

# **Introduction to PunMed**

**Jingchu Luo**

**Center of Bioinformatics**

**Peking University**

**Beijing 100871**

**China**

# MedLine

- ❖ Journal abstracts
- ❖ 4800 medical journals
- ❖ 12,000,000 records
- ❖ Since 1966
- ❖ Medicine, nursing, dentistry, veterinary, health care, preclinical

# PubMed Coverage

- ❖ Medline
- ❖ Old MedLine
- ❖ PubMed Central
- ❖ Life Science
- ❖ Chemistry

# Limit of Author Numbers

- ❖ **1966-1984: No limit**
- ❖ **1984-1995: first 10, et al.**
- ❖ **1996-1999: first 24, last, et al.**
- ❖ **2000-present: No limit**

# Field Tags

- ❖ AU: Authors
- ❖ AD: Affiliation and address (1st author), grant
- ❖ TI: Title
- ❖ AB: Abstract
- ❖ DP: Date of publication
- ❖ LA: Language
- ❖ PT: Publication type
- ❖ MH: MeSH term

# Publication Types

- ❖ Journal Article [excludes Letter, Editorial, News]
- ❖ Review [includes all reviews]
- ❖ Letter [includes letters to editor]
- ❖ Editorial
- ❖ News [for medical or scientific news]
- ❖ Newspaper Article
- ❖ Biography
- ❖ Comment
- ❖ Clinical Trials
- ❖ Published Erratum

# Medline Subject Heading (MeSH)

- ❖ Anatomy [A]
- ❖ Organisms [B]
- ❖ Diseases [C]
- ❖ Chemicals and Drugs [D]
- ❖ Techniques and Equipment [E]
- ❖ Psychiatry and Psychology [F]
- ❖ Biological Sciences [G]
- ❖ Physical Sciences [H]
- ❖ Anthropology, Education, Sociology and Social Phenomena [I]
- ❖ Technology and Food and Beverages [J]
- ❖ Humanities [K]
- ❖ Information Science [L]
- ❖ Persons [M]
- ❖ Health Care [N]
- ❖ Geographic Locations [Z]

# MeSH Biological Sciences

- ❖ Biological Sciences [G01]
- ❖ Health Occupations [G02]
- ❖ Environment and Public Health [G03]
- ❖ Biological Phenomena, Cell Phenomena, and Immunity [G04]
- ❖ Genetic Processes [G05]
- ❖ Biochemical Phenomena, Metabolism, and Nutrition [G06]
- ❖ Physiological Processes [G07]
- ❖ Reproductive and Urinary Physiology [G08]
- ❖ Circulatory and Respiratory Physiology [G09]
- ❖ Digestive, Oral, and Skin Physiology [G10]
- ❖ Musculoskeletal, Neural, and Ocular Physiology [G11]
- ❖ Chemical and Pharmacologic Phenomena [G12]
- ❖ Genetic Phenomena [G13]
- ❖ Genetic Structures [G14]

# MeSH Biological Sciences

- ❖ Anatomy [G01.100]
- ❖ Biochemistry [G01.201]
- ❖ Biology [G01.273]
- ❖ Biophysics [G01.344]
- ❖ Biotechnology [G01.550]
- ❖ Neurosciences [G01.610]
- ❖ Pharmacology [G01.703]
- ❖ Physiology [G01.782]

# MeSH Biology

- ❖ Botany [G01.273.118]
- ❖ Computational Biology [G01.273.180]
- ❖ Developmental Biology [G01.273.200]
- ❖ Ecology [G01.273.248]
- ❖ Exobiology [G01.273.295]
- ❖ Genetics [G01.273.343]
- ❖ Laboratory Animal Science [G01.273.368]
- ❖ Marine Biology [G01.273.476]
- ❖ Microbiology [G01.273.540]
- ❖ Molecular Biology [G01.273.595]
- ❖ Natural History [G01.273.602]
- ❖ Neurobiology [G01.273.610]
- ❖ Parasitology [G01.273.688]
- ❖ Photobiology [G01.273.738]
- ❖ Radiobiology [G01.273.789]
- ❖ Sociobiology [G01.273.866]
- ❖ Zoology [G01.273.943]

# MeSH Computational Biology

---

MeSH Heading	Computational Biology
Tree Number	G01.273.180
Tree Number	H01.158.273.180
Annotation	SPEC; SPEC qualif; coord IM with specific biol spec (IM); DF: COMPUTATIONAL BIOL
Scope Note	A field of biology concerned with the development of techniques for the collection and manipulation of biological data, and the use of such data to make biological discoveries or predictions. This field encompasses all computational methods and theories applicable to MOLECULAR BIOLOGY and areas of computer-based techniques for solving biological problems including manipulation of models and datasets.
Entry Term	Bioinformatics
Entry Term	Molecular Biology, Computational
Entry Term	Bio-Informatics
Entry Term	Biology, Computational
Entry Term	Computational Molecular Biology
See Also	Medical Informatics
Allowable Qualifiers	CL EC ED ES HI IS LJ MA MT OG SN ST TD
Entry Version	COMPUTATIONAL BIOL

---

# Stop Words (127)

- ❖ a, an, the
- ❖ has, have, had, having
- ❖ do, did, is, being, were, can, would, could ...
- ❖ make, made, show, seem, use ...
- ❖ that, which, when, where, how, what, if ...
- ❖ of, for, from, in, on, by, to ...
- ❖ they, we, their, this ...
- ❖ no, so, very, some, most, such, than, thus, here ...
- ❖ due, since, during, through, using, overall, however ...
- ❖ various, significantly, several, most ...
- ❖ kg, km, mg, ml, mm ...