Metropolis-Hastings MCMC estimation of OLS intercept (theta\_b) and slope (theta\_m) parameters (blue diamond = posterior mean; green line = true parameter value) 200 150 150 count count 100 -100 50 50 0 0 -3.0-2.0-3.5-2.5-1.51.90 1.95 2.00 2.05 theta\_b theta\_m 2.04 -2.0value 2.00 value -2.5 1.96 -3.01.92 -3.5

MCMC info: 2.5k iterations; .25 burn-in rate; start values b=0, m=0 data info: 1k points sampled from f(x) = 2x - 2 + N(0, 10), for  $x \sim Unif(-20, 20)$ 

1500

500

1000

MC\_iteration

1500

500

0

1000

MC\_iteration