Graph model representation

- We can use graphs to represent our putative causal model.

- An arrow between variables represents a potential causal effect.

$$x \longrightarrow y$$

This is a Directed Acyclic Graph, a **DAG**

Elemental triads

- All DAGs can be decomposed into a set of 3 elemental motifs:

- The pipe, the fork and the collider

- We can use these to structure our thinking about our models and decide what variable to include or exclude

The pipe:

x ➡ z ➡ y

The fork:

x ⬅ z ➡ y

The collider:

x ➡ z ⬅ y