

PubMed Central®

[Sign in to NCBI](#)



[Journal List](#)
[Limits](#)
[Advanced](#)

US National Library of Medicine
National Institutes of Health

[Help](#)



PMC

PMC is a free full-text archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine (NIH/NLM).



PubReader

A whole new way to read scientific literature at PubMed Central

Get Started

- [PMC Overview](#)
- [Users' Guide](#)
- [Journal List](#)
- [PMC FAQs](#)
- [PMC Copyright Notice](#)

Participate

- [Add a Journal to PMC](#)
- [Participation Agreements](#)
- [File Submission Specifications](#)
- [File Validation Tools](#)

Keep Up to Date

- [New in PMC](#)
- [PMC Announce Mail List](#)
- [Utilities Announce Mail List](#)
- [Tagging Guidelines Mail List](#)

Other Resources

- [PMC International](#)
- [Open Access Subset](#)
- [E-utilities](#)
- [NLM LitArch](#)
- [PMC Citation Search](#)

2.9 MILLION Articles

are archived in PMC.

Content provided in part by:

1368
268
2375

*Full
Participation
Journals*

*NIH
Portfolio
Journals*

*Selective
Deposit
Journals*

NIH Public Access

- [NIH Public Access and PMC](#)
- [NIH Manuscript Submission System](#)
- [My Bibliography](#)
- [PMCID/PMID/NIHMSID Converter](#)

You are here: [NCBI](#) > [Literature](#) > [PubMed Central \(PMC\)](#)

[Write to the Help Desk](#)

GETTING STARTED	RESOURCES	POPULAR	FEATURED	NCBI INFORMATION
NCBI Education	Chemicals & Bioassays	PubMed	Genetic Testing Registry	About NCBI
NCBI Help Manual	Data & Software	Bookshelf	PubMed Health	Research at NCBI
NCBI Handbook	DNA & RNA	PubMed Central	GenBank	NCBI News
Training & Tutorials	Domains & Structures	PubMed Health	Reference Sequences	NCBI FTP Site

PMC Overview

PubMed Central® (PMC) is a free archive of biomedical and life sciences journal literature at the U.S. National Institutes of Health's National Library of Medicine (NIH/NLM). In keeping with NLM's legislative mandate to collect and preserve the biomedical literature, PMC serves as a digital counterpart to NLM's extensive print journal collection. Launched in February 2000, PMC was developed and is managed by NLM's National Center for Biotechnology Information (NCBI).

Free Access: A Core Principle of PMC

As an archive, PMC is designed to provide permanent access to all of its content, even as technology evolves and current digital literature formats potentially become obsolete. NLM believes that the best way to ensure the accessibility and viability of digital material over time is through consistent and active use of the archive. For this reason, free access to all of its journal literature is a core principle of PMC.

Please note, however, that free access does not mean that there is no copyright protection. As described on our [copyright page](#) publishers and individual authors continue to hold copyright on the material in PMC and users must abide by the terms defined by the copyright holder.

How Journal Articles are Provided to PMC

PMC is a repository for journal literature deposited by participating publishers, as well as for author manuscripts that have been submitted in compliance with the [Public Access Policy](#) mandated by NIH and similar policies of other research funding agencies. PMC is not a publisher and does not publish journal articles itself.

PMC offers publishers a number of ways in which to [participate](#) and deposit their content in the archive. Although free access is a requirement, publishers can delay the release of their material in PMC for a reasonable period after publication. Publishers may also obtain a copy of their deposit material at any time, at no cost.

PMC's Integration with other Resources

In addition to its role as an archive, the value of PMC lies in its capacity to store and cross-reference data from diverse sources using a common format within a single repository. With PMC, a user can quickly search the entire collection of full-text articles and locate all relevant material. PMC also allows for the integration of its literature with a variety of other information resources that can enhance the research and knowledge fields of scientists, clinicians and others.

International Collaboration and Durability

NLM is collaborating internationally with other agencies that share the goals of PMC. Maintaining copies of PMC's literature in other reliable [international archives](#) that operate on the same principles provides greater protection against damage or loss of the material. At the same time, the diversity of sites allows for the possibility of more and even greater innovation, ensuring the permanence of PMC over the long-term.

You are here: [NCBI](#) > [Literature](#) > [PubMed Central \(PMC\)](#) > [PMC Overview](#)

[Write to the Help Desk](#)

GETTING STARTED

[NCBI Education](#)
[NCBI Help Manual](#)
[NCBI Handbook](#)
[Training & Tutorials](#)

RESOURCES

[Chemicals & Bioassays](#)
[Data & Software](#)
[DNA & RNA](#)
[Domains & Structures](#)

POPULAR

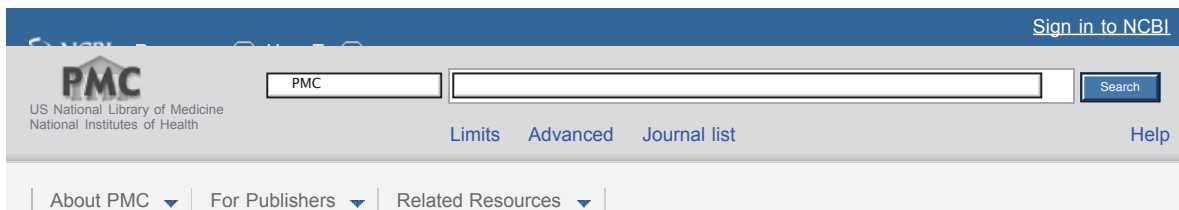
[PubMed](#)
[Bookshelf](#)
[PubMed Central](#)
[PubMed Health](#)

FEATURED

[Genetic Testing Registry](#)
[PubMed Health](#)
[GenBank](#)
[Reference Sequences](#)

NCBI INFORMATION

[About NCBI](#)
[Research at NCBI](#)
[NCBI News](#)
[NCBI FTP Site](#)



File Submission Specifications

PMC's mission is to both provide access to journal content and maintain a high-quality archive of this content over the long-term. With this in mind, PMC has designed the following sets of requirements for file submission

PMC Requires:

1. **XML Coding:** A separate XML data file for the full text of each article.
2. **Images:** The original high-resolution digital image files for all figures in each article.
3. **PDF:** A PDF file for each article.
4. **Supplementary Data:** Spreadsheets, video files, etc. available with the article.
5. **Delivery:** Files must be named and packaged for PMC.

1. XML Coding [\(more details\)](#)

For details on data elements and XML structure, please see the Journal Publishing DTD at <http://dtd.nlm.nih.gov/publishing>. For detailed information on using the Journal Publishing DTD for submissions to PMC, please read the [PMC Tagging Guidelines](#). Please check the [XML Coding Specifications](#) for a brief overview of tagging Selective Deposit, NIH Portfolio, license statements, and release-delays.

Required Data Elements

Certain data elements must be present and used consistently in each XML or SGML file deposited in PMC, even if the corresponding DTD does not require them. These elements contribute to making the XML/SGML files self-documenting and more portable for archival purposes:

- Journal ISSN
- Journal ID or Journal title abbreviation
- Journal Publisher
- Copyright statement, where applicable
- Volume, issue (if applicable), and article sequence number or pagination
- Issue publication date
- Article electronic publication date

Additional information on tagging Selective Deposit, NIH Portfolio, Release Dates, Open Access, and Limited Access is located on the [XML Coding Specifications page](#).

2. Images [\(more details\)](#)

Generally, Authors submit raw image data files to a publishing house in various formats (ppt, pdf, tif, jpg, xml, etc.). The files are then normalized to produce print or electronic output. PMC requires the normalized output, which is high-resolution, and of sufficient width and quality to be considered archival. Images generated at low resolution for display purposes are not acceptable.

Specific details on Figure, Equation, and Table Image Quality can be found on the [Image Quality Specifications page](#).

3. PDFs

A separate PDF which directly corresponds to the individual XML or SGML data file should be provided for each book review and/or letter.

If print quality PDFs are available, please submit them. If the journal is not printed, the resolution of the images in the PDF should be no less than: Line Art 800 dpi, Halftones 300 dpi, Color 600 dpi. All fonts used in the file need to be fully embedded. Compression for images should be lossless (zip) or highest-quality JPEG. Illustrations should be encoded as vector data with no erroneous conversion to bitmaps.

4. Supplementary Data

PMC requires all available supplementary material to be submitted in a portable format, such as PDF, .doc, .csv, etc. Supplementary material should not be externally linked to a www location from the article text as a substitute for submission. Supplementary material has been defined to include all of the following:

- Voluminous material that was used to support the conclusions of the narrative, such as a genomic database or the multiple data sets for an article that presents the highlights, which can never accompany a paper based on sheer mass.
- "Extra" tables that do not display with the work, but that record the measurements on which the article is based, for example, that need to be available so the peer reviewers can check the article.
- Material added to the work for enhancement purposes, such as a quiz, an instructional video, the 3-minute version of the reaction that was described in the work with narrative and a few still images, a form that can be filled out, etc.

Video

- PMC expects good quality video, and will downsample for web streaming if necessary.
- If the meaning of the video is not clear due to low quality, it must be improved prior to submission.
- Preferred Settings:
 - Audio codec: AAC
 - Sample audio bit rate: 128 kbit/s
 - Video codec: H.264
 - Video resolution: 480 vertical lines or better
 - Format: MPEG-4 (mp4) container
- Accepted formats: (mov, avi, mpg, mpeg, mp4, mkv, flv, wmv).
- Video files larger than 1GB should be split to several episodes, each less than 1GB.

5. Delivery [\(more details\)](#)


PMC requires that data is named and packaged in a compressed archive, such as a zip file, to ensure that the data can be processed by our automated system. [Naming Article Data Files](#), [Naming ZIP File Packages](#), [Revised or Corrected ZIP Files](#), and [ZIP File Delivery](#) are discussed on [this page](#).

You are here: [NCBI](#) > [Literature](#) > [PubMed Central \(PMC\)](#) > [File Submission Specifications](#)

[Write to the Help Desk](#)

GETTING STARTED	RESOURCES	POPULAR	FEATURED	NCBI INFORMATION
NCBI Education	Chemicals & Bioassays	PubMed	Genetic Testing Registry	About NCBI
NCBI Help Manual	Data & Software	Bookshelf	PubMed Health	Research at NCBI
NCBI Handbook	DNA & RNA	PubMed Central	GenBank	NCBI News
Training & Tutorials	Domains & Structures	PubMed Health	Reference Sequences	NCBI FTP Site
	Genes & Expression	BLAST	Gene Expression Omnibus	NCBI on Facebook
	Genetics & Medicine	Nucleotide	Map Viewer	NCBI on Twitter
	Genomes & Maps	Genome	Human Genome	NCBI on YouTube
	Homology	SNP	Mouse Genome	

[Sign in to NCBI](#)



US National Library of Medicine
National Institutes of Health

[Limits](#) [Advanced](#) [Journal list](#) [Help](#)

[About PMC](#) ▾ | [For Publishers](#) ▾ | [Related Resources](#) ▾

PMC National Advisory Committee

The PubMed Central National Advisory Committee advises the Director, NIH, the Director, NLM, and the Director, NCBI, on the content and operation of the PubMed Central repository. It is responsible for monitoring the evolution of PubMed Central and ensuring that it remains responsive to the needs of researchers, publishers, librarians and the general public. The committee meets at least once a year at the National Library of Medicine. Committee members are appointed by the NIH Director from the biomedical and information communities and the general public.

Minutes of earlier meetings

- [June 27, 2013 PDF](#) (179K).
- [June 19, 2012 PDF](#) (200K).
- [June 17, 2011 PDF](#) (192K).
- [June 4, 2010 PDF](#) (220K).
- [June 15, 2009 PDF](#) (107k).
- [June 17, 2008 PDF](#) (37k).
- [April 19, 2007 PDF](#) (36k).
- [October 26, 2006 PDF](#) (52k).
- [April 26, 2006 PDF](#) (37k).
- [October 20, 2005 PDF](#) (38k).
- [April 28, 2005 PDF](#) (27k).
- [November 22, 2004 PDF](#) (27k).
- [May 10, 2004 PDF](#) (22k).
- [December 2, 2003 PDF](#) (32k).
- [June 25, 2003 PDF](#) (26k).
- [January 16, 2003 PDF](#) (25k).
- [January 14, 2002 PDF](#) (25k).
- [March 21, 2001 PDF](#) (24k).

Committee Members

A member's term on the committee runs through the date shown alongside the member's name.

Chair: THIBODEAU, Patricia, M.L.S., M.B.A. (01/31/15)
Associate Dean for Library Services and Archives
Duke University Medical Center Library
10 Searle Drive, 103 Mudd Building
Durham, NC 27710

ANDERSON, Ivy, M.L.S. (01/31/14)
Director, Collection Development and Management
California Digital Library