

## Resources

Peter Geelan-Small, *The challenge of everyday statistics in 30 minutes*  
Talk to Surgical Research Society, 29th July, 2021

*Note:* Only \*some\* of these items are open access. Others require institutional library log in.

## Books

Bland, M., 2015, *An Introduction to Medical Statistics*, Oxford Uni Press, 4th ed. (e-book in UNSW Library)  
[https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW\\_ALMA51278314110001731](https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW_ALMA51278314110001731)

MacGillivray H, Utts JM and Heckard RF, 2013, *Mind on Statistics*, Cengage Learning Australia, 2nd ed., sect. 8.3, pp. 294-299 (e-book in UNSW library).  
[https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW\\_ALMA51223644710001731](https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW_ALMA51223644710001731)

## Genomics

Holmes, S. and Huber, W., c2019, *Modern Statistics for Modern Biology*  
<http://web.stanford.edu/class/bios221/book/index.html>

## Statistical methods in various software packages

<https://stats.idre.ucla.edu> (Resources tab)

## SPSS material

Field, Andy P, 2009, *Discovering Statistics Using SPSS*, SAGE, 3rd ed. (e-book UNSW Library)  
[https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW\\_ALMA51182015840001731](https://primoa.library.unsw.edu.au/permalink/f/1gq3lal/UNSW_ALMA51182015840001731)

## STATA

Bittmann, F. 2019, *STATA: A Really Short Introduction*, De Gruyter Oldenbourg (e-book UNSW Library)  
[https://primoa.library.unsw.edu.au/permalink/f/jhud33/UNSW\\_ALMA51258945110001731](https://primoa.library.unsw.edu.au/permalink/f/jhud33/UNSW_ALMA51258945110001731)

## *R material*

Hector, A. 2021, *The New Statistics with R: An Introduction for Biologists*, Oxford Uni Press, 2nd ed.

Irizarry, Rafael, 2021, *Introduction to Data Science*.

Irizarry, R. and Love, M. *Data Analysis for the Life Sciences*.

<https://rafalab.github.io/pages/books.html>

## **Reporting statistical results**

Lang, T. & Altman, D. G., 2019, Statistical analyses and methods in the published literature: the SAMPL guidelines, *Medical Writing* 25(3).

<https://journal.emwa.org/statistics/statistical-analyses-and-methods-in-the-published-literature-the-sampl-guidelines/>

## **Useful series from various journals**

British Medical Journal: Statistics Notes series

<https://www-users.york.ac.uk/~mb55/pubs/pbstnote.htm>

Statistics in Medicine: Tutorial papers

<https://onlinelibrary.wiley.com/page/journal/10970258/homepage/tutorials.htm>

*Deutsches Arzteblatt International*: Series on Evaluation of Scientific Publications (series of articles in English on statistical methods)

*Circulation* (Journal of the American Heart Association): Statistical Primer series

*Critical Care*: Statistics Review series

*Biomchemia Medica*: Lessons in Biostatistics series

*Nature*: Statistics for Biologists

<https://www.nature.com/collections/qghhqm>

*PM & R*: Statistically Speaking

*Indian Journal of Dermatology*: Biostatistics series

## **A few specific articles**

Spiestersbach, A., 2009, Descriptive statistics, *Dtsch Arztebl Int* 106(36): 578–83  
doi: 10.3238/arztebl.2009.0578

Zuur, A. F., Ieno, E. N., & Elphick, C. S., 2010, A protocol for data exploration to avoid common statistical problems. *Methods in Ecology and Evolution*, 1(1), 3–14.  
[https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN\\_cdi\\_webofscience\\_primary\\_000288913700002](https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN_cdi_webofscience_primary_000288913700002)

Glass, G. V., Peckham, P. D., & Sanders, J. R. 1972, Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance. *Review of Educational Research*, 42(3), 237–288.  
[https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN\\_cdi\\_crossref\\_primary\\_10\\_2307\\_1169991](https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN_cdi_crossref_primary_10_2307_1169991)

Oberg, A. L., & Mahoney, D. W., 2007, Linear Mixed Effects Models. In W. T. Ambrosius (Ed.), *Topics in Biostatistics* (Vol. 404, pp. 213–234). Humana Press.  
[https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN\\_cdi\\_springer\\_books\\_10\\_1007\\_978\\_1\\_59745\\_530\\_5\\_11](https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN_cdi_springer_books_10_1007_978_1_59745_530_5_11)

## **P values - a very topical issue!**

Wasserstein, R. L., Schirm, A. L., & Lazar, N. A., 2019, Moving to a world beyond “ $p < 0.05$ .” *The American Statistician*, 73(sup1), 1–19.  
[https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN\\_cdi\\_crossref\\_primary\\_10\\_1080\\_00031305\\_2019\\_1583913](https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN_cdi_crossref_primary_10_1080_00031305_2019_1583913)

Greenland, S. et al, 2016, Statistical tests, p values, confidence intervals, and power: a guide to misinterpretations, *European Journal of Epidemiology* 31(4): 337-350  
[https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN\\_cdi\\_pubmed\\_primary\\_27209009](https://primoa.library.unsw.edu.au/permalink/f/11jha62/TN_cdi_pubmed_primary_27209009)