

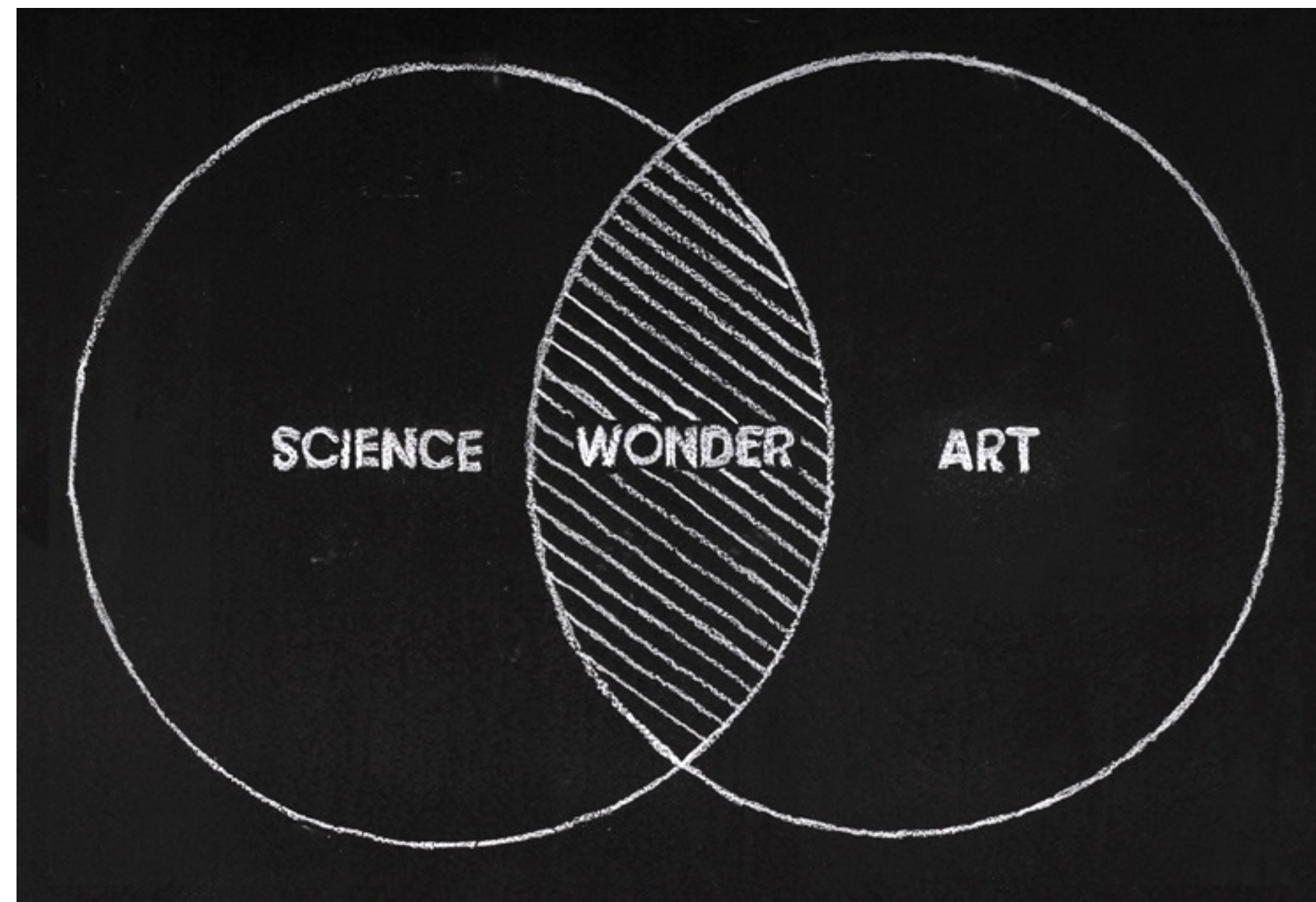
cjlortie

welcome



BIOL3250

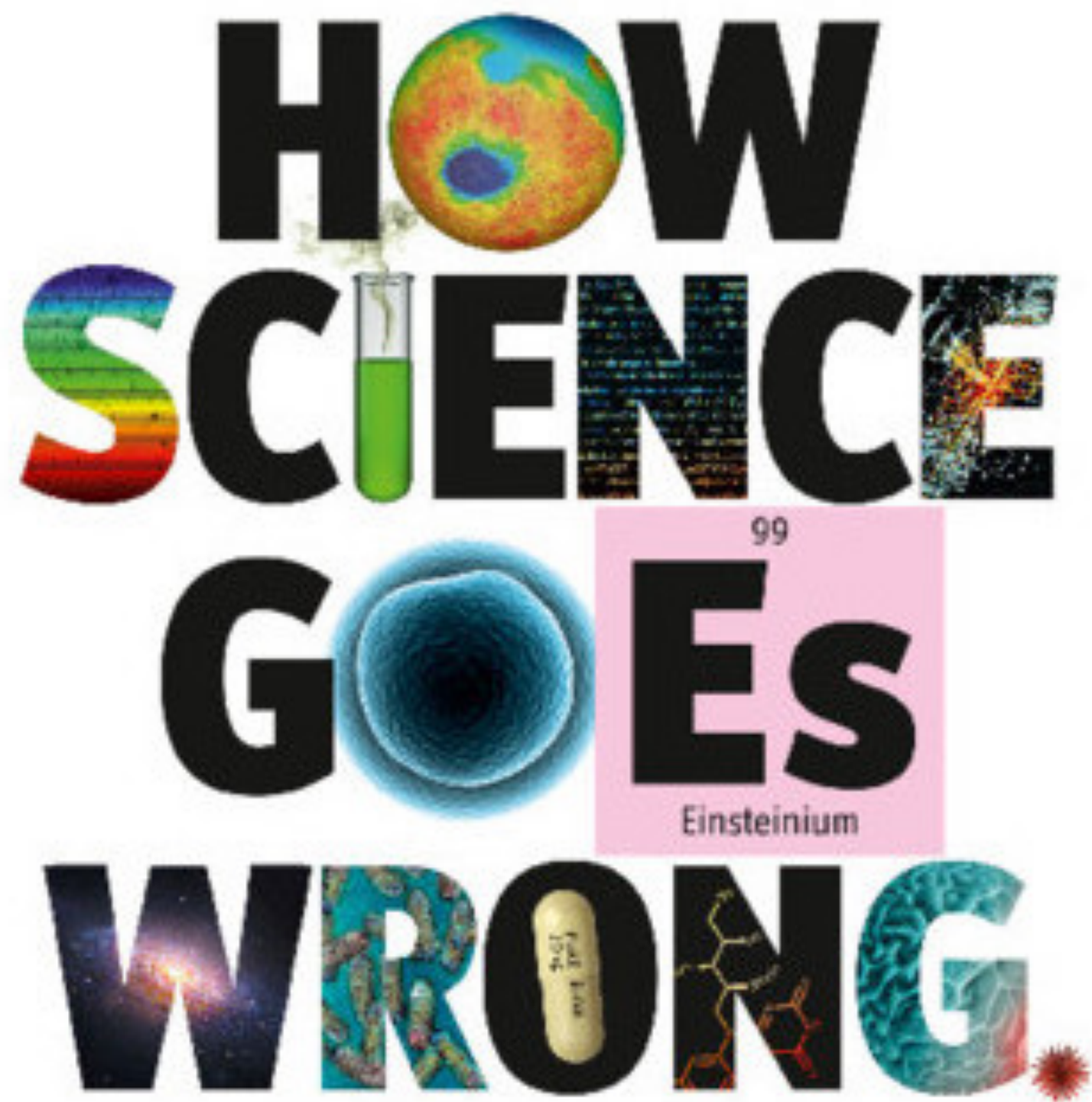
science is always creative



ideas, data, experiments

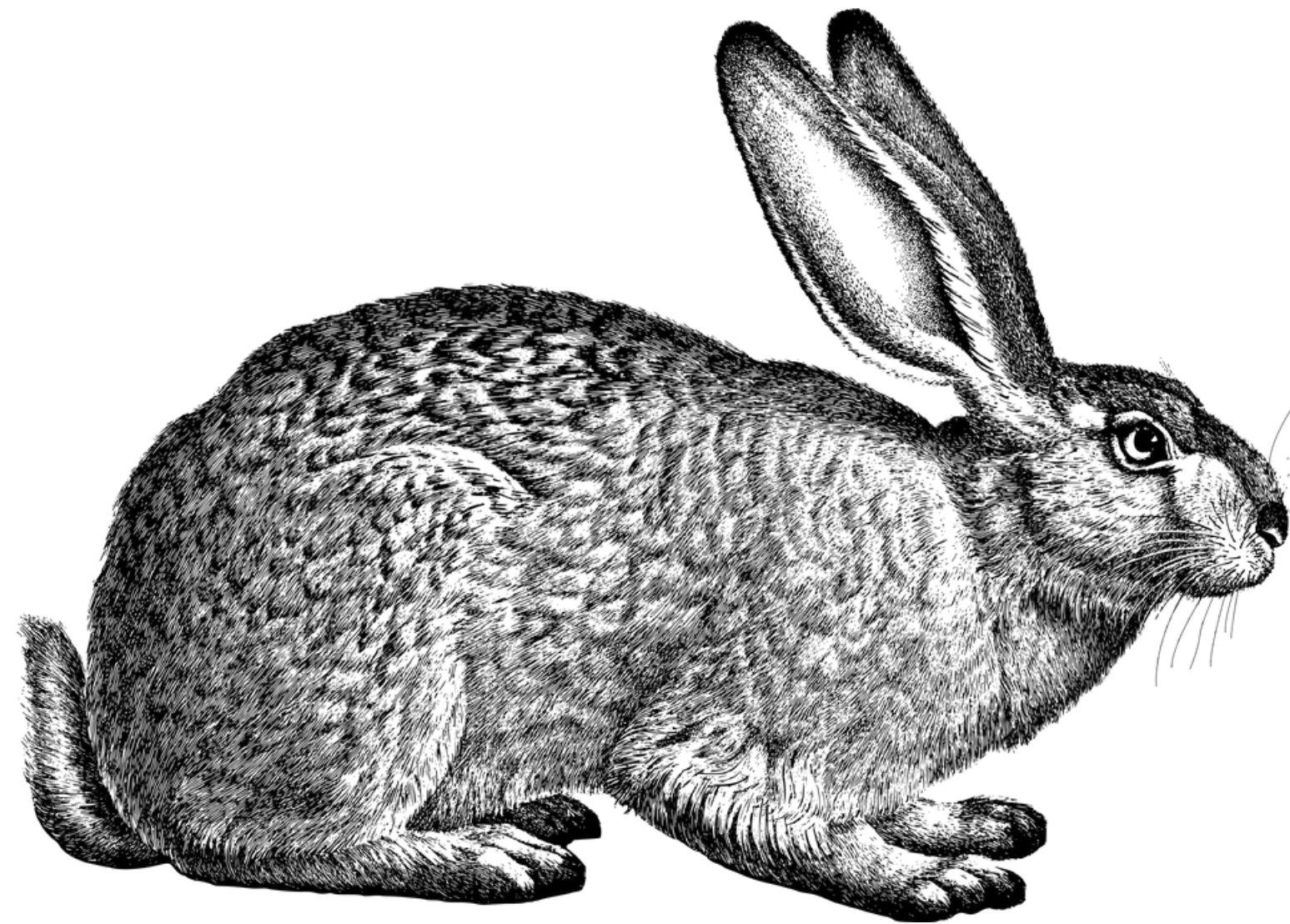
landscape includes
theory <space> experimentation <space> big data <space> validate ideas





landscape of research should be scalable and reproducible

need to expand use of and critical value of experimentation

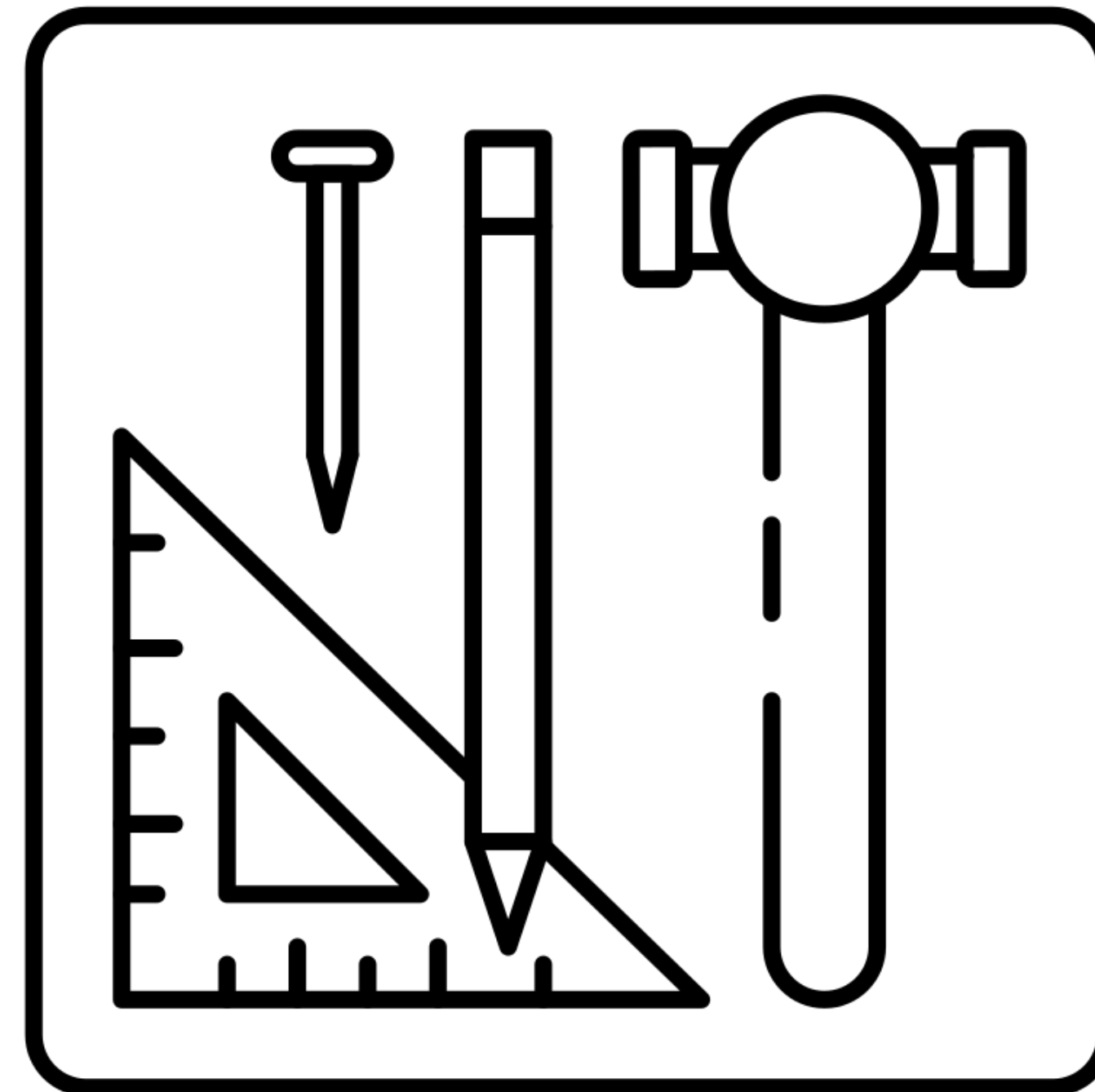


designcraft4experiments

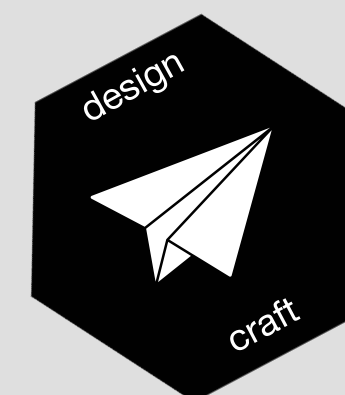
A black and white icon depicting a barn and a silo. The barn on the left has a gabled roof, a small square window, and a large door with a white 'X' pattern. To its right is a tall, cylindrical silo with a domed top and a vertical ladder-like structure on its side.

challenges

opportunity



BIOL3250 Experimental Design Cheat Sheet



lectures

test 30%

grant
proposal 20%

labs

data 5%

data 5%

field lab report
30%

data lab report
10%

key dates

sept 30 data

oct 21 data

oct 28 test

nov 11 lab

nov 25 grant

dec 2 lab

lectures



read ONE book, do a test, write a short grant proposal

labs



do one experiment from scratch (haha) and one from existing data

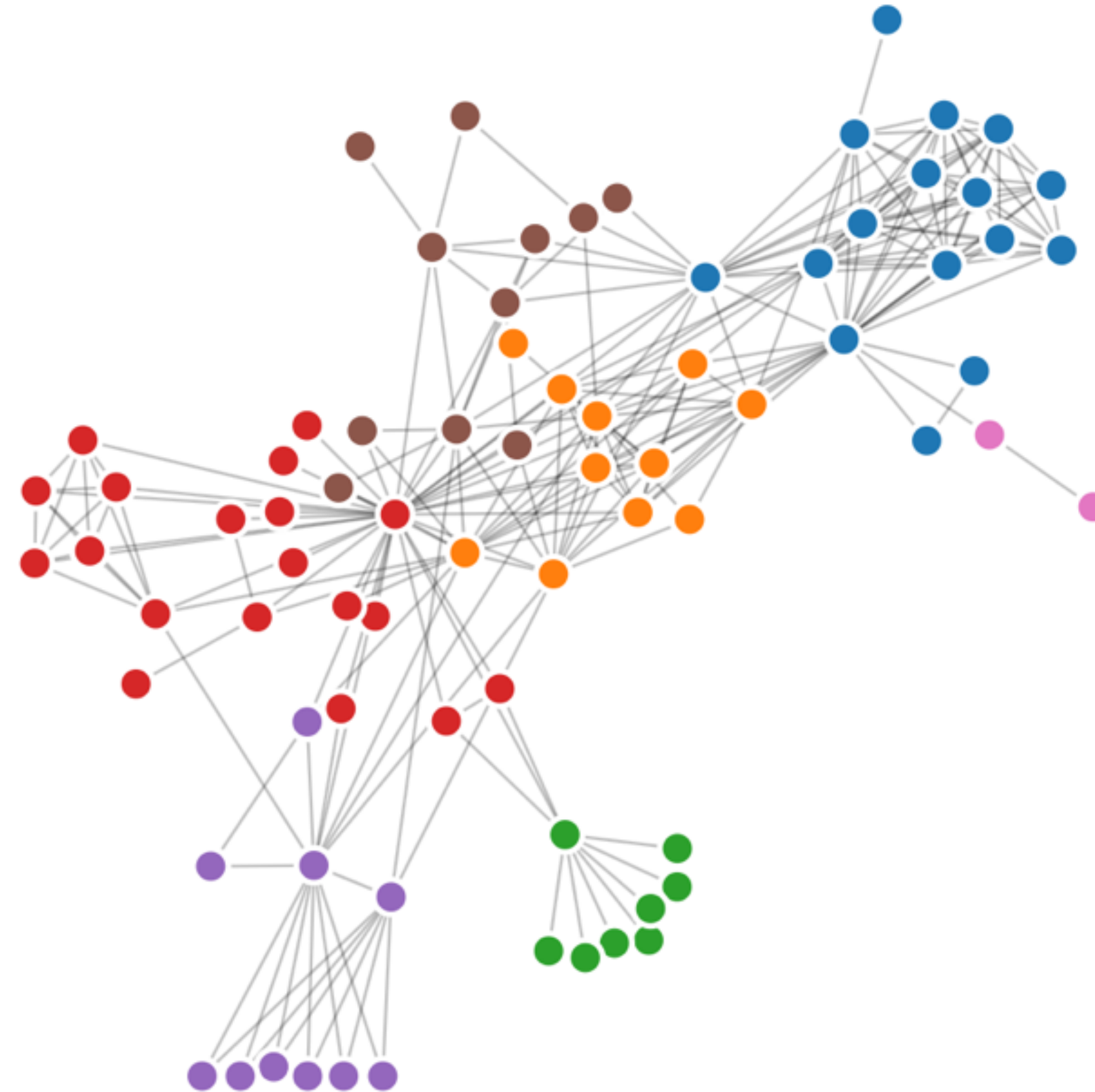


pilot experiments

useful
low stress
no side-effects
creative thinking for science
synchronous help, but asynchronous work

goal

become creative scientific
design thinkers



outcome

connect the dots between observation (data) and
process