# How PubMed Works: Selection Handout

## Pre-Test/Post-Test:

1. Which of the following groups outside of NLM reviews journals for MEDLINE?
   1. NIH Librarians
   2. Literature Selection and Technical Review Committee (LSTRC)
   3. U.S. Congress
   4. NLM Board of Regents
2. Which contains bibliographic records for the largest set of journal titles?
   1. NLM Catalog
   2. NLM Journals Collection
   3. PubMed
   4. MEDLINE
3. From where could you generate a list of current MEDLINE or PubMed Central journals?
   1. PubMed Central
   2. The NLM Catalog
   3. PubMed
   4. The MeSH database
4. What are the sources for PubMed records? (select all that apply)
   1. Journals indexed for MEDLINE
   2. Journals archived in PubMed Central (PMC)
   3. Author manuscripts and preprints in PMC
   4. Records for books and book chapters in the NCBI Bookshelf
5. What is your best source for information about what is included from a journal in PubMed?
   1. PubMed
   2. NLM Catalog
   3. PubMed Central
   4. NCBI Bookshelf

## Questions and Answers:

1. What can you search for in PubMed?
2. What are three features of the current publishing landscape that influence PubMed content?
3. Where does the NLM provide a transparent and publicly accessible set of criteria that we use in reviewing and evaluating the many journals that come to NLM?

A link to the guidelines is in the Links section below.

1. What is the minimum number of years that a publishing organization must publish scholarly content before NLM will consider their application?
2. What are some best practices NLM looks for in a journal to gauge the objectivity, credibility, and scientific quality of journal content?
3. True or False: MEDLINE and PMC journal applications undergo a scientific quality review by NLM staff and external experts.
4. What NLM Catalog search string retrieves records for all journals currently indexed in MEDLINE?

**Follow these 3 steps:**

a. Search the Web for NLM Catalog

b. Under NLM Catalog Tools, go to Journals in NCBI Databases

c. Select Journals currently indexed in MEDLINE

1. What NLM Catalog filter limits your search to journals currently being added to PubMed Central (PMC)? **Hint:** Explore the Additional Filters menu in the NLM Catalog.
2. What is the search string to use in the NLM Catalog to list all journals that are currently added to PubMed?
3. Where are approximately 90% of NIH-funded author manuscripts in PMC published?
4. What is the indexing status of the journal *BMC Pulmonary Medicine*?
5. Which issues of *BMC Pulmonary Medicine* are in PubMed Central?
6. Where can you report concerns about a publisher or journal?

## Helpful Links

[NLM Collection Development Guidelines](https://www.ncbi.nlm.nih.gov/books/NBK518693/)

[ICMJE’s Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals](https://www.icmje.org/icmje-recommendations.pdf)

[Principles of Transparency and Best Practice in Scholarly Publishing (COPE, DOAJ, OASPA, and WAME)](https://publicationethics.org/resources/guidelines/principles-transparency-and-best-practice-scholarly-publishing)

[NIH Preprint Pilot](https://www.ncbi.nlm.nih.gov/pmc/about/nihpreprints/)

[FTC Complaints](https://www.ftccomplaintassistant.gov/)

[Think Check Submit](http://thinkchecksubmit.org/)

For systematic reviews and meta-analyses, refer to the [PRISMA](http://www.prisma-statement.org/) guidelines

For case reports, review the [CARE](https://www.care-statement.org/) case report guidelines

For clinical trials, refer to the [CONSORT](http://www.consort-statement.org/) guidelines

And for animal studies,  [ARRIVE](https://www.nc3rs.org.uk/arrive-guidelines) provides guidance

[EQUATOR guidelines](https://www.equator-network.org/)

[NLM adapted format of EQUATOR](https://grants.nih.gov/grants/guide/notice-files/not-od-18-011.html)

[About MEDLINE](https://www.nlm.nih.gov/medline/medline_overview.html)

[About PMC](https://www.ncbi.nlm.nih.gov/pmc/about/intro/)

## Acronyms Mentioned in Class

|  |  |
| --- | --- |
| ARRIVE | Animal Research: Reporting of In Vivo Experiments |
| CARE | CAse REports |
| CLOCKSS | Controlled LOCKSS (Lots of Copies Keep Stuff Safe) |
| CONSORT | Consolidated Standards of Reporting Trials |
| COPE | Committee on Publication Ethics |
| CSE | Council of Science Editors |
| DOAJ | Directory of Open Access Journals |
| EQUATOR | Enhancing the QUAlity and Transparency of Health Research |
| FTC | Federal Trade Commission |
| ICMJE | International Committee of Medical Journal Editors |
| LSTRC | Literature Selection Technical Review Committee |
| MeSH | Medical Subject Headings |
| NISO | National Information Standards Organization |
| OSAPA | Open Access Scholarly Publishers Association |
| OSTP | White House Office of Science and Technology Policy |
| PMC | PubMed Central |
| PRISMA | Preferred Reporting Items for Systematic Reviews and Meta-Analyses |
| WAME | World Association of Medical Editors |

## Table: How to Search PubMed for MEDLINE, PMC, and Bookshelf Content

|  |  |  |
| --- | --- | --- |
| **Record Source** | **PubMed Search** | **PubMed Filter** |
| **MEDLINE** | medline[sb] | OTHER: MEDLINE |
| **PubMed Central** | “pubmed pmc”[sb] | (none but included in TEXT AVAILABILITY: Free Full text) |
| **Author manuscripts** | pubstatusnihms AND publisher[sb] | (none) |
| **Preprints** | preprint[pt] | (none but can exclude using OTHER: Exclude preprints) |
| **Books and chapters (Bookshelf)** | pmcbook | ARTICLE TYPE: Books and Documents |

## Additional Resources and Trainings:

[The New PubMed: Trainer's Toolkit](https://learn.nlm.nih.gov/documentation/training-packets/T0022014P/) - slides and materials to repurpose for training end-users.

[MEDLINE/PubMed Resources Guide](http://www.nlm.nih.gov/bsd/pmresources.html) - detailed information about MEDLINE data and searching PubMed.