References

Alberts, Bruce, and others. 2015. "Self-Correction in Science at Work." *Science* 348 (6242): 1420–22.

Begley, C. Glenn. 2013. "Reproducibility: Six Red Flags for Suspect Work." *Nature* 497 (7450): 433–34. doi:10.1038/497433a (http://dx.doi.org/10.1038/497433a).

Begley, C. Glenn, and Lee M. Ellis. 2012. "Drug Development: Raise Standards for Preclinical Cancer Research." *Nature* 483 (7391): 531–33. doi:10.1038/483531a (http://dx.doi.org/10.1038/483531a).

Collins, Francis S., and Lawrence A. Tabak. 2014. "Policy: NIH Plans to Enhance Reproducibility." *Nature* 505 (7485): 612–13. doi:10.1038/505612a (http://dx.doi.org/10.1038/505612a).

COS. 2015. "Center for Open Science (COS)." *Cos.io*. https://cos.io (https://cos.io).

Economist. 2013. "Unreliable Research. Trouble at the Lab." *Economist*. http://www.economist.com/news/leaders/21588069-scientific-research-has-changed-world-now-it-needs-change-itself-how-science-goes-wrong (http://www.economist.com/news/leaders/21588069-scientific-research-has-changed-world-now-it-needs-change-itself-how-science-goes-wrong).

Errington, Timothy M, Elizabeth Iorns, William Gunn, Fraser Elisabeth Tan, Joelle Lomax, and Brian A Nosek. 2014. "An Open Investigation of the Reproducibility of Cancer Biology Research." *ELife* 3. doi:10.7554/elife.04333 (http://dx.doi.org/10.7554/elife.04333).

Fisher, Ronald Aylmer. 1926. "The Arrangement of Field Experiments." *Journal of the Ministry of Agriculture GB* 33: 503–13.

———. 1937. *The Design of Experiments*. 2nd ed. Oliver; Boyd.

———. 1956. *Statistical Methods and Scientific Inference*. Hafner.

Ioannidis, John P. A. 2005. "Why Most Published Research Findings Are False." *CHANCE* 18 (4): 40–47. doi:10.1080/09332480.2005.10722754 (http://dx.doi.org/10.1080/09332480.2005.10722754).

Iorns, Elizabeth, and others. 2015. "Validation by Science Exchange - Identifying and Rewarding High-Quality Research." *Validation.scienceexchange.com*. http://validation.scienceexchange.com/\# (http://validation.scienceexchange.com/\#).

Kaiser, Jocelyn. 2015. "The Cancer Test." *Science* 348 (6242): 1411–13.

King, Gary. 2013. "Restructuring the Social Sciences: Reflections from Harvard's Institute for Quantitative Social Science." *PS: Political Science & Politics* 47 (01): 165–72. doi:10.1017/s1049096513001534 (http://dx.doi.org/10.1017/s1049096513001534).

Klein, Richard A., and others. 2014. "Investigating Variation in Replicability." *Social Psychology* 45 (3): 142–52. doi:10.1027/1864-9335/a000178 (http://dx.doi.org/10.1027/1864-9335/a000178).

Kriegeskorte, Nikolaus, W Kyle Simmons, Patrick S F Bellgowan, and Chris I Baker. 2009. "Circular Analysis in Systems Neuroscience: The Dangers of Double Dipping." *Nature Neuroscience* 12 (5): 535–40. doi:10.1038/nn.2303 (http://dx.doi.org/10.1038/nn.2303).

Nosek, B A, and others. 2015. "Promoting an Open Research Culture." *Science* 348 (3242): 1422–25.

Nuzzo, Regina. 2014. "Scientific Method: Statistical Errors." *Nature* 506 (7487): 150–52. doi:10.1038/506150a (http://dx.doi.org/10.1038/506150a).

OSBR. 2015. "The Synaptic Leap: Open Source Biomedical Research." http://www.thesynapticleap.org/ (http://www.thesynapticleap.org/).

OSC. 2015. "Estimating the Reproducibility of Psychological Science." *Science* 349 (6251): aac4716–16. doi:10.1126/science.aac4716 (http://dx.doi.org/10.1126/science.aac4716).

Pentland, Alex. 2014. *Social Physics*. Scribe.

Prinz, Florian, Thomas Schlange, and Khusru Asadullah. 2011. "Believe It or Not: How Much Can We Rely on Published Data on Potential Drug Targets?" *Nature Reviews Drug Discovery* 10 (9): 712–12. doi:10.1038/nrd3439-c1 (http://dx.doi.org/10.1038/nrd3439-c1).

Scherr, George. 1983. *The Best of the Journal of Irreproducible Results: Improbable Investigations and Unfounded Findings*. Workman Publishing Company.

Sellke, Thomas, M. J Bayarri, and James O Berger. 2001. "Calibration of P-Values for Testing Precise Null Hypotheses." *The American Statistician* 55 (1): 62–71. doi:10.1198/000313001300339950 (http://dx.doi.org/10.1198/000313001300339950).

Todd, Mat, and others. 2015. "OSM - Open Source Malaria." *Opensourcemalaria.org*. http://opensourcemalaria.org/ (http://opensourcemalaria.org/).

Tukey, John. 1997. "More Honest Foundations for Data Analysis." *Journal of Statistical Planning and Inference* 57 (1): 21–28. doi:10.1016/s0378-3758(96)00032-8 (http://dx.doi.org/10.1016/s0378-3758(96)00032-8).

Yong, Ed. 2012. "Replication Studies: Bad Copy." *Nature* 485 (7398): 298–300. doi:10.1038/485298a (http://dx.doi.org/10.1038/485298a).