

Resource Summary Report

Generated by [ASWG](#) on Aug 6, 2026

FMA

RRID:SCR_003379

Type: Tool

Proper Citation

FMA (RRID:SCR_003379)

Resource Information

URL: <http://sig.biostr.washington.edu/projects/fm/>

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Description: A domain ontology that represents a coherent body of explicit declarative knowledge about human anatomy. It is concerned with the representation of classes or types and relationships necessary for the symbolic representation of the phenotypic structure of the human body in a form that is understandable to humans and is also navigable, parseable and interpretable by machine-based systems. Its ontological framework can be applied and extended to all other species. The description of how the OWL version was generated is in Pushing the Envelope: Challenges in a Frame-Based Representation of Human Anatomy by N. F. Noy, J. L. Mejino, C. Rosse, M. A. Musen: http://bmir.stanford.edu/publications/view.php/pushing_the_envelope_challenges_in_a_frame_based. The Foundational Model of Anatomy ontology has four interrelated components: # Anatomy taxonomy (At), # Anatomical Structural Abstraction (ASA), # Anatomical Transformation Abstraction (ATA), # Metaknowledge (Mk). The ontology contains approximately 75,000 classes and over 120,000 terms; over 2.1 million relationship instances from over 168 relationship types link the FMA's classes into a coherent symbolic model.

Abbreviations: FMA

Synonyms: Foundational Model of Anatomy Ontology, Foundational Model of Anatomy

Resource Type: data or information resource, data processing software, controlled vocabulary, software application, data analysis software, software resource, database, ontology

Defining Citation: [PMID:18688289](#), [PMID:18360535](#), [PMID:16779026](#)

Keywords: anatomy, informatics, model, neuroanatomy, protg, reference, standard, structural, taxonomy, owl, phenotype

Funding: RSNA-NIBIB ;
University of Washington; Washington; USA ;
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Microsoft ;
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NLM LM006822;
NLM LM06316;
NLM contract LM03528;
NHLBI HL08770

Availability: Free, Freely available

Resource Name: FMA

Resource ID: SCR_003379

Alternate IDs: nif-0000-00066

Alternate URLs: <http://bioportal.bioontology.org/ontologies/FMA>

Record Creation Time: 20220129T080218+0000

Record Last Update: 20260806T054350+0000

Ratings and Alerts

No rating or validation information has been found for FMA.

No alerts have been found for FMA.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at [ASWG](#) .

Guizzardi G, et al. (2022) Automated conceptual model clustering: a relator-centric approach. Software and systems modeling, 21(4), 1363.

Surles-Zeigler MC, et al. (2022) Extending and using anatomical vocabularies in the stimulating peripheral activity to relieve conditions project. Frontiers in neuroinformatics, 16, 819198.

Tim??n S, et al. (2017) Extending XNAT Platform with an Incremental Semantic Framework. Frontiers in neuroinformatics, 11, 57.

Sluka JP, et al. (2016) A Liver-Centric Multiscale Modeling Framework for Xenobiotics. PloS one, 11(9), e0162428.

Bota M, et al. (2010) Collating and Curating Neuroanatomical Nomenclatures: Principles and Use of the Brain Architecture Knowledge Management System (BAMS). Frontiers in neuroinformatics, 4, 3.

Pathak J, et al. (2009) LexGrid: a framework for representing, storing, and querying biomedical terminologies from simple to sublime. Journal of the American Medical Informatics Association : JAMIA, 16(3), 305.

Wennerberg P, et al. (2009) Ontology based clinical query extraction. Summit on translational bioinformatics, 2009, 135.

Baldock R, et al. (2005) Anatomical ontologies: names and places in biology. Genome biology, 6(4), 108.