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Strategies to Enhance the Impact of Your Research

Improving access to, and retrieval of, your research articles is the surest way to enhance their impact. Repetition, consistency, and an awareness of the intended audience form the basis of most of the following strategies in areas related to preparation for publication, dissemination of content, and keeping track of your research.

1. Authors should use the same variation of their name consistently throughout their academic careers. If your name is a common one, consider adding your full middle name to distinguish it from other authors. *Consistency enhances retrieval.*
2. Consider adding the name of the research study or your center, institute, division, or program as a corporate author, and use the same name consistently. This will allow for enhanced retrieval of publications generated by a particular research study or center, institute, division, or program in a database or resource search. See the National Library of Medicine's *Fact Sheet: Authorship in MEDLINE* (1).
3. Assign Medical Subject Headings (MeSH) terms to the manuscript. Contact your health sciences library for assistance with MeSH terms.
4. Formulate a concise, well-constructed title and abstract. Include crucial key words in the abstract. See Wiley-Blackwell's *Optimizing Your Article for Search Engines* (2).
5. Retain the rights to your manuscripts to allow for maximum flexibility in reusing your work.
6. If your work involves potential translational medicine applications, include a discussion of how the research could translate to clinical outcomes. "Impact of journal articles will be improved if they provide a direct line of reasoning for how findings might translate into useful information for real-world behaviors or technologies. This will enhance the probability that the article will affect public policy and thus increase its impact." (3)
7. Submit the manuscript to a digital subject repository or your institution's facility, if they have one. Contact your health sciences library for assistance with identifying appropriate locations.
8. Publish your work in an open access journal. Open access journals allow authors to retain rights to their work, which allows for other options for dissemination of the research. Open access articles may garner greater impact than traditional publication models (4).
9. Set up a website devoted to the research project, and post manuscripts of publications, conference abstracts, and supplemental materials—such as images, illustrations, slides, specimens, and progress reports—on the site.
10. Share the research data and deposit it in appropriate repositories, such as GenBank (<http://www.ncbi.nlm.nih.gov/genbank>) and other databases at the National Center for Biotechnology Information, or with journal publishers willing to post the data. Sharing of this information may lead to more rapid analysis and identification of genetic contributions to diseases and medical conditions. One study (5) has demonstrated a correlation between shared research data and an increased number of citations.
11. Present preliminary research findings at a meeting or conference, and after the event consider making your figures available through Figshare (<http://figshare.com>) and your presentation materials available in your institutional repository or on a slide-sharing site such as SlideShare (www.slideshare.net) so that others may discover and share your knowledge.
12. Consider communicating information about your research via Twitter (<https://twitter.com>). Twitter provides an efficient platform for communicating and consuming science. For some practical guidance on getting started and some background, see *Twitter 101: How should I get started using Twitter?* (6). To get a better idea of how and why scientists and physicians are using Twitter, you might find *What is Twitter and Why Scientists Need to Use It* (7), *How Could Twitter Influence Science (and Why Scientists Are on Board)* (8), and *Physicians on Twitter* (9) of interest, as well.
13. Research is not just text and figures. Create a podcast describing the research project, and submit it to YouTube (<http://www.youtube.com>) or Vimeo (<http://vimeo.com>). The Washington University YouTube channel offers good examples (<http://www.youtube.com/user/wustlpa#p/c/F4A14AEE489425B0>). Another option for distributing podcasts is BioMed Central (<http://www.biomedcentral.com>), an organization that recognizes video as an increasingly important way for researchers to communicate their results and that welcomes podcast submissions. Links to these podcasts are located on the BioMed Central YouTube channel.
14. Issue press releases for significant findings, and partner with your organization's media office to deliver findings to local media outlets.
15. If there is a website for the study, provide information tailored for consumers. According to the 2009 Pew Internet & American Life Project report (10), 61 percent of Americans use the Internet for health information.
16. Conduct outreach visits and/or provide seminars to other institutions, scientists, practicing physicians, and health care providers to discuss your research project.
17. Consider discussing the results of your research with policy makers and other governing bodies that issue policies, guidelines, and standards. See *Feeding your Research into the Policy Debate* (11) for a review of the pros and cons of doing this.
18. Keep your profile data up to date on social networking sites aimed at scientists, researchers, and/or physicians. Inquire about these tools within your organization. Some highly adopted institution-wide platforms include VIVO (<http://vivoweb.org>) and Profiles (<http://profiles.catalyst.harvard.edu>). These institutional efforts leverage structured data about researchers to provide current and validated information that can be used to visualize research efforts and identify new collaborators.
19. Sign up for other social networking sites to increase your visibility and connect with colleagues. Some useful sites are ResearcherID (<http://www.researcherid.com>) and LinkedIn (<http://www.linkedin.com>). Sites such as Nature Network (<http://network.nature.com>) allow and encourage interaction between users. Social network tools provide a forum for disseminating your research, promoting discussion of your work, sharing scientific information, and forming new partnerships.
20. Alternative metrics allow users to understand how their work is being used in the online world via bookmarks and links to the article or data, conversations on Twitter, in blogs about the work, and in the various methods of sharing and storing content. Some great sites for viewing these "altmetrics" include Total-Impact, ReaderMeter (<http://readermeter.org>), and resources at Altmetric, including an explorer and a bookmarklet that is easily incorporated into your Web browser bookmark bar. ●

References

1. National Library of Medicine. Fact Sheet: Authorship in MEDLINE. <http://www.nlm.nih.gov/pubs/factsheets/authorship.html>.
2. Wiley-Blackwell. Optimizing your article for search engines. <http://authorservices.wiley.com/bauthor/seo.asp>.
3. Park DC. Publishing in the psychological sciences: enhancing journal impact while decreasing author fatigue. *Perspect Psychol Sci* 2009; 4:36–37.
4. The Open Citation Project. The effect of open access and downloads ('hits') on citation impact: a bibliography of studies. <http://opcit.eprints.org/oacitation-biblio.html>.
5. Piwowar HA, Day RS, Fridsma DB. Sharing detailed research data is associated with increased citation rate. *PLoS ONE* 2007; 2:e308. doi:10.1371/journal.pone.0000308
6. Twitter. Twitter 101: How should I get started using Twitter? <https://support.twitter.com/groups/31-twitter-basics/topics/104-welcome-to-twitter-support/articles/215585-twitter-101-how-should-i-get-started-using-twitter#>.
7. McClain C. What is Twitter and why scientists need to use it. <http://deepseanews.com/2010/08/what-is-twitter-and-why-scientists-need-to-use-it/>.
8. Shaughnessy H. How could Twitter influence science (and why scientists are on board). <http://www.forbes.com/sites/haydnshaughnessy/2012/01/15/how-could-twitter-influence-science-and-why-scientists-are-on-board/>.
9. Chretien KC, Azar J, Kind T. Physicians on Twitter. *JAMA* 2011; 305:566–568.
10. Fox S, Jones S. The social life of health information. Pew Internet & American Life Project. <http://www.pewinternet.org/Reports/2009/8-The-Social-Life-of-Health-Information.aspx>.
11. Pain E. Feeding your research into the policy debate. http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2010_07_30/credit.a1000074.

Adapted from the *Becker Medical Library Model for Assessment of Research Impact*, available at <https://becker.wustl.edu/impact-assessment/strategies>.