Presentations, Writing, and Publishing

Printing your poster at UT-Austin

- Poster Printing (Harris Lab specific; restricted access)
- UT Brand Guidelines - UT logo, color pallet, etc.
  - For the UT logo, go to "Identity". Then under "Logos", **read and follow the usage guidelines carefully**. Click "Download Assets". This will open a shared UT Box folder. "1_Primary.zip" or "5_Informal_Horizontal.zip" will fit the best for your poster. Use a PNG (for PowerPoint or Photoshop) or EPS (for Illustrator) file in RGB.

Presentations

- Designing effective scientific presentations (Susan McConnell, Stanford Univ.)
- Ten Simple Rules for a Good Poster Presentation

Conference presentation opportunities for undergraduates

- Within UT-Austin
  - CNS Undergraduate Research Forum: https://cns.utexas.edu/info-undergraduate-students/events-recognition/undergraduate-research-forum
  - Capital of Texas Undergraduate Research Conference (CTURC): https://senateofcollegecouncils.utexas.edu/cturc
- Outside UT-Austin
  - Gulf Coast Undergraduate Research Symposium: https://gcurs.rice.edu/
  - LSU Discover Day: https://www.lsu.edu/discover/events/index.php

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Writing papers

Writing

- Writing Strategies
- Strunk W. The Elements of Style. (New York: bartleby.com, 1999)
- Preparing a Manuscript for Submission to a Biomedical Journal (ICMJE)
- So you're writing a paper (*Nature Methods* **14**, 1115 (2017))
- How to Write an Accurate, Concise, and Meaningful Significance Statement (Society for Neuroscience)
- Living Science: Love Writing (*eLife* **8**, e45734 (2021))
- Heard SB. The Scientist's Guide to Writing (Princeton University Press)
- Check your manuscript for plagiarism with iThenticate (UT EID required)
- Select key words using the US National Library of Medicine's Medical Subject Headings (MeSH) browser list at www.nlm.nih.gov/mesh.

Figures and videos

Image manipulation

- What's in a picture? The temptation of image manipulation (*J Cell Biol* **166**, 11 (2004))

  - Potential fabrication in research images threatens key theory of Alzheimer's disease

Data Visualization

- SuperPlots: Communicating reproducibility and variability in cell biology (*J Cell Biol* **219**, e202001064 (2020))
- Violin SuperPlots: visualizing replicate heterogeneity in large data sets (*Mol Biol Cell* **32**, 1333-4 (2021))
- SuperPlotsOfData—a web app (*Mol Biol Cell* **32**, 470-4 (2021))
- Raincloud plots: a multi-platform tool for robust data visualization (Wellcome Open Res **4**, 63 (2021))

Accessibility

- Making graphics accessible to those with color vision deficiencies (*Nature Methods* **8**, 441 (2011))
  - Color Universal Design (CUD) - How to make figures and presentations that are friendly to Colorblind people -

    - Refer to the Figure 16 – When generating an image in Reconstruct, use RGB values (0-255).
  - If you are using Adobe Illustrator or Photoshop: View Proof Setup Color blindness to set up color proof. Then View Proof Color to turn it on/ff.

How to Make Figure Plates

- A basic workflow for putting together a figure
- Reconstruct Color Scheme
- Adobe Illustrator for Scientists [YouTube]

Reporting requirements

- The ARRIVE Guidelines for Reporting Animal Research
- RRID: for unique, persistent identification and tracking of key biological resources (e.g., antibody, software, etc.)
- Reporting and reproducibility in microscopy (Nature Methods)
  - A guide to accurate reporting in digital image acquisition – can anyone replicate your microscopy data? (*J Cell Sci* **134**, jcs254144 (2021))
  - A guide to accurate reporting in digital image processing – can anyone reproduce your quantitative analysis? (*J Cell Sci* **134**, jcs2541 (2021))

Data availability

- Sharing Data through 3DEM.org (Harris Lab specific; restricted)

Submitting

- Comparing documents

Writing grants

- Grant-writing blog by Parker Derrington Ltd

Reviewing papers

- Tricks of the Trade: How to Peer Review a Manuscript (Society for Neuroscience)
- Step-by-step guide to reviewing a manuscript (John Wiley & Sons, Inc.)
- Rookie review
- Reviewer Mentoring Program (Society for Neuroscience)

Food for thought

- "Why Is It so Hard to Do Good Science?" by Ray Dingledine
- "What Is the Question?" by Leek and Peng
- "On Fallacies in Neuroscience" by Christophe Bernard
- Promoting Awareness and Knowledge to Enhance Scientific Rigor in Neuroscience (Society for Neuroscience)
- Considerations and recommendations for experimental designs by Journal of Neuroscience
- Consideration of Sample Size in Neuroscience Studies by Journal of Neuroscience