Unconscious Bias: What You Don't Realize that Affects Your Every Life Action

Bernard L. Lopez, MD, MS, CPE

Professor and Executive Vice Chair, Department of **Emergency Medicine**

Associate Dean, Diversity and Community Engagement

Sidney Kimmel Medical College

Associate Provost, Diversity and Inclusion

Thomas Jefferson University











Disclosures:

No financial conflicts of interest





Learning Objectives

- Define unconscious bias and describe its effects on key actions
- Understand its physiologic basis and its main purpose in human function
- Name at least three key components that play into our unconscious biases and at least four ways to work with your unconscious biases



Unconscious Bias: What You Don't Realize that Affects Your Every Life Action

Bernard L. Lopez, MD, MS, CPE

Professor and Executive Vice Chair, Department of **Emergency Medicine**

Associate Dean, Diversity and Community Engagement

Sidney Kimmel Medical College

Associate Provost, Diversity and Inclusion

Thomas Jefferson University











Portuguese Society Against Racism





BIAS

Howard Ross Cook Ross Inc.





How Successful are We?















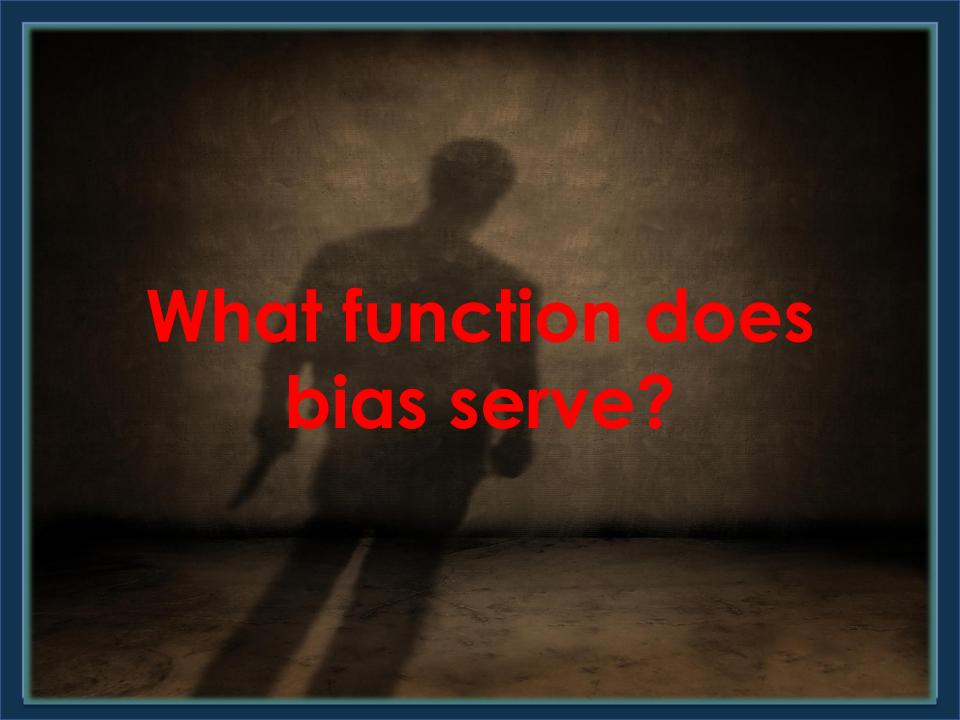




What is Bias?

A tendency or inclination that results in judgment without question.





Bias in Action





Ian Ayres, Yale University



The Impact of a Name

??????????

Email: gschoppe@gmail.com

Website: http://www.gschoppe.com

portfolio available at website

- A creative and motivated Computer Technician, with several years of experience in web design, programming, and computer maintenance, with strengths including: Strong communication skills

- Analytical problem solving skills
 Quickly Adapts to unfamiliar software environments and languages

Qualifications

Computer Maintenance:

- Certifications:
 - CompTIA A+ certified (maintenance) CompTIA Network+ certified (networks)
- 7 years experience in building computers

5 years experience in tech support and repair

- Knowledge and working experience with:
 HTML/XHTML/XML

 - PHP (as well as GD, ImageMagick, NetBPM, ect...)
 - SOL
 - Dreamweaver
- Co-designer for the Graham Highlanders of St Johnsbury Academy:
- http://www.grahamhighlanders.com Lead designer for the CMU Chapter of the Alpha Epsilon Pi fraternity:
- http://www.aepiak.org

Programming:

Knowledge and working experience with: C/C++, Java, Python, BASIC, Visual BASIC, VB.net, and ML (Standard ML of New Jersey)

- SAT Score of 1540/1600 SATII Math 2 Score of 800/800
- AP Computer Science Score of 5/5

- 2 Years at Carnegie Mellon University's School of Computer Science
- Specific courses completed include:
 System Skills in C
 - Computer Algorithms Discreet Math
 - Advanced Java

Work Experience

- Jun. 2005 Aug. 2005
 - O Google: Summer of Code Program a summer grant based program where Google pays students to work on Open Source projects
- - Staples In Littleton Office Equipment Sales Associate, Cashier, Technician, Copy Center Associate



United States

Singapore



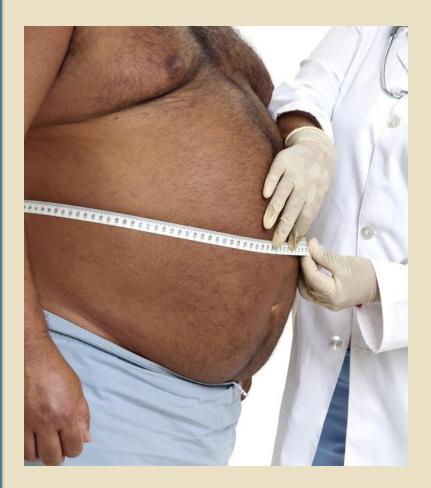


Sweden

Sendhil Mullainathan, MIT and Marianne Bertrand, Univ. of Chicago



Are Doctors Fattists?



University of Washington, University of Virginia, University of Modena, Wake Forest University



So are patients!

Bloomberg School of Public Health,
Johns Hopkins University

Sex Differences in Diagnoses, Treatment, and Outcomes for Emergency Department Patients With Chest Pain and Elevated Cardiac Troponin

Karin H. Humphries, DSc, May K. Lee, MSc, Mona Izadnegahdar, PhD, Min Gao, MD, PhD, Daniel T. Holmes, MD, PhD, Frank X. Scheuermeyer, MD, MHSc, Martha Mackay, PhD, RN, CCN(C), Andre Mattman, MD, and Eric Grafstein, MD

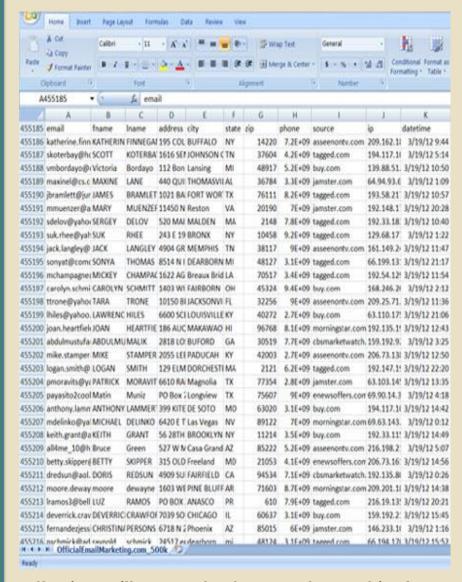
A related article appears on page 467.

ABSTRACT

Objective: While sex differences in the treatment and outcomes of subjects with acute coronary syndromes are well documented, little is known about the impact of cardiac troponin (cTn) levels obtained in the emergency department (ED) on the observed sex differences. We sought to determine whether cTn levels by chest pain features modify sex differences in diagnosis, treatment, and outcomes in patients presenting with chest pain suggestive of ischemia.

Methods: All adults presenting to two hospitals in Vancouver, Canada, between May 2008 and March 2013 with ischemic chest pain and with cTn testing were included in the study. Outcomes were obtained through data linkage with population-based administrative data sets, including Vital Statistics (death), Discharge Abstract Database (hospitalizations), and PharmaNet (medications). Cumulative event rates for the composite major adverse cardiac event (MACE) endpoint (death, myocardial infarction [MI], incident admission for heart failure or for angina requiring diagnostic catheterization or revascularization) were estimated for each sex and cTn level using the Kaplan-Meier method; Cox models were used to estimate hazard ratios and 95% confidence interval (CIs) for 1-year MACE and 7-day catheterization. Logistic models were used to estimate odds ratios (ORs) and 95% CI for 90-day medication use.

Results: Over the 5-year study period, 25,539 patients presented to the ED with chest pain of which 7,272 (2,933 females and 4,339 males) met the inclusion criteria. Among patients with chest pain with cardiac features/ history and cTn > 99th percentile, females were less likely to be diagnosed with MI (46.4% vs. 57.5%). Females



Women had 35.2% more emails ignored...and 59.9% more meetings declined

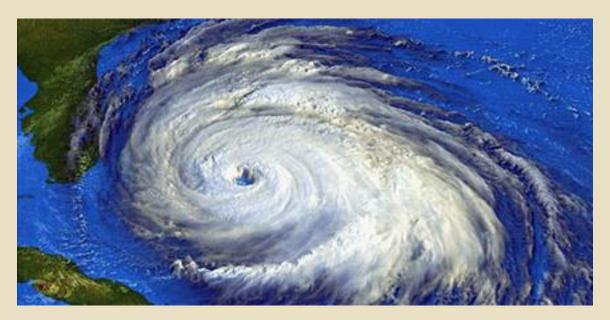
Katherine Milkman, Wharton, Modupe Akinola, Columbia University, Dolly Chugh, New York University



Even Female Hurricanes Get No Respect!



23
average deaths



45 average

deaths

Q

Researchers studied the 47 most damaging hurricanes, from 1950-2012 (excluding Katrina and Audrey)

"Female hurricanes are deadlier than male hurricanes" National Academy of Sciences, Jung, Shavitt, Viswanathan, and Hilbe, May 2014



Height

Sexual Orientation

Name

Appearance

Disability

Religion

Which are ours?

Accent

Age

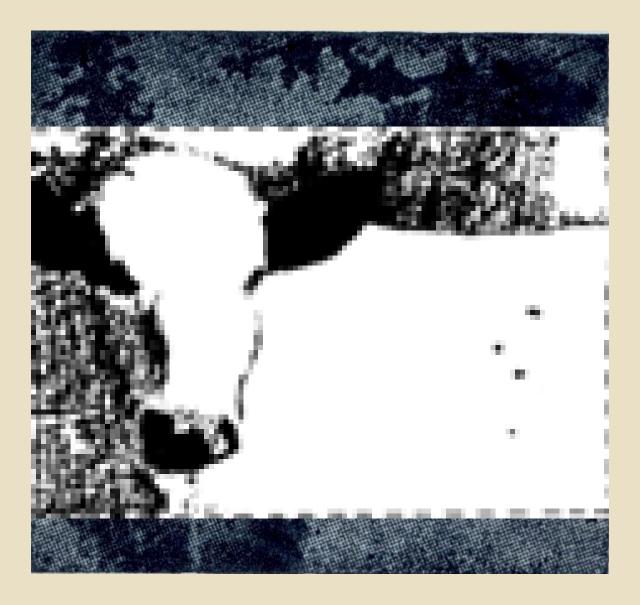
Skin Tone

Weight

Hand Dominance

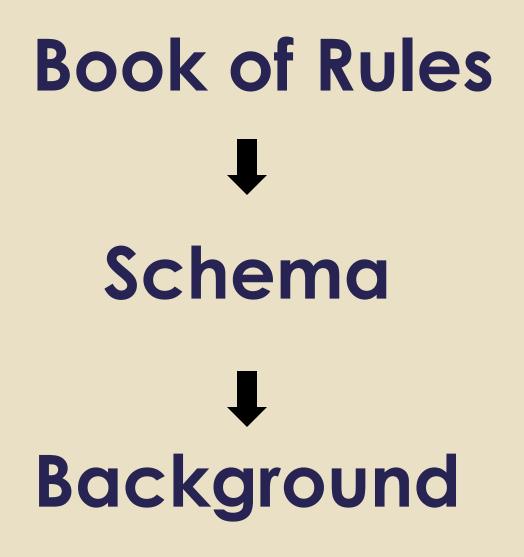






Karl Dallenbach







Background





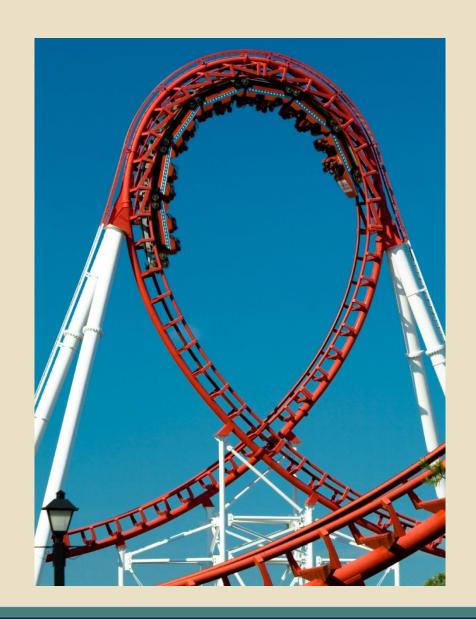
Background creates CONTEXT



What is there...?

Welded steel

Bright paint



Nuts and Bolts

Curved design

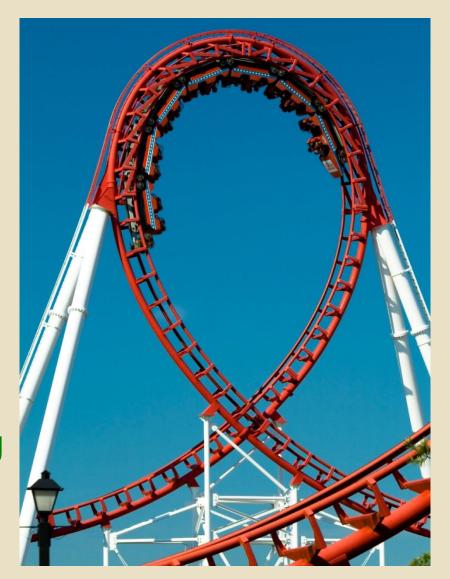


What we see...

Fun

Exciting

Exhilarating



Scary

Nauseating

Dangerous



What is there...?

Hair

Glasses

Neutral expression



Earrings

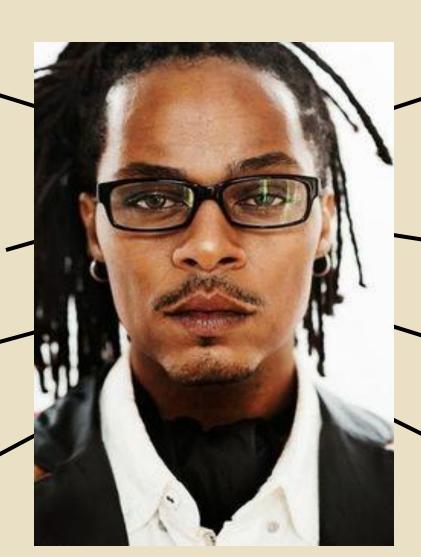
What we see...

Well Croomed

Intelligent -

Expressive

Stoic



One of "those people"

Socially Inept

Rebellious

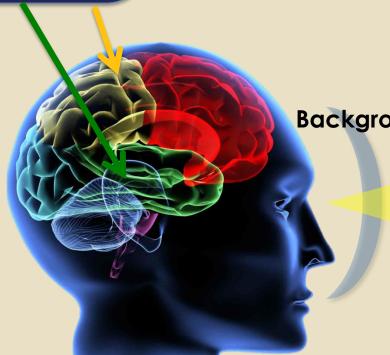
Unfriendly



The Neurobiology of Bias







Background

Catalyzing person or circumstance



Do we "know" or are we just "reacting"?









Slow (Thinking) Brain

Background

Catalyzing person or circumstance



We make associations very quickly, based on our experience or beliefs, and more slowly when we see something counter to our experience or beliefs.





John Ridley Stroop, 1935







Key Patterns of the Mind

Selective Attention/ Inattentional Blindness Subliminal Messages

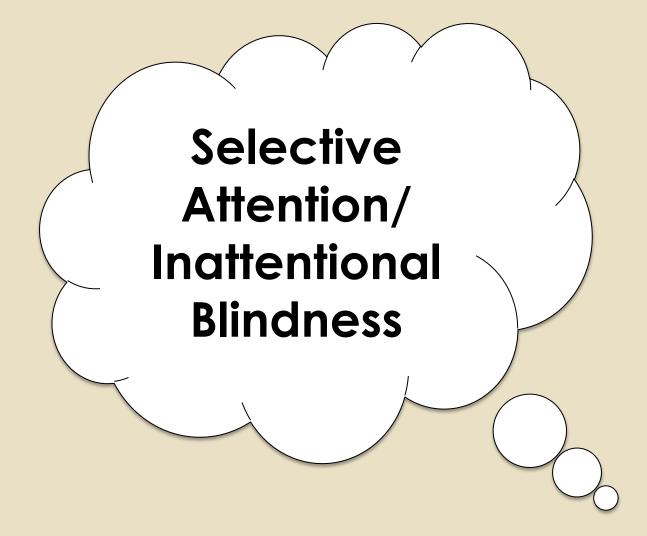
Projection

Social Primacy



Power and Empathy



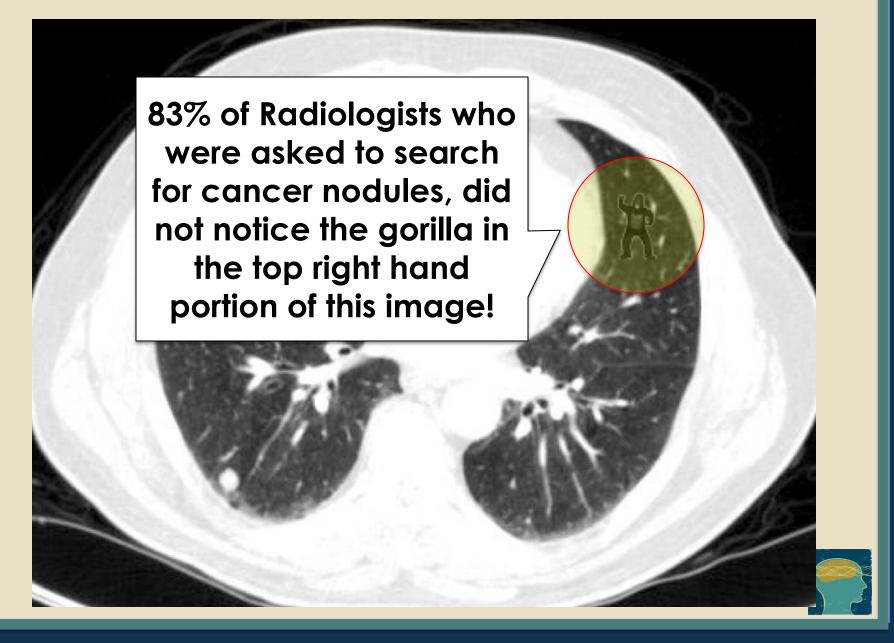




Can you find the the mistake? 1 2 3 4 5 6 7 8 9



Trafton Drew, Harvard Medical School, 2013





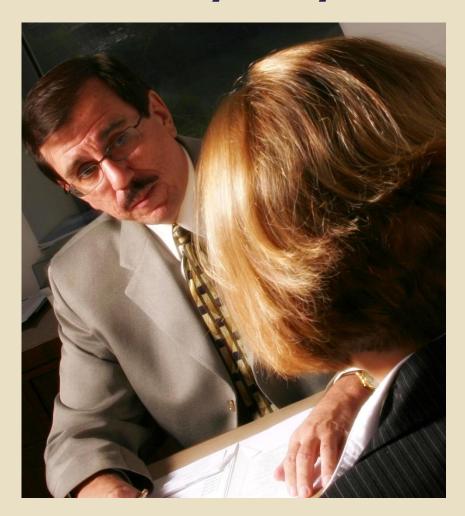




Adrian North, David Hargreaves, and Jennifer McKendrick, University of Leicester in the United Kingdom



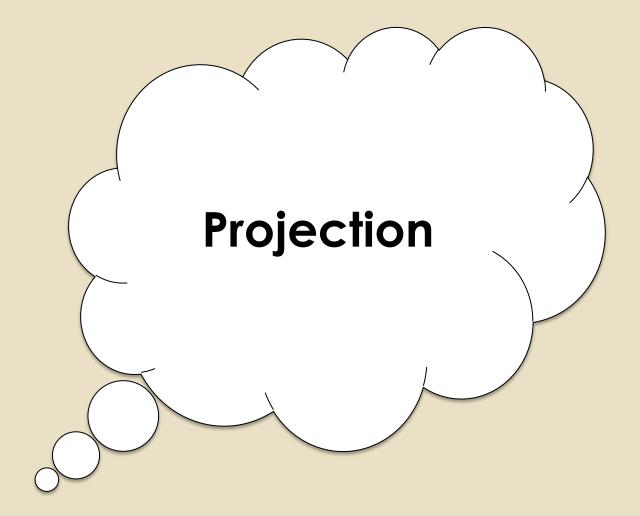
Rainy Days Get You Down?



Medical school applicants interviewed on rainy days received scores equivalent to a 10% lower mark on the MCAT than those interviewed on sunny days.

Donald Redelmeier, MD and Simon Baxter, BSc, University of Toronto Medical School, 2009





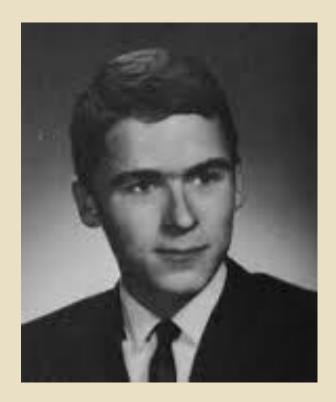


We make stuff up about people...



John Fetterman

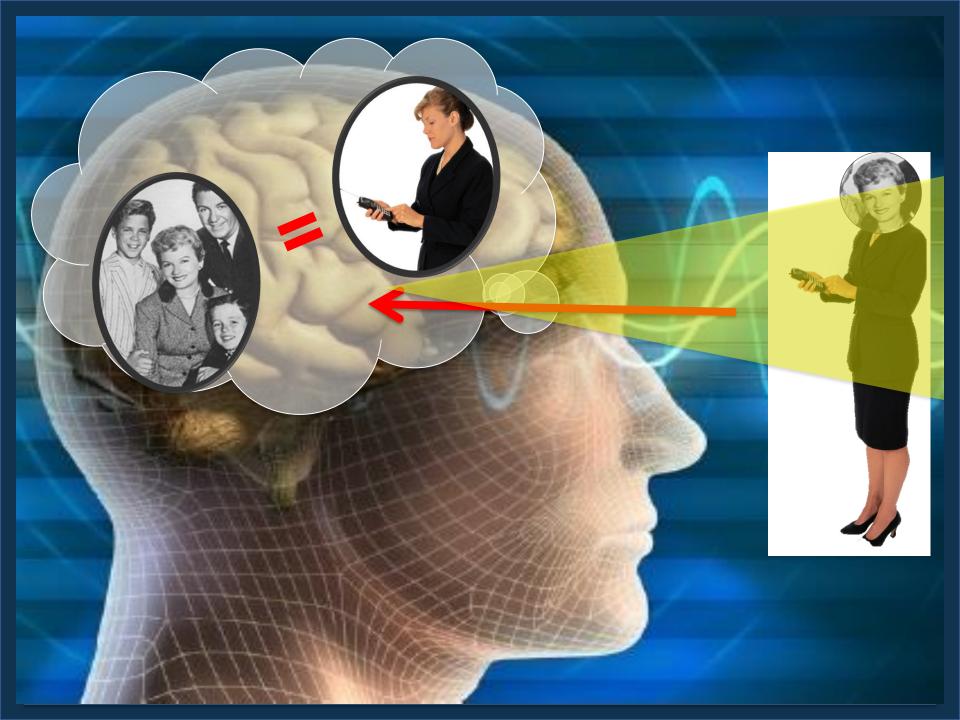
- Lt. Governor of PA, Former mayor of Braddock, PA the tattoo on his arm is the zip code!
- Has a Master's degree in Public Policy from Harvard
- Served in the Americorps
- Received international media attention for the economic revitalization programming he started in his community



Ted Bundy

- American serial killer and rapist.
- Confessed to killing 30 women





"The past is not dead. It isn't even past."

William Faulkner Requiem for a Nun



Women in Media Today

- Women are 51% of the U.S. population but only 37% of prime-time TV characters, and women 45 and older are only 15% of prime-time characters.
- Male TV characters are 13% more likely to be shown "on-the-job" than females and 12% more likely to be shown talking about work.

American Association of University Women







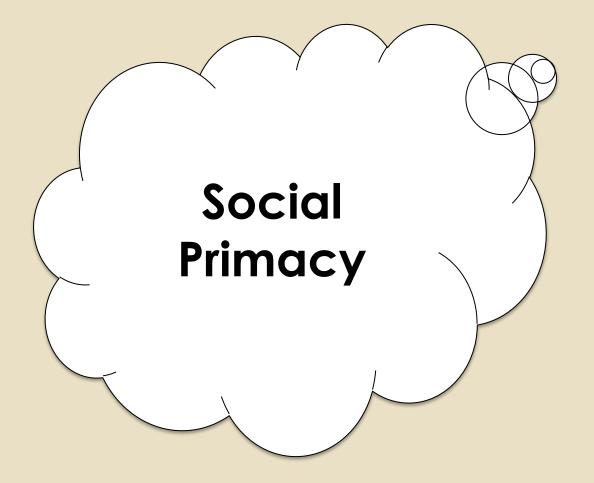














Maslow's Hierarchy

Self-Actualization

Esteem

Belongingness

Safety

Physiological



"...being excluded from a group triggers activity in the same regions of the brain associated with physical pain."

Kipling D. Williams, Purdue University, 2007











Empathy



- "Empathetic neural responses...decreased significantly when participants viewed faces of other races"
 - Xiaojing Xu, Xiangyu Zuo, Xiaoying Wang, and Shihui Han, Peking University



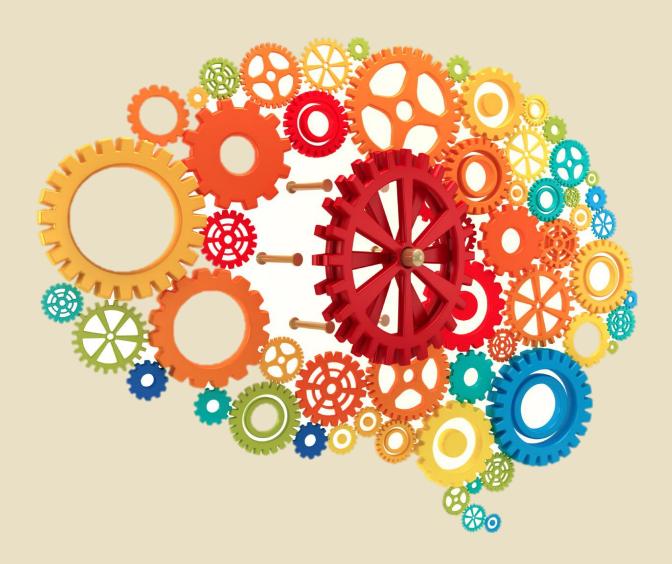
- "When the target is an out-group member, people may have powerful motivations not to care about or help 'the other.'"
 - Mina Cikara, Carnegie Mellon University, Emile Bruneau, MIT, and Rebecca Saxe, MIT



- "Empathy is diminished when people (black or white) who hold racial biases see that pain is being inflicted on those of another race."
 - Salvatore Maria Aglioti of Sapienza Università di Roma



The Unconscious is Malleable





"Unless you make the unconscious conscious it will direct your life and you will call it fate. We cannot change anything until we accept it."

Carl Jung



Ways to Develop More Consciousness in Decision-Making



Recognize and accept that you have bias









Develop the capacity to "use a flashlight on yourself"



How much does intelligence, confidence and success matter?





The Overconfidence Effect

"...A larger bias blind spot was associated with higher cognitive ability."

Richard F. West and Russell J. Meserve James Madison University, Keith E. Stanovich University of Toronto, APA Journal 2012



Practice "constructive uncertainty"



Explore awkwardness and discomfort



Engage with people you consider "others" and expose yourself to exemplars from that group



Get feedback



To change systems, we have to think from a systems perspective!

Education

Systems and structures

Accountability



Transform employee and physician experience by improving engagement to enable the delivery of the best patient experience

Human Experience

Transform employee and physician experience by improving engagement to enable the delivery of the best patient experience

Patient Experience and Satisfaction

Employee Experience & Engagement





Thank You!









