

Collection Subject Statement: Neuroscience

Last Reviewed: May 2025

Purpose

The Neuroscience collection in the University of Pittsburgh Library System (ULS) primarily supports the academic programs and research needs of the students, faculty, and staff of the Department of Neuroscience and others studying or working in the field across the university. The collection supports a bachelor's degree, a master's degree that is primarily intended for students already working with a faculty member, and a Ph.D. degree at the Pittsburgh campus. Research from the undergraduate to post-doctoral and faculty levels is supported. The collection aims to support all aspects of teaching and learning in the Department of Neuroscience, including theory and practice, and to enable and encourage independent inquiry and research. Relevant materials are located primarily in Bevier Library, Hillman Library, and Thomas Blvd. Library.

Audience

The collection primarily serves the needs of students, faculty, and researchers in the Department of Neuroscience. This includes students taking neuroscience courses in support of a minor in the discipline, majors in other disciplines, or a pre-health science program. The collection is also a resource for those in disciplines such as bioengineering, biophysics, chemistry, computational science, mathematics, psychology, and certain health sciences. The Department of Neuroscience has close ties to the Center for Neuroscience, which promotes collaboration among members of a variety of departments in Arts & Sciences, Engineering, and Health Sciences, as well as some members from Carnegie Mellon University.

Guiding Principles and Areas of Focus

The collection is intended to represent the broad range of study and research in neuroscience. It includes resources for brain anatomy, cognition, computational modeling and network analysis, developmental neuroscience, experimental methodology, emotion and motivation, learning, memory, neurophysiology, neuroplasticity, regulatory systems for homeostasis, the senses, signaling, and synaptic transmission. It supports study to understand the underlying biological structure and function of the nervous system with goals such as determining how experience alters brain anatomy, how cognitive and emotional behaviors are regulated, how abstract properties are stored and used to determine actions, and how disruptions lead to disorders such as addiction, dementia, emotional and mood disorders, schizophrenia, and neuromuscular disease. Subject matter is guided by current teaching and research. The focus is on original writing and research in all formats, but on occasion reprints of classic works or collected works of major contributors to the field are acquired.

Collection Scope

The Neuroscience collection offers a wide range of print and digital materials in the form of monographs, journals, selected book series and conference proceedings, and electronic databases related to the discipline. Resources covering laboratory methodology, experimental techniques, and instrumentation are acquired, but “one-time use” laboratory manuals, workbooks, and most spiral bound materials are not. Advanced and graduate level textbooks may be acquired, but most undergraduate and introductory textbooks will only be acquired on request in support of course reserves. Works of history and philosophy are generally reserved for History and Philosophy of Science but may be acquired selectively. A limited number of more general or biographical treatments may be acquired to support general interest reading. English is the primary language of the collection. Materials are acquired primarily from publishers based in North America and Europe, but individual works and journals reflect a broad international scope of authors and contributors. The emphasis is on adding current publications.

Library of Congress Classification

Typical classifications in which materials are acquired are listed below. Selective acquisitions may also be made in other categories based on need and interest.

BF (Psychology) (works.in.BF.are.acquired.to.the.extent.that.materials.with.a.neuroscience.or.physiological.focus.are.classified.here.or.as.related.to.specific.courses.and.research)

- BF207-209 Psychotropic drugs and other substances
- BF231-299 Sensation
- BF309-499 Consciousness. Cognition (including.learning.and.memory)
- BF501-505 Motivation
- BF511-593 Affection. Feeling. Emotion
- BF608-635 Will. Volition. Choice. Control

QA (Mathematics) Materials.in.QA?QC?QD.and.the»T.s.are.acquired.in.support.of.specific.course

QC (Physics) .or.research.or.when.they.have.specific.applications.to.neuroscience.

QD (Chemistry) computational.neuroscience;Acquisitions.are.made.in.conjunction.with.those.

T (Technology).for.mathematics?statistics?computing?engineering?and.other.sciences.

QH (Biology (General)) (specific.applications.to.neuroscience?the.nervous.system?or.computational.neuroscience.or.in.support.of.specific.courses.or.research)

- QH211 -273 Microscopy. Microscopes
- QH323.5 Biometry. Biomathematics. Mathematical models

- QH324 Methods of research. Technique. Experimental biology
- QH426-470 Genetics
- QH491-499 Development. Morphogenesis
- QH505-531 Life (including.biophysics?biological.control.systems?bioelectronics?bioacoustics?photobiology?electrophysiology?respiration?chronobiology?periodicity.biorhythms?cytology)

QL (Zoology) (works.may.also.be.acquired.when.classified.by.specific.animal.or.group).

- QL756.7 Animal behavior/Drug use
- QL785 Animal behavior/Psychology. Intelligence. Learning
- QL921-939 Anatomy/Chordates.Vertebates/Nervous system
- QL945-949 Anatomy/Chordates.Vertebates/Sense organs

QM (Human anatomy)

- QM451-471 Nervous system (works.on.the.innervation.of.other.systems.may.also.be.acquired)
- QM501-511 Sense organs
- QM575 Nerve tissues
- QM575.5 Blood-brain barrier
- QM690-695 Teratology (including.brain?nervous.system)

QP (Physiology)

- QP90.4 Homeostasis
- QP341 Electrophysiology
- QP351-495 Neurophysiology and neuropsychology

RC (Internal medicine)

- RC321-571 Neurosciences. Biological psychiatry. Neuropsychiatry. (when.focused.on.neuroscience.aspects.and.related.to.specific.courses.or.research)

Connections & Collaborations

The ULS collaborates with other institutions and consortia to acquire specialized materials that support research, teaching, and learning in neuroscience, particularly in areas where shared resources improve accessibility to rare or costly materials. Regionally and nationally, the ULS participates in several consortia for collection development (NERL? EAST?Hathi.Trust?CRL) and resource sharing (PALCI EZBorrow, OCLC Interlibrary Loan, RapidILL) that shape strategy for the Neuroscience collection. Within the university, the ULS cooperates with the Health Sciences Library System to provide shared access to a variety of electronic books, journals, databases, videos, and specialized resources. Development of the collection takes into account the connection of Neuroscience with related disciplines, such as biology, bioengineering, chemistry, computational science, mathematics, psychology, statistics, and certain health sciences, such as psychiatry.

Subject Expert

- Pittsburgh campus contact: Margarete Bower (bower@pitt.edu)

Sources of Information

- <https://www.neuroscience.pitt.edu/>
- <https://www.cnup.pitt.edu/about/basic-page-746>