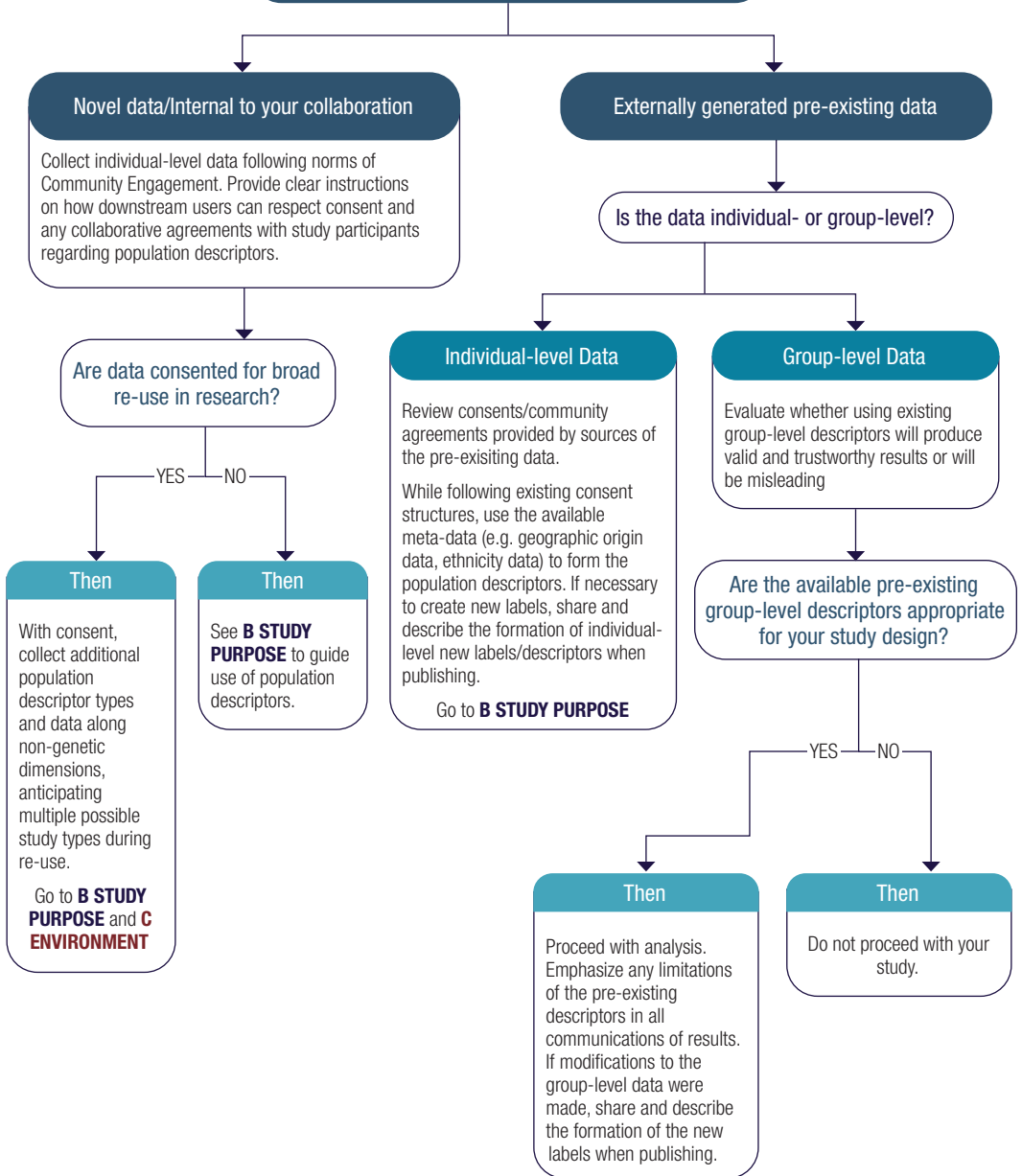


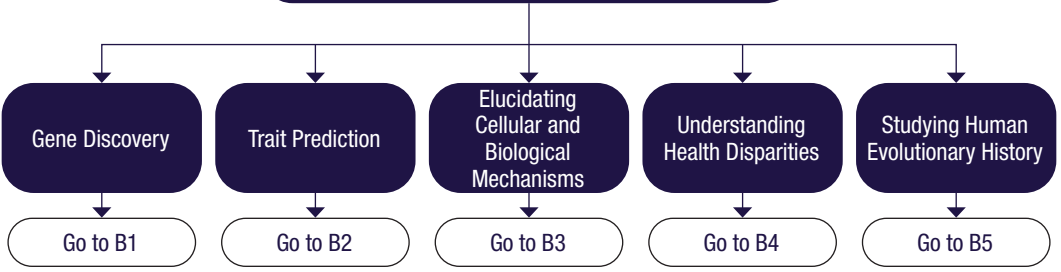
# PART A

## A: WHAT IS THE SOURCE OF YOUR DATA?



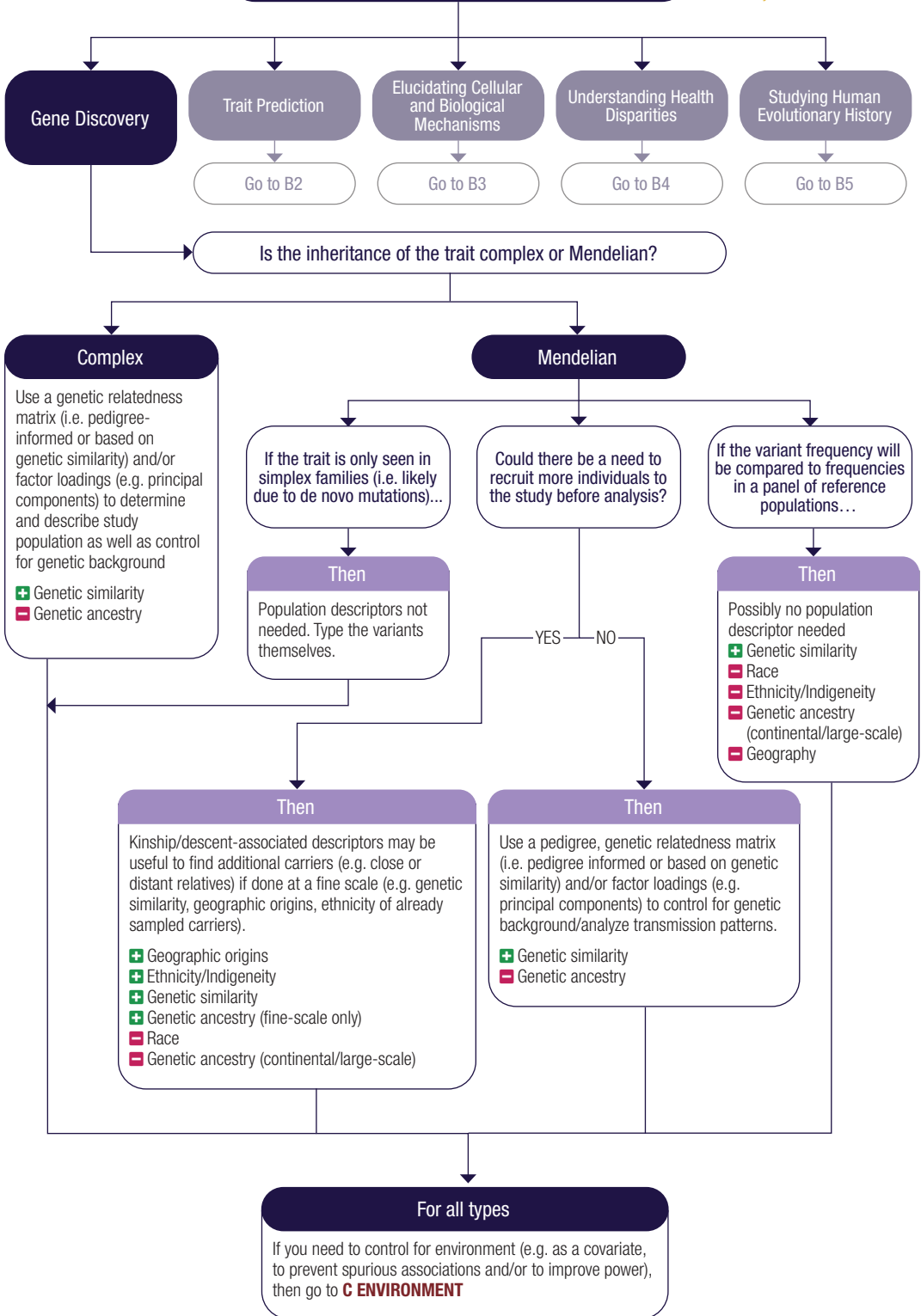
# PART B

## B: WHAT IS THE PURPOSE OF YOUR STUDY?



**B: WHAT IS THE PURPOSE OF YOUR STUDY?**

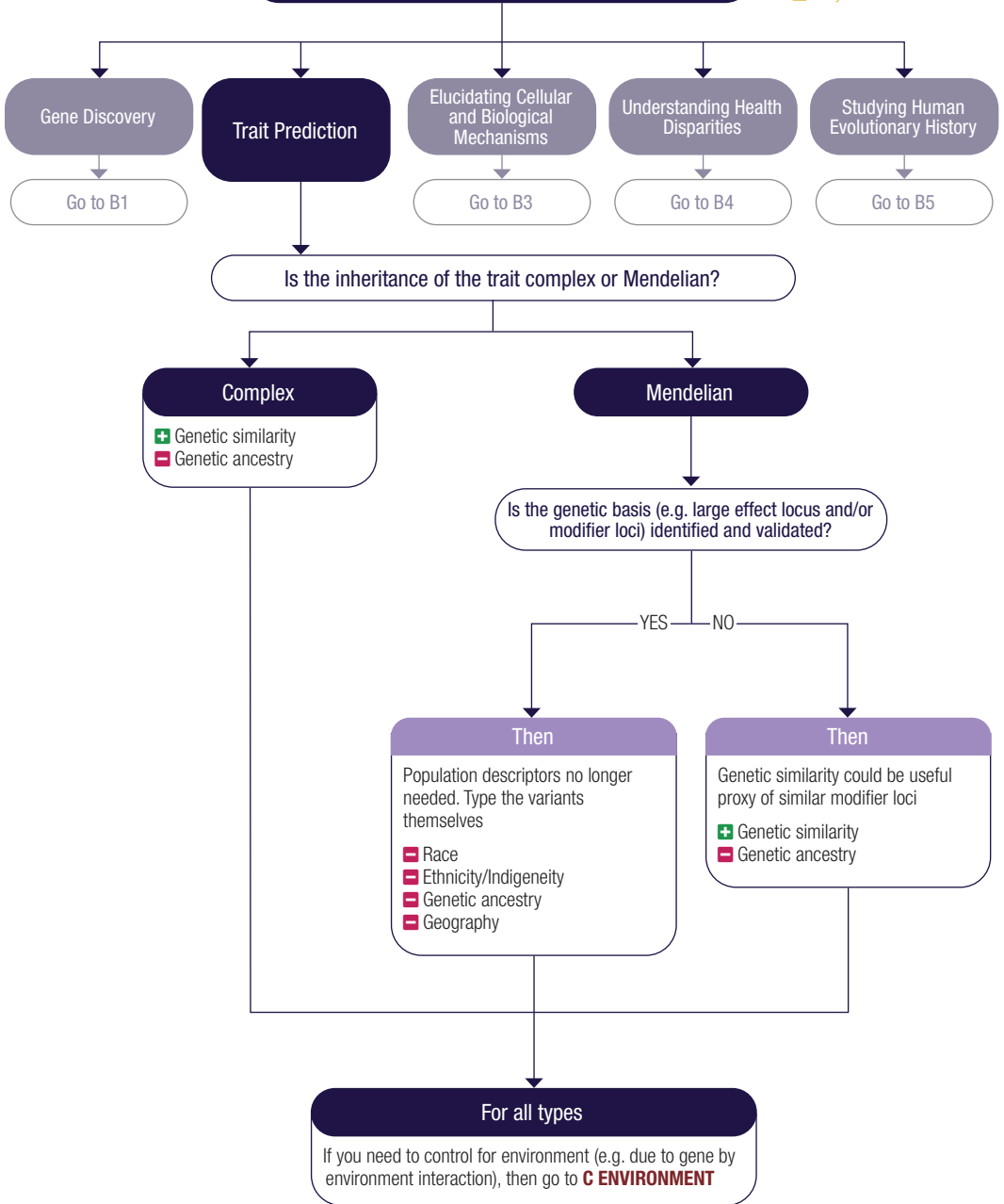
- + Preferred descriptors
- Should not be used
- ? May be used in some cases



# PART B2

## B: WHAT IS THE PURPOSE OF YOUR STUDY?

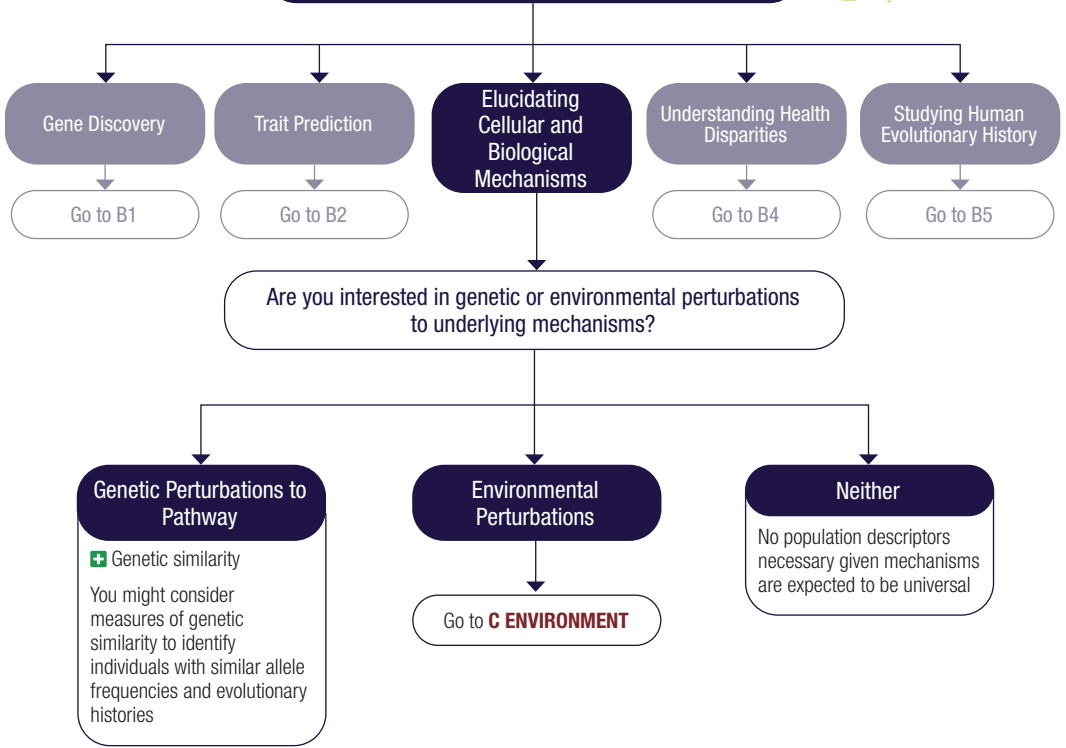
- + Preferred descriptors
- Should not be used
- ? May be used in some cases



# PART B3

## B: WHAT IS THE PURPOSE OF YOUR STUDY?

- + Preferred descriptors
- Should not be used
- ? May be used in some cases



### Genetic Perturbations to Pathway

#### + Genetic similarity

You might consider measures of genetic similarity to identify individuals with similar allele frequencies and evolutionary histories

### Environmental Perturbations

Go to **C ENVIRONMENT**

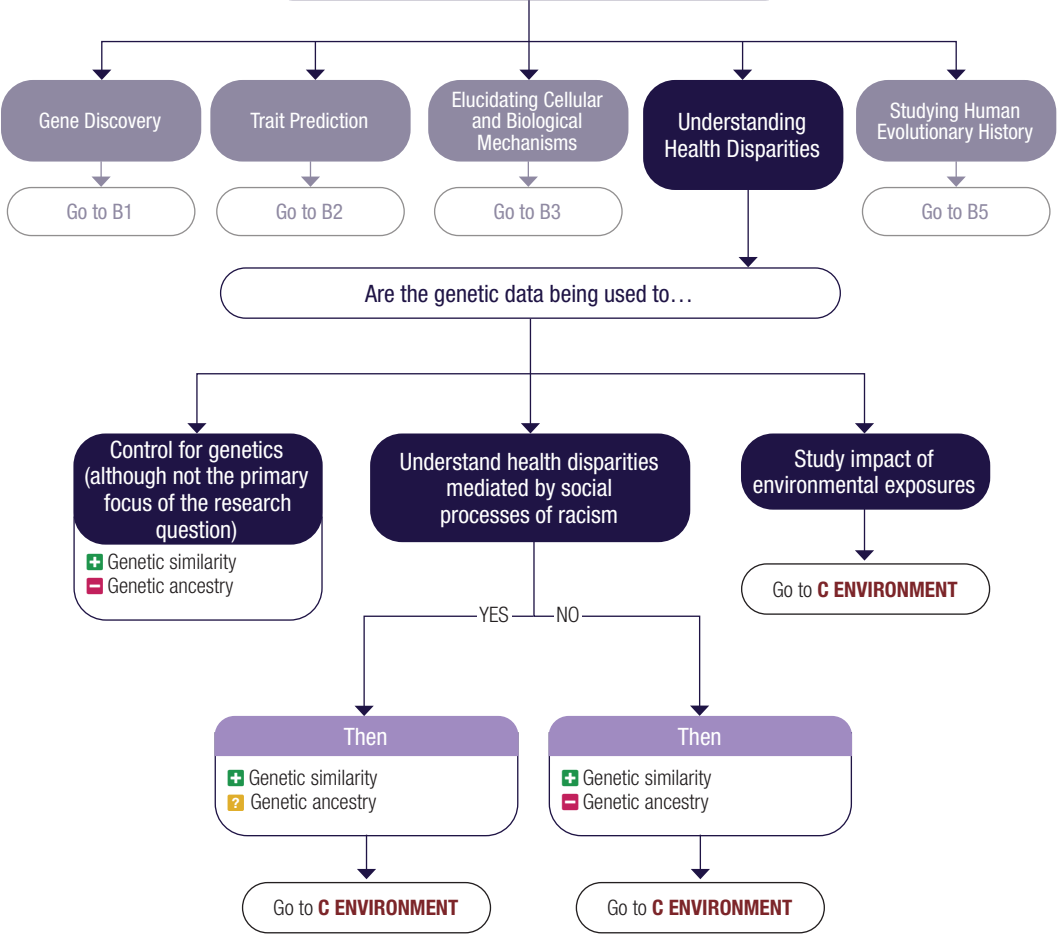
### Neither

No population descriptors necessary given mechanisms are expected to be universal

# PART B4

## B: WHAT IS THE PURPOSE OF YOUR STUDY?

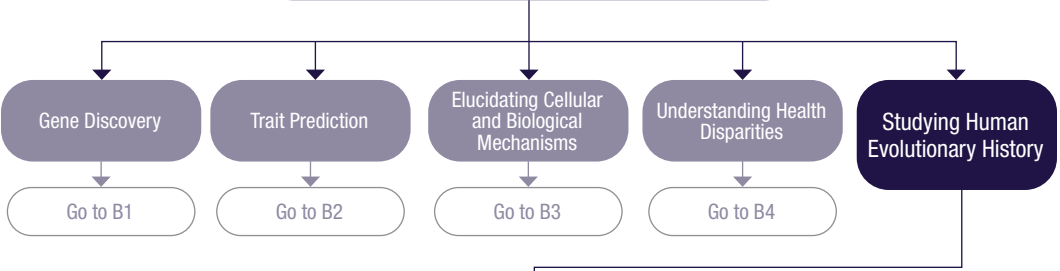
- + Preferred descriptors
- Should not be used
- ? May be used in some cases



# PART B5

## B: WHAT IS THE PURPOSE OF YOUR STUDY?

- Preferred descriptors
- ❌ Should not be used
- 🔍 May be used in some cases



**In general**

- Genetic ancestry
- Genetic similarity
- Geography
- 🔍 Ethnicity/Indigeneity
- ❌ Race

No population descriptor may be needed (e.g. in an ancestral recombination graph)

If ancient DNA...

**Then**

Avoid conflating cultural and genetic group namings - see Eisenmann et al 2018

# PART C

## C: ARE YOU TRYING TO...

- Preferred descriptors
- ❌ Should not be used
- 🔍 May be used in some cases

Control for the environment

Understand the impact of an environmental effect and may need to control for genetic background

➤ Genetic similarity

Do you have observations of the specific relevant environmental variables necessary to understand your trait?

YES NO

**Then**  
Incorporate these variables.

Are you using pre-existing data, such as from a biobank?

YES NO

**Then**  
Carefully consider use of proxy variables if needed.  
Possible proxies:  
🔍 Geography  
🔍 Ethnicity/Indigeneity  
🔍 Race (for only a subset of health disparities studies)

**Then**  
Collect information for as many potential environmental factors as possible and describe their source.