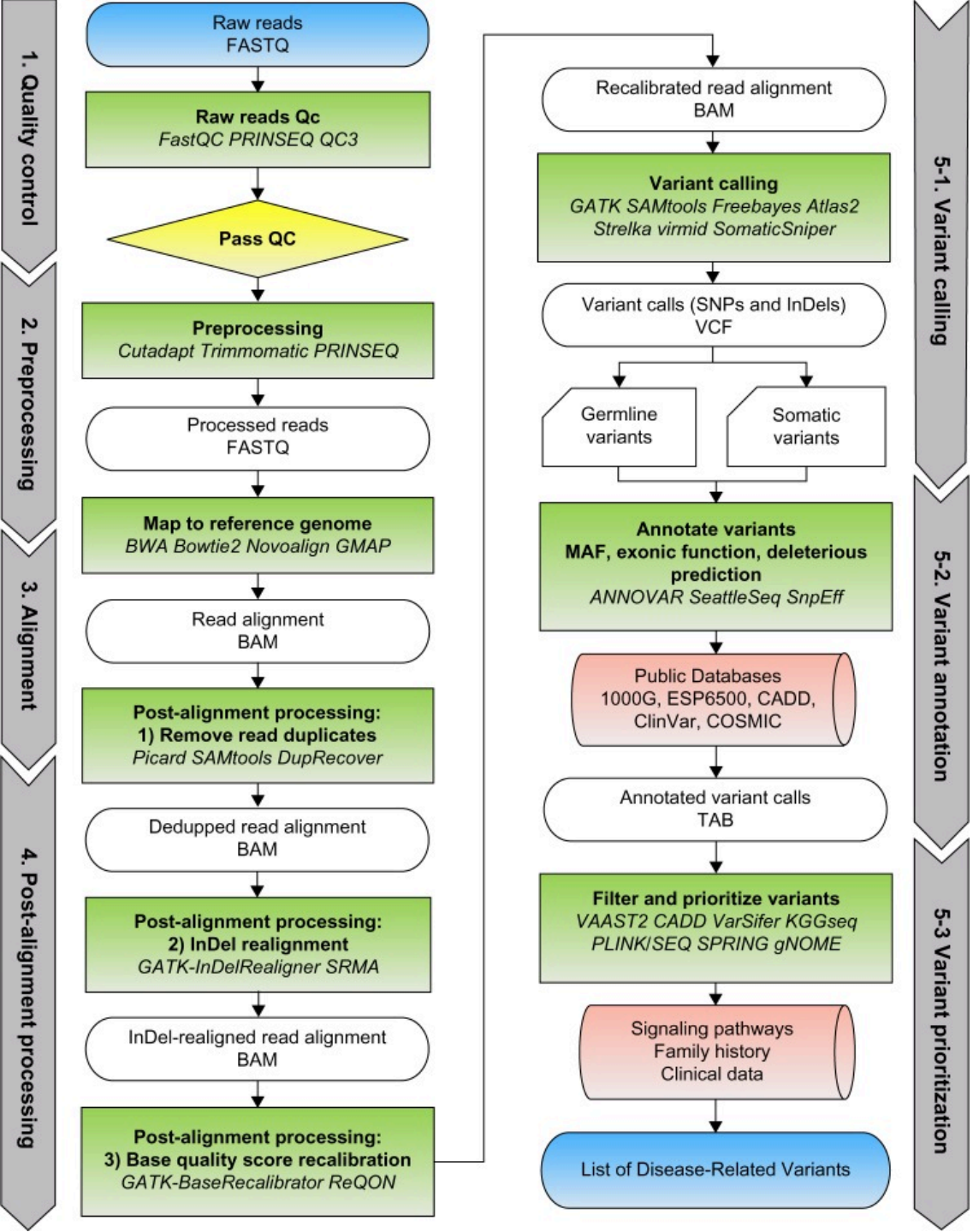
# Main Take Aways



# Where to start on a problem?

**Data driven approach:**

1. Define a specific disease area and population.
2. What datasets look interesting and may be useful.
3. Propose a filtering or pattern recognition strategy.




**Complete example from:**
[Cancer Inform. 2014; 13(Suppl 2): 67–82.]

Do not just list a bunch of tools in your proposal! Need descriptions and justifications.

**Also:**

ExAC, VEP, dbSNP,
GGV browser,
Polyphen2, PROVEAN

OMIM, HGMD,
SNOMED, HPO,
PhenIX, GO

STRING,
PathwayCommons,
DAVID, mSIGdb,
SFARI

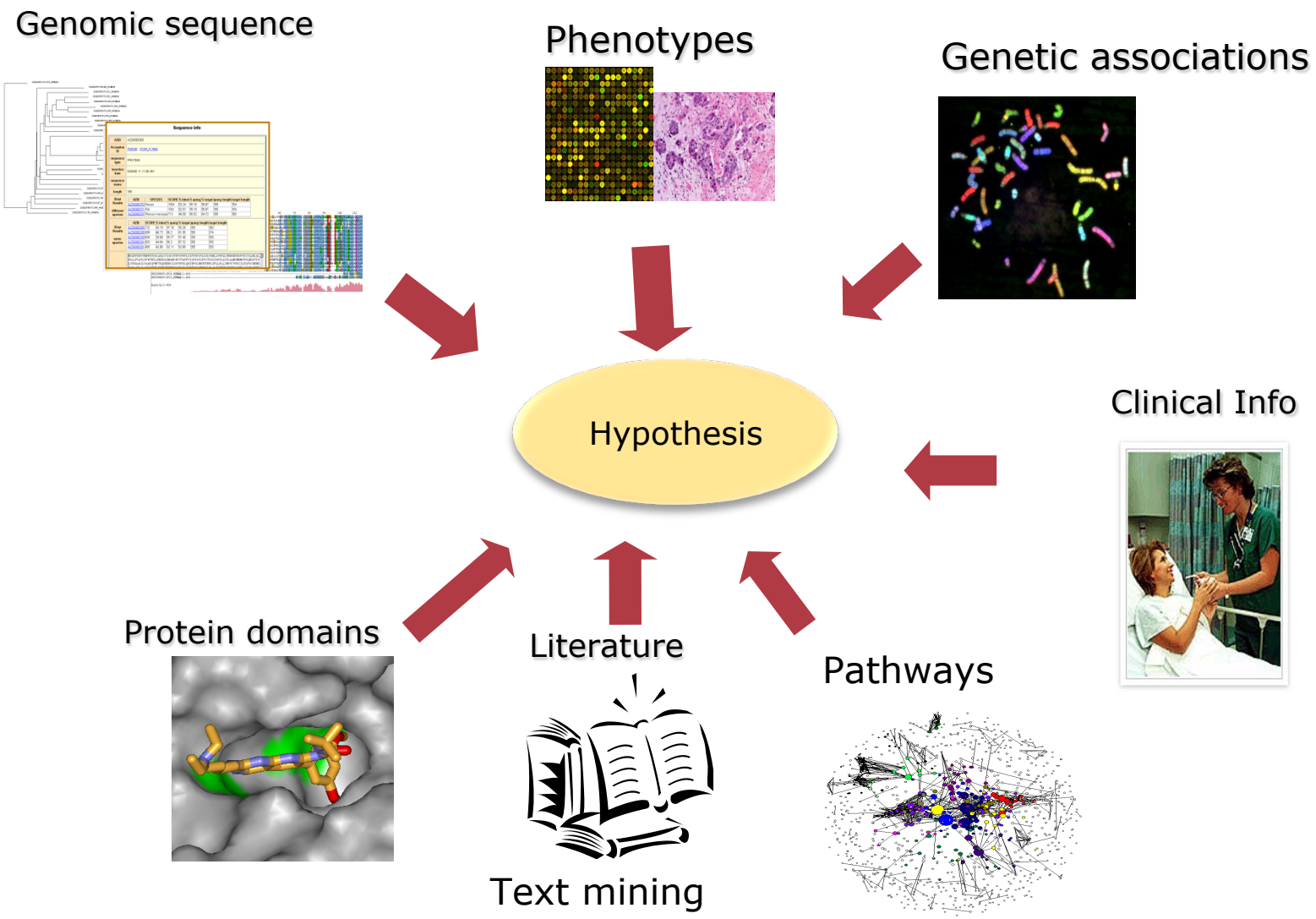
# Where to start on a problem?

**Hypothesis driven approach:**

1. Define success (impact) for your proposal and how it is measured.

2. What do you expect the result (hypothesis) to be?

3. Identify what you need to support the hypothesis




For each resource/tool, think about their advantages and **limitations** (eg. EPRs, protein positions)