Publication and Authorship

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Why talk about authorship and publication ethics

- Committee on publication ethics (COPE)
  - Medical Journal Editors
  - 9000 members worldwide
  - 1/3 of cases brought before committee involve redundant or duplicate presentations
  - 26% of cases involve authorship
  - More than half of all cases involve either duplicate publications or author disputes
Why publish

• Dissemination is an obligation
  – Research only useful if read and evaluated by others
  – Researchers are obliged to share their study methods and findings
  – Participants, funders, and colleagues rely on this commitment

• Failure to abide by ethical principles of authorship and publication can
  – Damage scientific reputation
  – Result in penalties and other damage to career

• It’s good for you
  Publications are the primary “currency” of a academics
  Has direct effects on promotion, funding, etc.
What “counts” as a publication

• Geez, everyone knows that:
  – Articles, grant applications, published abstracts

• But what about:
  – You submit an abstract to a research conference and before your presentation several newspapers contact you and ask if they can write a short article about your findings
  – You submit a manuscript to a peer-reviewed publication. During the review process, the Editor of a newsletter contacts you and asks if you would write a short piece describing your results
  – You respond to a posting on the internet and use your data as support.
What to publish

• New and substantial findings or analysis
  – Avoid “salami” publications
  – Avoid thinking about: least (minimal) publishable units (LPU/MPU)
    • Strongest reputations built on quality not quantity of publications
  – Citations equally/more important than number of publications
    • Modal number of citations for articles in biomedical journals?
    • They don’t even cite themselves!!

• Avoid duplicate submission & publication
  – Slight differences in manuscripts does not constitute two manuscripts
  – Unethical
    • Wastes time of peer-reviewers and editors
    • Wastes resources and Journal pages
    • Distorts Academic reward system
    • Inflates scientific literature for no benefit other than to author
Publications advance science

• Critical that EVERYTHING you publish meets criteria of:
  – Honesty
    • Almost never have access to raw data
      – Depend on integrity of authors
  • Thoroughness
    • Your job is present an accurate representation of
      Ø Your findings
        ▪ Both successes AND failures
      Ø The literature
        ▪ Both consistent and inconsistent
Publications and research misconduct

- Most significant violations of ethical principles are deemed research misconduct
  - Fabricating or falsifying data
  - Plagiarism
  - Cite ALL sources, even yourself
  - Some instances ok to re-use previous text YOU wrote, but must cite
Errors after publication

• It happens!
• Acknowledge immediately
  – Submit letter to the Editor describing error and how it impacts work
    • Some errors are more serious than others
  – Prepare erratum
    • Short paper describing error and how it affects major conclusions
  – Retract paper
    • In some cases better to ask that paper is retracted
• Failure to acknowledge is unethical
  – Others will base their work on your findings
Publications in faculty-student collaborations

• Special case because faculty-student relationship inherently unequal

• Potential ethical issues
  – Inappropriate influence by faculty
    • Instructs student to exclude inconsistent data
  – Faculty taking unearned authorship or inappropriate author order
    • It will “look better” for future funding if faculty is lead author
  – Faculty granting students unearned authorship or inappropriate author order
    • “I (faculty) don’t need another lead-author publication, but it will really advance your career”
Example: Case study from NSF

• A New York university professor plagiarized a substantial amount of text from multiple sources into a proposal submitted to NSF, and into two research publications acknowledging NSF support. The professor claimed that his students and post-doctoral research associate provided the plagiarized texts to him in their research progress reports. A university investigation concluded that these individuals did not provide the text, and determined that the professor had also plagiarized text into a previously submitted NSF proposal, and into three internal university proposals.

• Outcome:
  – Individual barred from receiving NSF funding for 2 years
  – For an additional 2 year period all submissions required to contain assurances by University officials that none of the material was plagiarized
Where to publish
*Warning: could have my AE hat on here*

- Hard to believe, but ….
  - Not every paper is a *Science* paper
- “Reach for the starts approach”
  - Puts demands on resources
  - Hardest thing for me as AE is finding reviewers
    - Most have multiple current reviews and can’t take another
- Especially with current metrics, prestige and importance of Journals generally (not always) well known
  - Submit appropriately
    - Will increase chance of acceptance
    - Increase chance of getting useful reviews from experts in the field
    - Distribute editorial activities in a discipline more evenly
Who is an author? International Committee of Medical Journal Editors (ICMJE)

• Authorship credit should be based on
  – 1) Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
  – 2) Drafting the article or revising it critically for important intellectual content; and
  – 3) Final approval of the version to be published

• Must meet **All** 3 criteria to be considered an author

• Possible 4\textsuperscript{th} criterion:
  – Be able to present, discuss, interpret, and defend the work, analysis, and conclusions
  – Example: My first publication
Who is NOT an author, but can be acknowledged

- Advice on study design
- Editing grant proposal, manuscript
- Data collection, subject recruitment, providing animals, contributing samples
- Statistical or technical advice
- Assistance with data entry or analysis
- Photography
- Financial support or donation of materials
- Clerical assistance
- Editorial assistance
- Participants
- Fabrication of a device
- Recruitment or referral of participants
Maybe you have too many co-authors?

“You should spend the next week typing down names of all co-authors on your paper.”
Order of authors

• Might be source of most/biggest disagreements

• Differs by discipline and journal
  – Some have lead author as last, some first
  – Some require alphabetical listing
  – Oddest one I’ve ever seen as AE

  • Green, Brown, and White (2004).
    – “Order of authorship was determined by wavelength”

• Decide on criteria for authorship order and discuss as early as possible
  – My lab, the day you are hired AND again immediately before any data are collected
  – Doesn’t matter what position (from UG to faculty colleagues)

• Some Journals now asking for “author contributions”
Authorship: Credit and Responsibility

• **Credit**
  - Contribute to field
  - Increase scientific reputation

• **Responsibility**
  - You are signing off that information in publication is accurate
  - You are responsible for the accuracy
  - Occasionally better to be removed from publication
  - Case of Woo Suk Hwang
    - Well known S. Korean researcher claimed to have created stem cells from cloning
    - Published in *Science*, but findings were all falsified
  - Professor Gerald Schatten (U. Pittsburgh) senior collaborator
    - Withdrew his name prior to publication
    - Review panel found he had NOT committed misconduct
Interesting case studies

• Columbia University, Dept. of Pharmacology
  – Post-doc sent ms to collaborators at University where she obtained PhD for comment
  – After 6 months and repeated requests for comment, believes collaborators are stalling so can submit their own similar work
  – Sends ms to journal as sole author

• U. Texas (Radiology)
  – Post-doc asked to include Department Chair as author because has provided salary support for past two years and is familiar with the research area
Resources

• PERCSS
• Committee on Publication Ethics (COPE)
  – Medical Journal Editors
  – 9000 members
  – www.publicationethetics.org
• Council of Science Editors
  – Community of editorial professionals dedicated to the responsible and effective communication of science.
  – www.councilscienceeditors.org
Conclusions

• Authorship requires meeting all 3 criteria of contributions
  – Make a significant intellectual contribution
  – Contribute to manuscript preparation
  – Provide approval of the final versions

• Authorship entails responsibility to ensure that publications
  – Are meaningful and advance the field
  – Are not duplicates
  – Are complete and accurate
  – All individuals who meet criteria are listed as authors
  – None who fail to meet criteria are listed as authors
The publication process? Hopefully not