Data 8, Lab 2

Causality and Table Operations
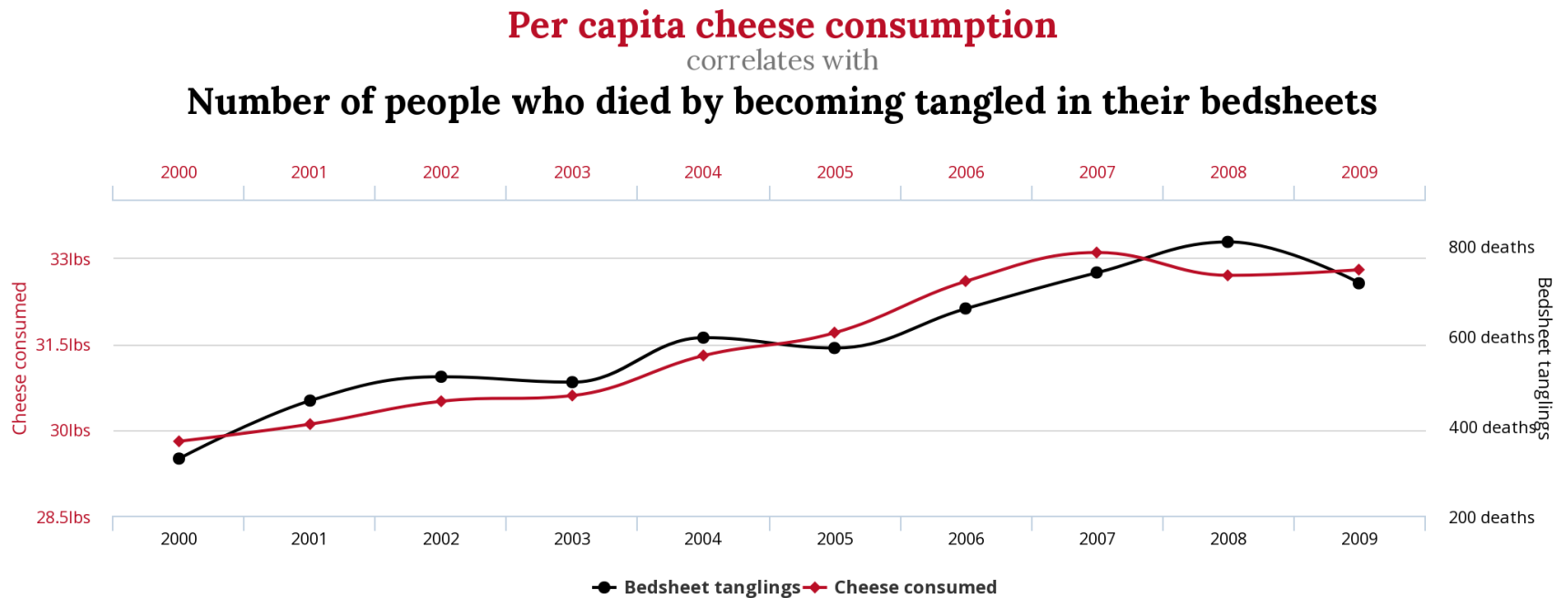
Hubert Luo
Spring 2020

31 January 2020

Lab Assistants
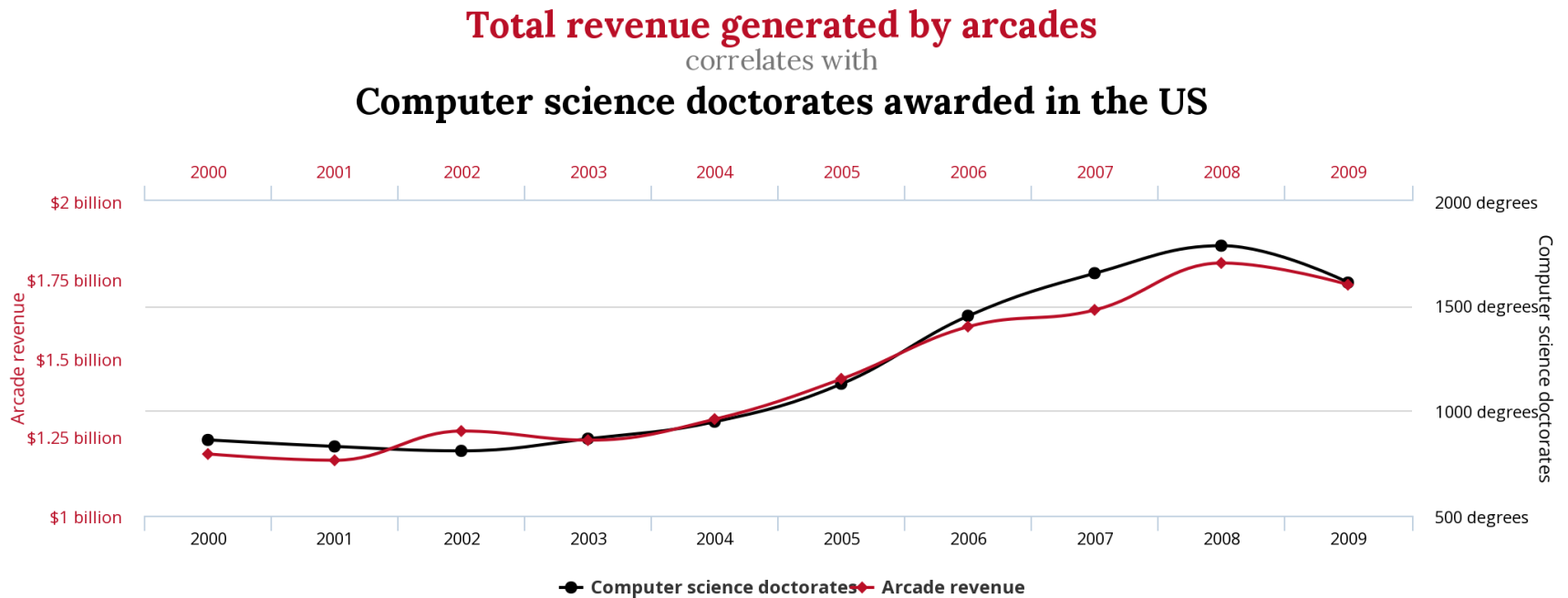
We have lab assistants who will be joining us this semester!

Correlation vs. Causation

Per capita cheese consumption
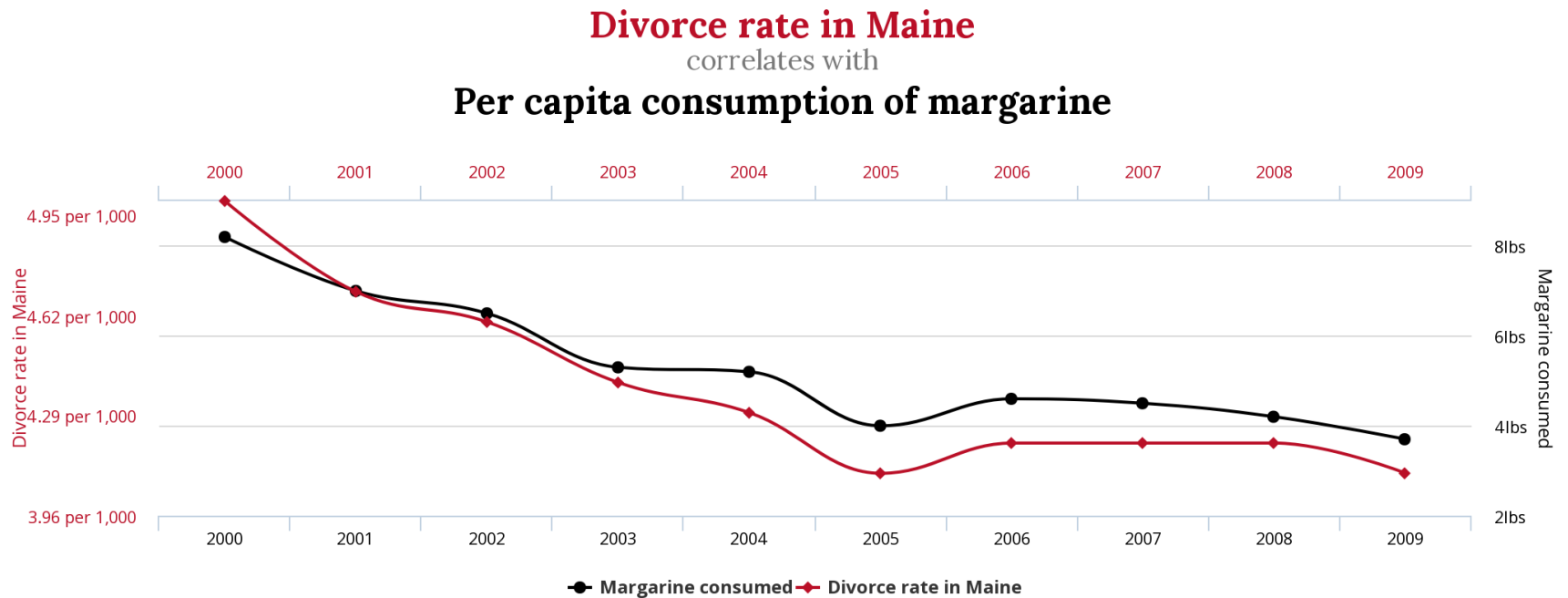correlates with
Number of people who died by becoming tangled in their bedsheets

tylervigen.com

Correlation vs. Causation

Total revenue generated by arcades
correlates with
Computer science doctorates awarded in the US

Correlation vs. Causation

Divorce rate in Maine
correlates with
Per capita consumption of margarine

Correlation does not imply Causation!!

Establishing Causality

- Observational Study: Experimenter has no ability to divide study participants into treatment and control groups

- Randomized Control Experiment: Randomly divide participants into treatment and control group

- Example: Study the effect of capital punishment on a state's murder rate

  – Observational study since researchers cannot just randomly decide which states have capital punishment or not

Announcements

- HW1 due 1/30
  - Early submission bonus point on 1/29
- Tutoring section sign-ups have been released, will start in week 3
  - Highly recommended: Opportunity to work with a tutor and other students in a small group setting
- DSP students: Please talk to your advisor about submitting letters of accommodation to SCARAB
- Office Hours start this week! 12-5pm Monday-Friday in 581 Barrows
  - Hubert's Office Hours are 4-5pm on Fridays

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Announcements Contd.

- Gradescope vs. Okpy Regrade Requests
  - Gradescope: Directly request on Gradescope (written answer for homework or projects)
  - Okpy: Email Hubert (autograder error only)
  - Make sure to submit before the regrade request deadline! Regrade requests after the deadline will not be considered
- Lab Credit Policy Reminder. Credit in two possible ways:
  - Attend **entire** lab section and make substantial progress
  - Finish and pass all autograder tests by Wednesday at 8:59 AM

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