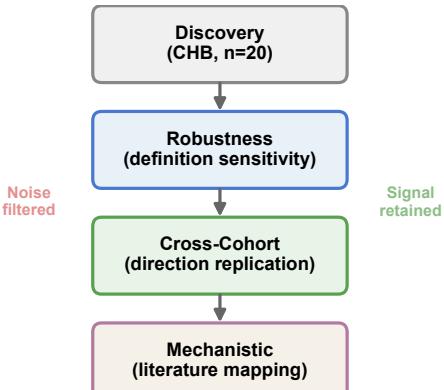


**c**

Module	Dir	Val	Mechanism	Ref
scfa acetate	v S Y		GPR41/43	Koh2016
scfa lactate s	v S Y		pH modulation + T-	Louis2017
bile acids	^ S N		FXR/TGR5 axis	Wahlstrom2016
tryptophan ind	v S Y		AhR ligand	Agus2018
lps lipidA	v S N		TLR4	Park2009
scfa butyrate	^ S N		Barrier integrity	Furusawa2013

**d**



Outcome: hypothesis-generating candidates ranked by concordance + plausibility