Quick Guide to the Neuroscience Department





Professor: Barb Beltz (Row 1L), Marc Tetel (Row 1M) **Associate Professors:** Michael Wiest (Row 2L), Sharon Gobes (Row 2M)

Assistant Professors: Sara Wasserman (Row 1R) Lecturer in Neuroscience: Deborah Bauer (Row 2R) Instructor in Neuroscience Laboratories: Ginny Quinan (row 3L)

Laboratory specialist: Kailee Silva (Row 3M) Neuroscience Advisory Committee:

Christen Deveney (Row 3R, Psychology) Ellen Hildreth (Row 4L,Computer Science), Yui Suzuki (Row 4M, Biological Sciences)

Student Representatives: Dulce Aleman, Mayaa Appiah and Rosalie Grijalva





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> Website: http://wellesley.edu/neuroscience

WELLESLEY COLLEGE NEUROSCIENCE DEPARTMENT

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What is neuroscience?

Neuroscience explores how the brain and nervous system function to generate behavior, emotion and cognition. Neuroscience is highly interdisciplinary, integrating biology, psychology, chemistry, physics and computer science. Exploring the complexity of the nervous system requires analyses at multiple levels. Neuroscientists investigate how genes and molecules regulate nerve cell function (cellular/molecular neuroscience), explore how neural systems produce integrated behaviors (behavioral neuroscience), seek to understand how neural substrates create mental processes and thought (cognitive neuroscience) and use mathematics and computer models to comprehend brain function (computational neuroscience). In studying how the brain and nervous system function normally, neuroscientists also hope to better understand devastating neurologicaland psychiatric disorders.

Wellesley Neuroscience majors and alumni

To learn more about what Neuroscience <u>students</u> and <u>alumni</u> are doing in the field, visit our website.

Research in neuroscience

All of the <u>neuroscience faculty</u> are actively engaged in laboratory research, and we encourage students to become involved in <u>research</u> as early as possible in their time at Wellesley. Information about specific faculty research projects is found on the neuroscience website. The research endeavor is supported by modern instrumentation such as a laser confocal microscope, an MRI for small animal imaging, and a suite of instruments for genomic and proteomic analyses.

The major in Neuroscience offers three areas of concentration:

- cellular and molecular neuroscience
- cognitive neuroscience
- systems and computational neuroscience

See the Wellesley <u>course catalog</u> for additional information about specific courses.

Diversity, Equity & Inclusion in Neuroscience

The Neuroscience website offers information and resources pertaining to diversity, equity and inclusion, including summer research opportunities.

The Neuroscience Major

Core Courses

NEUR 100 + P (recommended taking during first three semesters at Wellesley)

NEUR 200 + L NEUR 300 (required fall of senior year) BISC 110, 110P, 112, 112Y + L, or BISC 116 + L PSYC 205 or STAT 218

200-Level Electives* (choose 3 courses from at least 2 of 3 groupings) *Note: Additional prerequisites may be needed

Cellular Net BIS BIS CHE CHEM 2 CHEM 2	Cellular and Molecular Neuroscience BISC 219 + L BISC 220 + L CHEM 211 + L CHEM 223 + L (CHEM 222) CHEM 227 (CHEM 220)		Cognitive Neuroscience PHIL 215 PSYC 215 PSYC 216 PSYC 217 PSYC 218	
(cho Cellular a Neur BISC NEUI NEUR NEUR/BIS NE	Systems and Computational Neuroscience CS 232 MATH 215 PHYS 210 PHYS 210 PHYS 216 (Class of '23 or before) QR/STAT 260300-Level Electives* (choose 3 courses from at least 2 of 3 groupings; at least one lab course)Cellular and Molecular Neuroscience BISC 302 + L NEUR 305 + L NEUR/BISC 316, 315 + L NEUR/BISC 315, 315 + L NEUR 332Cellular and Molecular Neuroscience PSYC 317 PSYC 317 PSYC 317 PSYC 319 PSYC 318 PSYC 314R + L, 315R + L (PSYC 205 required for PSYC 314R and 315R)			
	Systems and Cor Neurosci CS 30 CS 33 NEUR 31 NEUR 32 NEUR 33		+ L + L - L	