# **Resources on Implicit Bias**

### **Books**

These books represent comprehensive reviews of research related to inherent bias and related topics. All are well written and have extensive notes and references.

Banaji, Mahzarin R. and Greenwald, Anthony G. *Blindspot: Hidden Biases of Good People*. Delecorte Press, New York, 2013

Sandberg, Sheryl. Lean In: Women, Work, and the Will to Lead. Alfred A. Knopf, New York, 2013

Steele, Claude M. *Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do.* WW Norton & Company, New York, 2010 (Issues of Our Times, series editor Henry Louis Gates, Jr.)

Kahneman, Daniel. Thinking, Fast and Slow. Farrar, Strauss and Giroux, New York, 2011

Kaplan, Mark. *The Inclusion Dividend: Why Investing in Diversity & Inclusion Pays Off.* Bibliomotion; First edition, 2013

Ross, Howard. Everyday Bias: Identifying and Navigating Unconscious Judgements in Our Daily Lives. Rowman & Littlefield Publishers, 2014

### Web Sites

<u>Project Implicit</u> - From the web site: "Project Implicit investigates thoughts and feelings that exist outside of conscious awareness or conscious control." A rich source of reviews, primary literature, and links to research sites and tests.

Implicit Association Test by Project Implicit - This site has 14 different implicit association tests (IAT) including Gender-Science IAT, Age IAT, Race IAT, and Gender-Career IAT.

<u>Women in Science & Engineering Leadership Institute, University of Wisconsin-Madison</u> - Web site of the Women in Science & Engineering Leadership Institute (WISELI) at the University of Wisconsin-Madison. Founded in 2002 with an NSF ADVANCE grant; now funded by contributions from 8 UW-Madison schools, colleges, and units as well as funding agencies, gifts, and income generated by WISELI activities.

Kirwan Institute - This site provides an annual report on the state of implicit bias in the United States.

Games Learning Society - Another rich source of information including the prototype of a game under development.

#### **Reports**

Committee on Maximizing the Potential of Women in Academic Science and Engineering. 2006. *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*. The National Academies Press: Washington, DC. This report can be downloaded at <u>http://www.nap.edu/catalog/11741/beyond-bias-and-barriers-fulfilling-the-potential-of-women-in</u>

Committee on Advancing Institutional Transformation for Minority Women in Academia. 2013. *Seeking Solutions: Maximizing American Talent by Advancing Women of Color in Academia*. The National Academies Press:

Washington, DC. Conference Summary, Workshop Summary, and slides can be downloaded at <a href="http://sites.nationalacademies.org/PGA/cwsem/minoritywomen/PGA\_087695">http://sites.nationalacademies.org/PGA/cwsem/minoritywomen/PGA\_087695</a>

National Academy of Engineering. 2014. Advancing Diversity in the US Industrial Science and Engineering Workforce: Summary of a Workshop. Washington, DC: The National Academies Press. This report can be downloaded at <u>http://www.nap.edu/catalog/13512/advancing-diversity-in-the-us-industrial-science-and-engineering-workforce</u>

Special Report: State of the World's Science 2014: How diversity powers innovation. Sci American 311:12, 38-57. A collection of 7 articles (some very short), 2 editorials and some terrific graphics.

Diversity, a Nature Special Feature in News and Comment. 2014. Nature 513:297-307.

The Massachusetts Institute of Technology. 1999. A study on the status of women faculty in science at MIT. Available at <u>http://web.mit.edu/fnl/women/women.html#</u>.

## Papers

Byars-Winston, A. (2014). Toward a framework for multicultural STEM-focused career interventions. Career Development Quarterly, 62(4), 340-357. doi: 10.1002/j.2161-0045.2014.00087.x

Carnes, M., Devine, P. G., Baier Manwell, L., Byars-Winston, A., Fine, E., Ford, C. E., . . . Sheridan, J. (2015). The effect of an intervention to break the gender bias habit for faculty at one institution: A cluster randomized, controlled trial. Academic Medicine, 90(2), 221-230. doi: 10.1097/ACM.00000000000552

Carnes M, Devine PG, Isaac C, Manwell LB, Ford CE, Byars-Winston A, Fine E, Sheridan JT (2012) Promoting Institutional Change through Bias Literacy J Divers High Educ 5: 63–77. doi: 10.1037/a0028128 Description of development and implementation of a workshop for faculty

Carnes M, Geller S, Fine E, Sheridan J, Handelsman J (2005) NIH Director's Pioneer Awards: Could the Selection Process Be Biased against Women's Health 14:684-691. doi:10.1089/jwh.14.684.

Chapman EN, Kaatz A, Carnes M (2013) Physicians and Implicit Bias: How Doctors May Unwittingly Perpetuate Health Care Disparities. J Gen Intern Med. 28(11): 1504–1510. doi: 10.1007/s11606-013-2441-1. PMCID: PMC3797360

Devine PG, Forscher PS, Austin AJ, Cox WTL (2012) Long-term reduction in implicit race bias: A prejudice habitbreaking intervention. J Exp Soc Psychol. 48(6): 1267–1278. doi: 10.1016/j.jesp.2012.06.003

Eddy, S. L., Brownell, S. E., & Wenderoth, M. P. (2014). Gender gaps in achievement and participation inmultiple introductory biology classrooms. CBE Life Sciences Education, 13(3), 478-492. doi: 10.1187/cbe.13-10-0204

Fine, E., Sheridan, J., Carnes, M., Handelsman, J., Pribbenow, C., Savoy, J., & Wendt, A. (2014) Minimizing the influence of gender bias on the faculty search process. Vol. 19. Advances in Gender Research (pp. 267-289).

Greenwald AG, Krieger LH(2006) Implicit Bias: Scientific Foundations. California Law Review 94:945-968. Available at <u>http://scholarship.law.berkeley.edu/californialawreview/vol94/iss4/1</u>

Handelsman J, Cantor N, Carnes M, Denton D, Fine E, Grosz B, Hinshaw V, Marrett C, Rosser R, Shalala D, Sheridan J (2005) "More Women in Science." Science 309:1190-1191. doi: 10.1126/science.1113252

Jost JT, Rudman LA, Blair IV, Carney DR, Dasgupta N, Glaser J, Hardin CD (2009) The existence of implicit bias is

beyond reasonable doubt: A refutation of ideological and methodological objections and executive summary of ten studies that no manager should ignore. Research in Organizational Behavior 29:39–69.

Larivière, V., Ni, C., Gingras, Y., Cronin, B., & Sugimoto, C. R. (2013). Global gender disparities in science. Nature, 504(7479), 211-213. doi: 10.1038/504211a

Moss-Racusin, C. A., Van Der Toorn, J., Dovidio, J. F., Brescoll, V. L., Graham, M. J., & Handelsman, J. (2014). Scientific diversity interventions. Science, 343(6171), 615-616. doi: 10.1126/science.1245936

Moss-Racusin CA, Dovidio JF, Brescoll VL, Graham MJ, Handelsman J (2012) Science faculty's subtle gender biases favor male students. Proc. Natl Acad Sci 109:16474–16479. doi: 10.1073/pnas.1211286109

Nosek BA, Smyth FL (2011). Implicit social cognitions predict sex differences in math engagement and achievement. American Educational Research Journal, 48, 1124-1154.

Reuben, E., Sapienza, P., & Zingales, L. (2014). How stereotypes impair women's careers in science. Proceedings of the National Academy of Sciences of the United States of America, 111(12), 4403-4408. doi: 10.1073/pnas.1314788111

Shen, H. (2013). Inequality quantified: Mind the gender gap. Nature, 494(7439), 22-24. doi: 10.1038/495022a

Stanley, D. A., Sokol-Hessner, P., Banaji, M. R., & Phelps, E. A. (2011). Implicit race attitudes predict trustworthiness judgments and economic trust decisions. Proceedings of the National Academy of Sciences of the United States of America, 108(19), 7710-7715. doi: 10.1073/pnas.1014345108

Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014) Social class culture cycles: How three gateway contexts shape selves and fuel inequality. Vol. 65. Annual Review of Psychology (pp. 611-634).

Tsay CJ, Banaji MR (2011) Naturals and Strivers: Preferences and Beliefs about Sources of Achievement. Journal of Experimental Social Psychology, 47, 460-465.