



Key Themes

- The importance of the person behind the curtain
 - Statistics are just the tools - the people behind them make the impact
 - The intentions of the person collecting the data
- The data we have and the data we don't
 - The conditions that shape what is available and what is not
 - The consequences of unrepresentative data
 - Algorithms developed in homogeneous population
 - Aggregation of very heterogeneous groups
- The race variable
 - Important to be clear on the purpose for including
 - Need for better measurement
 - May be a poor proxy for what you are actually trying to measure



Key Themes

- Equity vs. Equality
- What do we mean by bias?
 - How do we define it? Is there agreement on this?
 - How do we measure it?
 - What strategies can we use to mitigate bias at each stage: data collection, algorithm building, algorithm use
- We exist in a system that actively excludes and harms certain people
- Limitations of data collection, e.g. surveys



Big Questions

- What does bias really mean? How do we define it; can we truly measure/quantify it?
- Do you plan ahead of studies to mitigate bias in statistical studies?
- What is the goal - equality, equity?



Resources from Breakout Rooms

- *American Nations* by Colin Woodard
- Algorithmic Bias in Health Care Exacerbates Social Inequities – How to Present It (<https://www.hsph.harvard.edu/ecpe/how-to-prevent-algorithmic-bias-in-health-care/>)
- Loosely defined framework: <https://www.whitehouse.gov/ostp/ai-bill-of-rights/>
- Felicity Enders: measuring race
- Keeping Track: Data and Disparities (<https://mcpress.mayoclinic.org/rise-for-equity/keeping-track-data-and-disparities/>)
- Really interesting book on the wide variety of Asian-American experiences: <https://www.penguinrandomhouse.com/books/580138/the-loneliest-americans-by-jay-caspian-kang/>



Resources from Breakout Rooms

- Articles in the scientific literature:
 - <https://link.springer.com/article/10.1007/s11019-021-10008-5>
 - <https://www.tandfonline.com/doi/full/10.1080/15265161.2020.1819469>
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9003600/> – algorithm transparency
 - <https://www.sciencedirect.com/science/article/pii/S2352396422004327> – review article on algorithmic fairness
- More detailed guidance based on Obermeyer 2019 paper:
<https://ic3.center.ufl.edu/wordpress/files/2022/08/algorithmic-bias-playbook.pdf>
- From the ACLU in late 2022: <https://www.aclu.org/news/privacy-technology/algorithms-in-health-care-may-worsen-medical-racism>