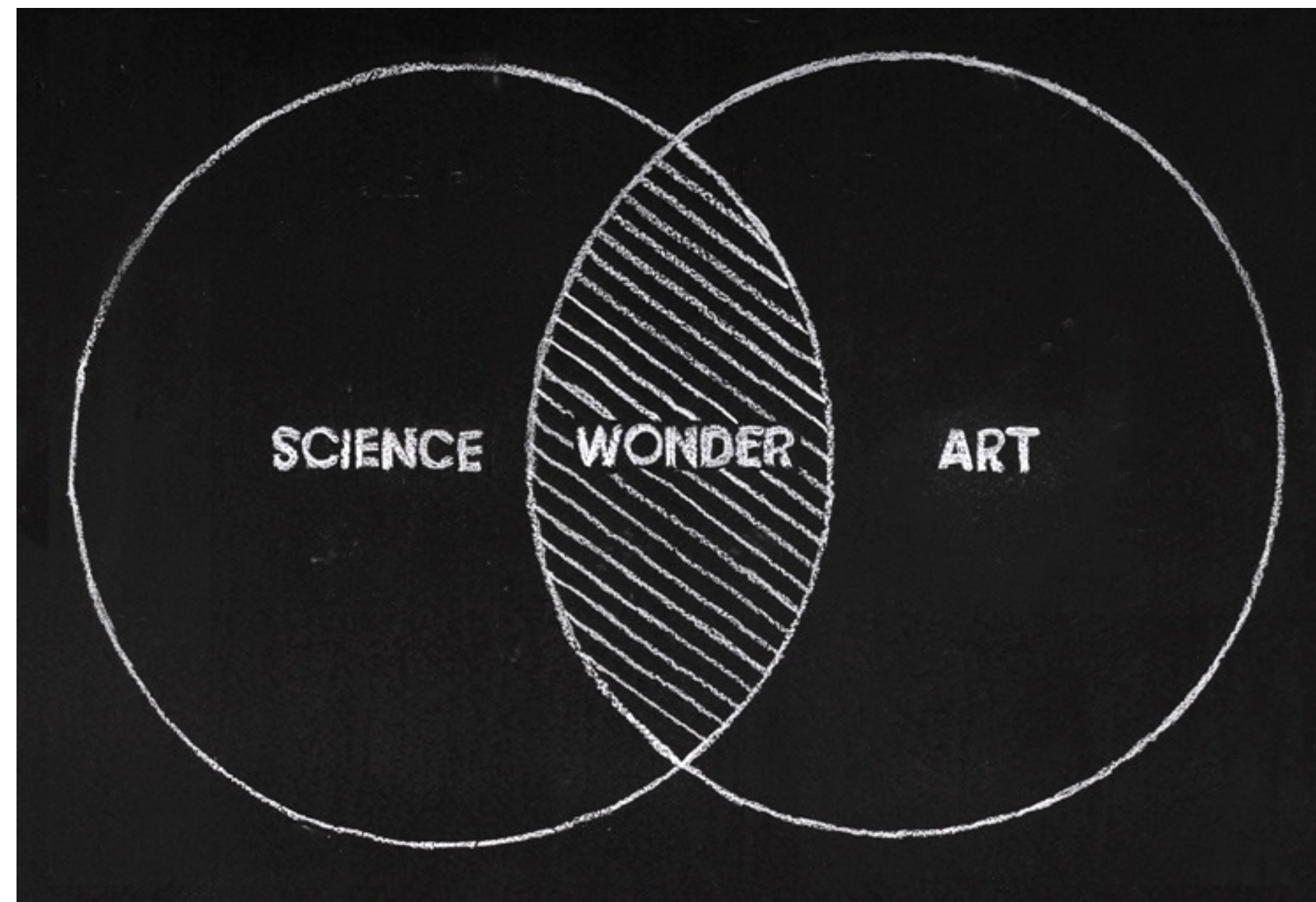


cjlortie



welcome

science is always creative



ideas, data, experiments

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



The Economist

OCTOBER 19TH-25TH 2013
Economist.com

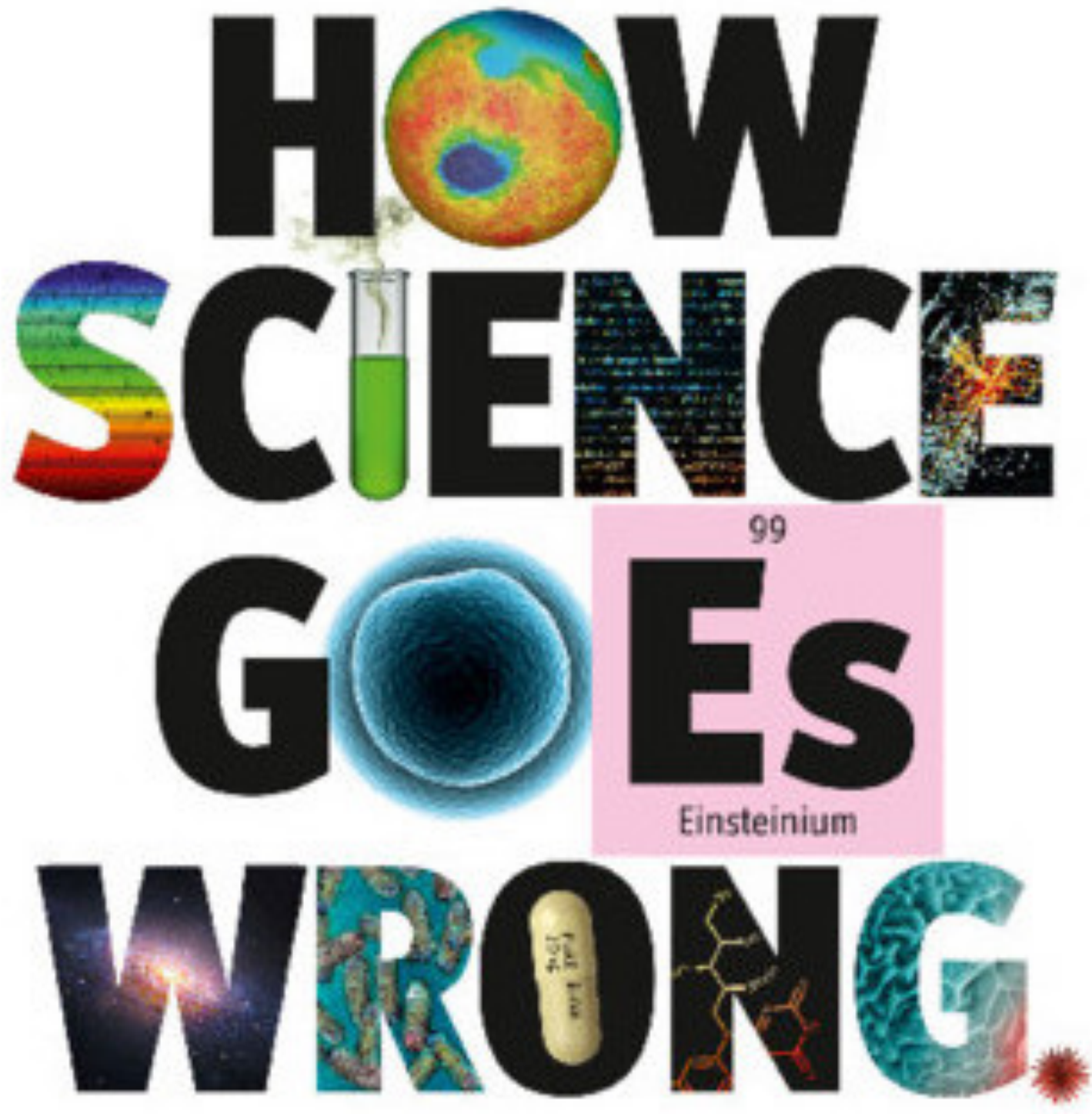
Washington's lawyer surplus

How to do a nuclear deal with Iran

Investment tips from Nobel economists

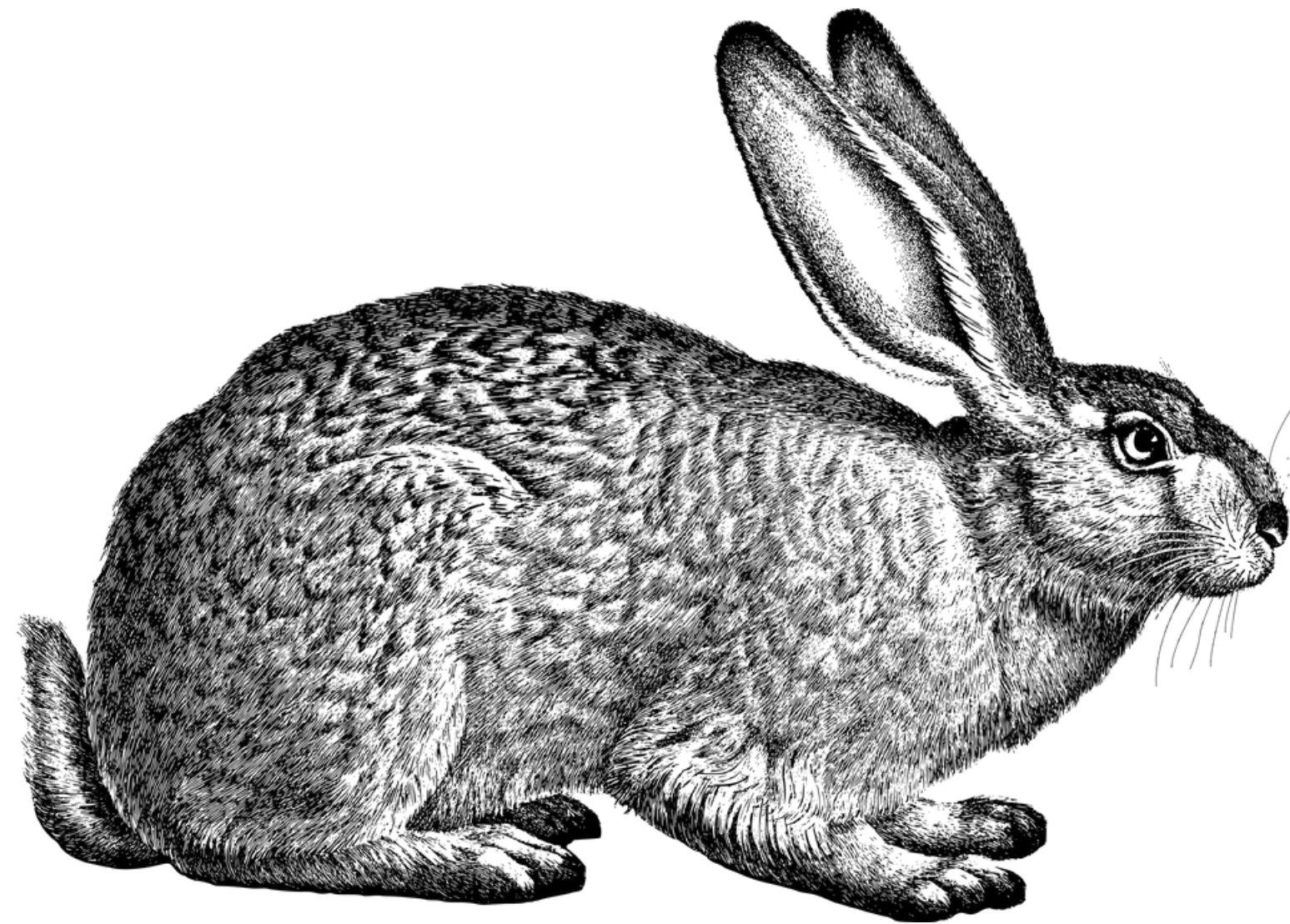
Junk bonds are back

The meaning of Sachin Tendulkar



landscape of research should be scalable and reproducible

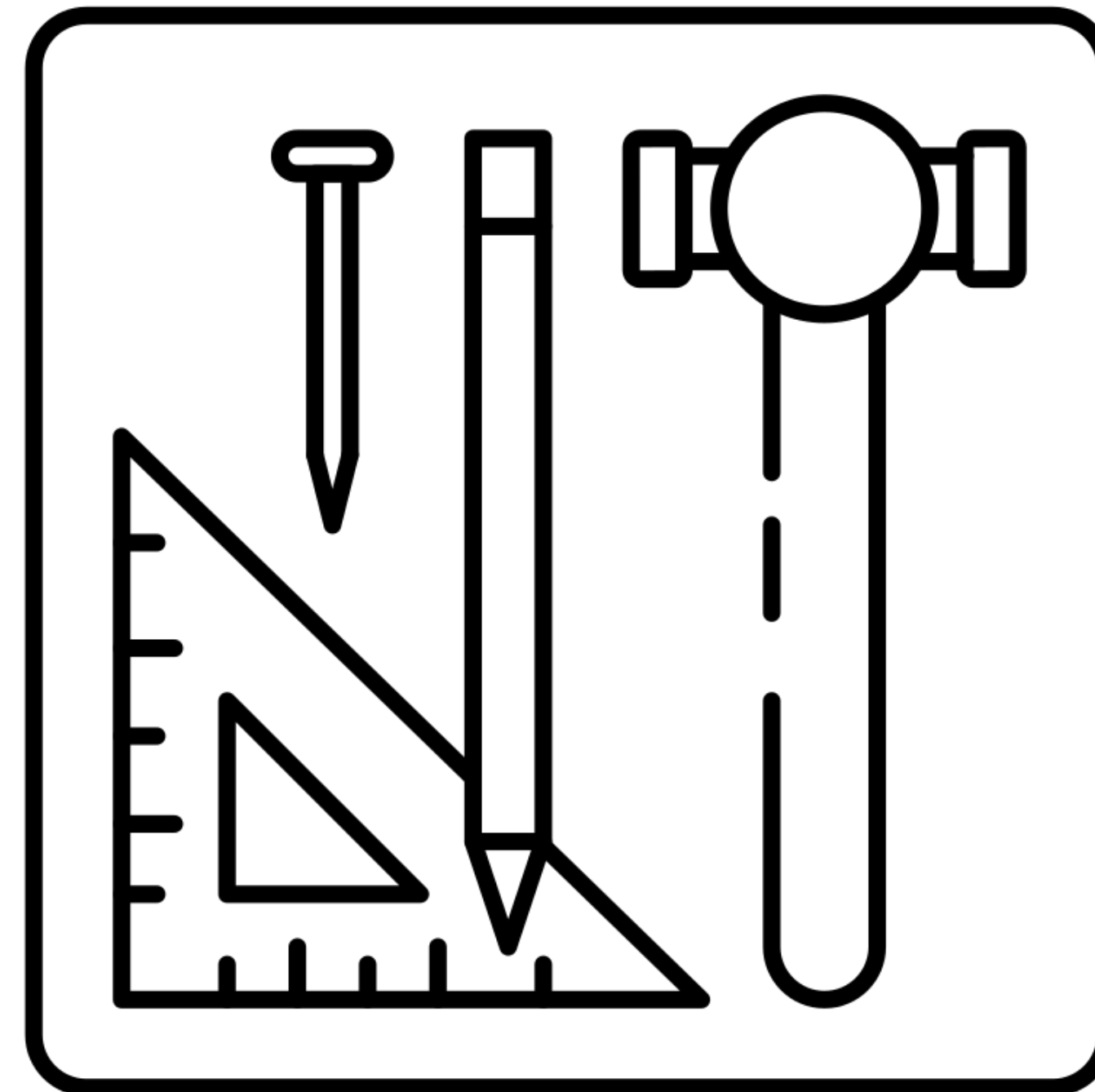
need to expand use of and critical value of experimentation



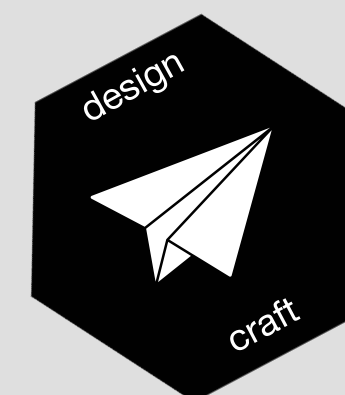
designcraft4experiments

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.

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

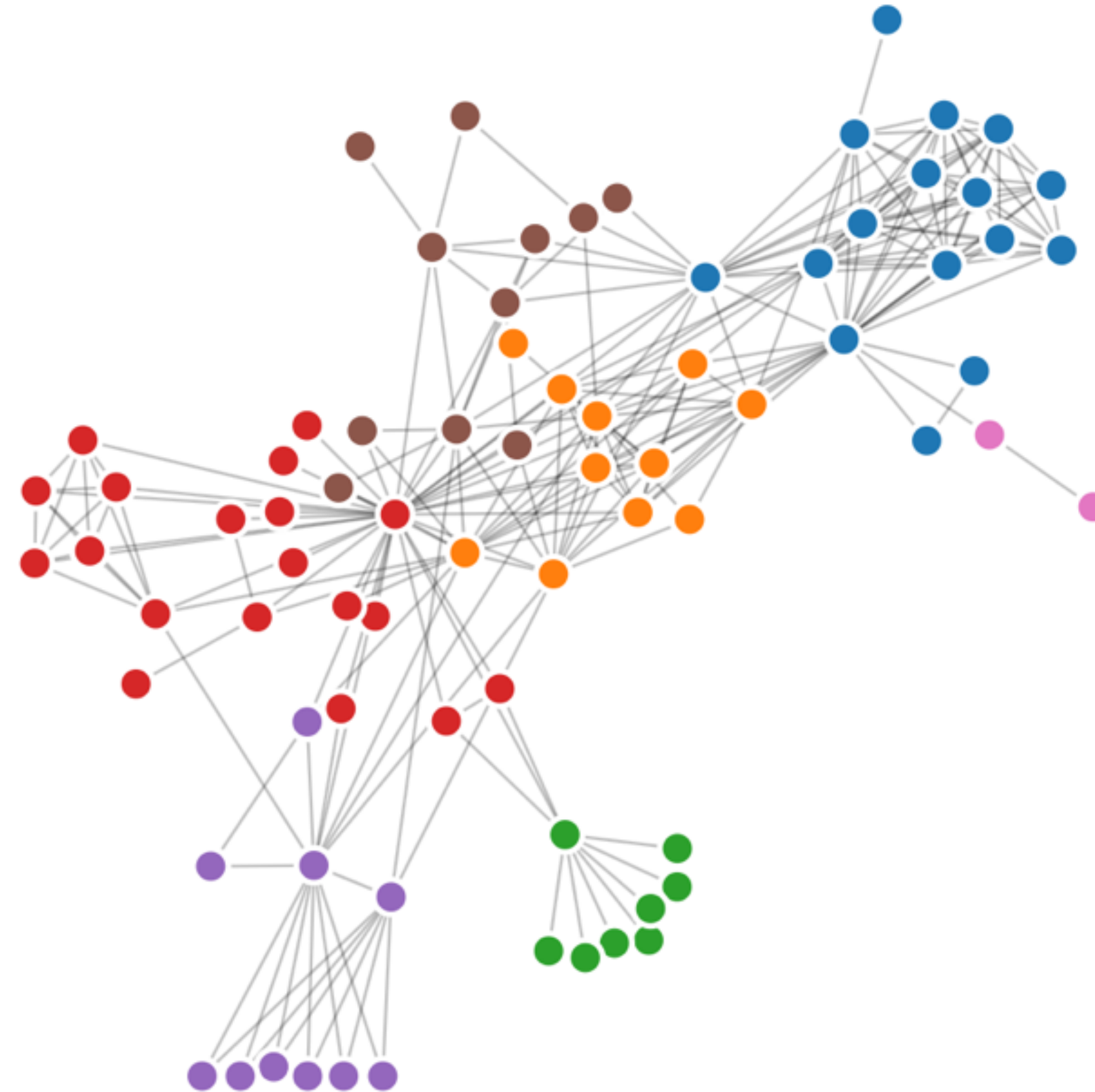


pilot experiments

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