USEFUL RESOURCES ON CREATING EFFECTIVE GRAPHS
Handout to accompany Scientific Publications webinar, 1/31/18

General best practices for graph and figure design
These resources provide general tips on graph design and served as sources for the webinar.

- American Medical Association. *AMA Manual of Style: A Guide for Authors and Editors.* 10th ed. New York, NY: Oxford University Press; 2007:98-106. [The full text of this book is available as an e-book through MD Anderson's Research Medical Library: http://www3.mdanderson.org/library/.]
- Day RA, Gastel B. *How to Write and Publish a Scientific Paper.* 8th ed. Santa Barbara, CA: Greenwood; 2016.
- Lang TA. *How to Write, Publish, & Present in the Health Sciences: A Guide for Clinicians & Laboratory Researchers.* Philadelphia, PA: American College of Physicians Press; 2010:67-86.
- Rougier NP. Ten simple rules for better figures. *PLoS Comput Biol* 10(9): e1003833, 2014. https://doi.org/10.1371/journal.pcbi.1003833.
- Tufte ER. *The Visual Display of Quantitative Information.* 2nd ed. Cheshire, CN: Graphics Press, 2001.

Uses and examples of various types of graphs
These articles discuss pros and cons of specific graph types.

- Krzywinski M, Altman N. Visualizing samples with box plots. *Nat Methods* 11(2): 119-120, 2014. http://www.nature.com/articles/nmeth.2813
- LaMorte WW. Choosing the best graph type. http://sphweb.bumc.bu.edu/otlt/mph-modules/bs/datapresentation/DataPresentation7.html
- Robbins N. A histogram is not a bar chart. *Forbes,* 2012. https://www.forbes.com/sites/naomirobbins/2012/01/04/a-histogram-is-not-a-bar-chart/#55d27dbe6d77
- Streit M, Gehlenborg N. Bar charts and box plots. *Nat Methods* 11(2): 117, 2014. http://www.nature.com/articles/nmeth.2807
- Weissgerber TL, Milic NM, Winham SJ, Garovic VD. Beyond bar and line graphs: time for a new data presentation paradigm [discusses scatterplots, dot plots, and histograms]. *PLoS Biol* 13(4): e1002128, 2015. http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002128

Creating graphs for publication
These resources provide basic explanations of file formats, color formats, and resolution. (Note: Different publishers have different specifications, which may differ from the advice in these articles.)

- Digital art guidelines. *Blood*. http://www.bloodjournal.org/sites/default/files/misc/blood_DigitalArtGuidelines.pdf
- Nanes B. How to create publication-quality figures: A step-by-step guide (using free software!). http://b.nanes.org/figures/
- Leeper TJ. Making high-resolution graphics for academic publishing. *The Political Methodologist* [blog], 2013. https://thepoliticalmethodologist.com/2013/11/25/making-high-resolution-graphics-for-academic-publishing/