



**Welcome to Neuroscience**

- 
- **EXPAND** your knowledge of neuroscience concepts.
  - **LEARN** through lab training, interdisciplinary classroom instruction and mentored research to prepare for a career in research, teaching, publishing, or industry.
  - **GAIN** valuable experience from 28 full-time faculty members, who conduct research in a wide variety of areas, including but not limited to Psychology, Physiology, Developmental Biology, Molecular Biology, Engineering and Bioinformatics.
  - **DEVELOP** critical thinking, professional, and scientific thinking skills.





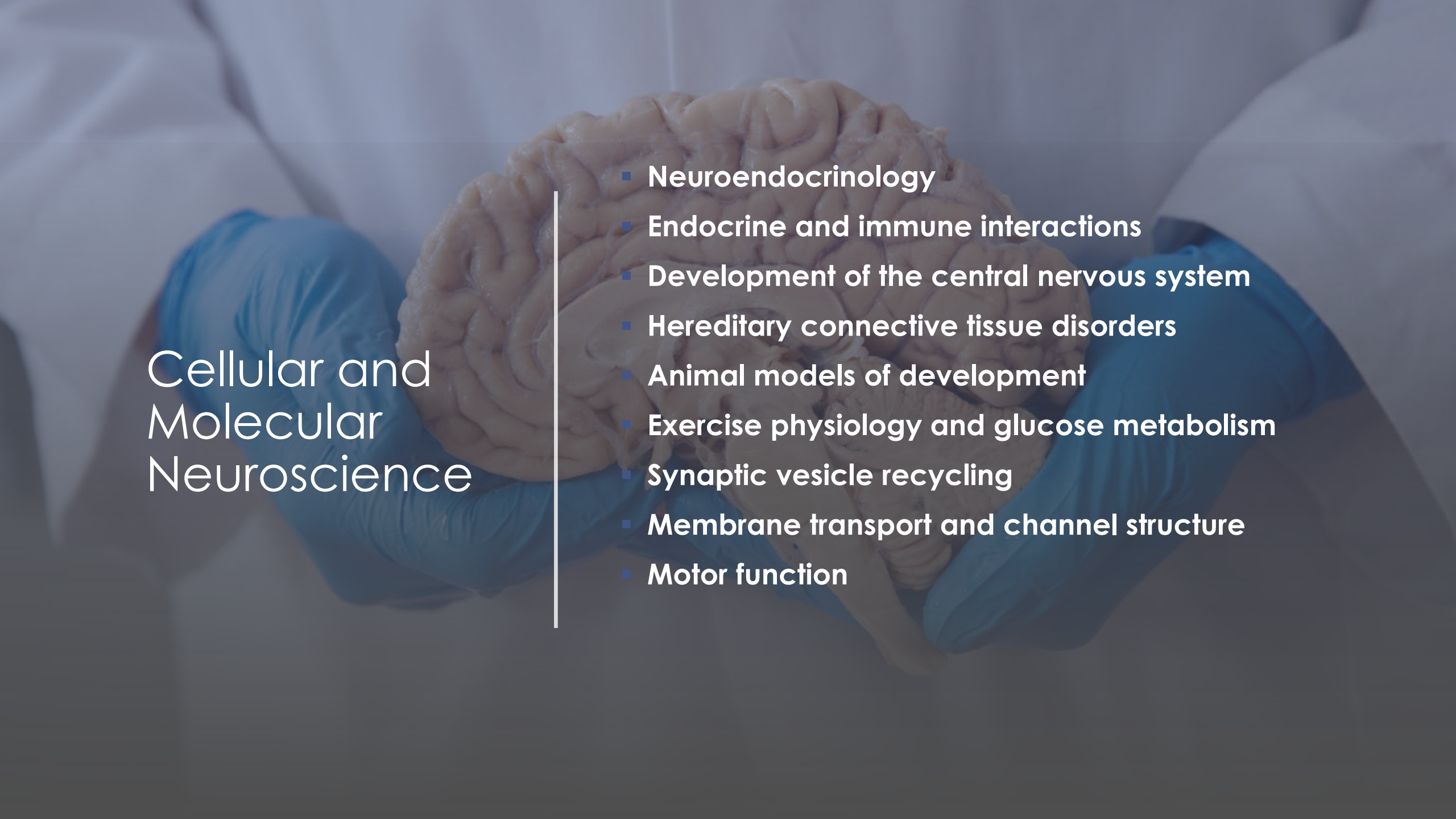
## BYU NEUROSCIENCE MS and PhD Programs



## Access Resources

- MRI scanner
- Eye-tracking lab
- Animal facilities
- Travel/research funding to attend professional conferences to present research
- Up-to-date computer technology and analysis software
- EEG equipment

Neuroscience is an **interdisciplinary science** that studies the development of the nervous system, its structure and function and its connection to influencing/regulating behavior. Graduate programs in Neuroscience offer **research training and classroom instruction** in a wide range of areas including **Psychology, Physiology, Developmental Biology, Molecular Biology, Engineering and Bioinformatics.**

A person wearing a white lab coat and blue nitrile gloves is holding a human brain. The brain is positioned in the center of the frame, showing its characteristic gyri and sulci. The background is a soft, out-of-focus white, suggesting a clinical or laboratory setting. The overall tone is professional and scientific.

# Cellular and Molecular Neuroscience

- **Neuroendocrinology**
- **Endocrine and immune interactions**
- **Development of the central nervous system**
- **Hereditary connective tissue disorders**
- **Animal models of development**
- **Exercise physiology and glucose metabolism**
- **Synaptic vesicle recycling**
- **Membrane transport and channel structure**
- **Motor function**





# Behavioral Neuroscience

- Memory
- Neuroimaging
- Visual processing
- Sleep
- Event related potentials of language development
- Traumatic brain injury
- Autism
- Child development
- Social relationships and health
- Cognitive and psychological outcomes of medical disorders
- Neurological and neuropsychiatric disorders



## **BYU Masters in Science**

The graduate neuroscience MS degree program is designed with a sound understanding of and advanced knowledge and training in current concepts in neuroscience. The program prepares students for positions in research, academia and industry.



## BYU-MS

- **30 credit hours total** (24 hours in course work including seminar and 6 thesis hours); 20 hours must be in the 500 series or above (can include 699R, etc.)
- No more than 10 credit hours of non-degree credit and no home study (except prerequisites) can be applied toward the MS degree.
- Undergraduate credit: Graduate Studies allows up to 9 credit hours of undergraduate courses (300-400 level) if it pertains to the area of study.





## BYU PhD Program

The **PhD** degree program offers lecture and laboratory courses and research that emphasizes the multidisciplinary nature of neuroscience. Students in the program are required to develop a strong background in the principles of neuroscience and develop the intellectual background and technical expertise necessary in their area of specialization. The program is designed to provide advanced training and research to develop and carry out original research, present their findings at meetings and conferences, and teach neuroscience.



## BYU-PhD

- The minimum requirement for students who do not have a Master's degree is 56 semester credit hours beyond the baccalaureate degree; the 56 hours may not include undergraduate (100 to 400 level) or more than 18 credit hours of dissertation credit
- Students who have earned a Master's degree must complete at least 36 semester credit hours of additional graduate work at BYU beyond the credits earned as part of their Master's degree.



## **Neuroscience Prerequisites Courses**

- Molecular/Cellular/Behavioral Neuroscience (e.g., BYU's Neuro 480, 481)
- Physiology with lab (e.g., BYU's PDBio 362, 363)
- Biochemistry (e.g., BYU's Chemistry 481)

## **Suggested additional prerequisites:**

- Cellular/Molecular Biology (e.g. PDBio 360)
- Organic Chemistry (e.g. Chemistry 352)
- College Physics (e.g. Physics 121, 123, 220)





## **BYU-Grad Studies**

Students working toward a Master's degree generally complete all requirements within two years, while PhD students generally complete all requirements within four-five years.

BYU has over 3, 000 graduate students, 32 doctoral programs, and 88 master's programs.



## BYU-Diversity and Inclusion

With 50 states and 105 countries represented at Brigham Young University, our programs seek diversity and inclusion in all areas.

**Students from all backgrounds and religious faiths are encouraged to apply.**



# BYU- Diversity and Inclusion

## **The Committee for Diversity, Collaboration, and Inclusion**

seeks to nurture an inclusive community—grounded in unity, mutual respect, and charity toward all. To achieve this goal, we support the college in the following three areas: (1) We promote the recruitment, training, retention, promotion, and support of faculty of color, women faculty, and faculty from other underrepresented groups, recognizing that their perspectives and contributions enhance the quality of our college's research, teaching, and programming.





## BYU- Diversity and Inclusion

(2) We collaborate with faculty members, deans, chairs, mentors, and other campus partners to create inclusive academic environments where faculty, students, and staff of all backgrounds and experiences can succeed, thrive, and contribute to the aims of Brigham Young University. (3) We directly support the College in its goal to help students become informed citizens and thoughtful leaders who make our BYU community and the broader communities in which they live more just, equitable, happy, and inclusive.

## Brigham Young University- #1 Forbes “Best Value Colleges”

2020-2021	
LDS Tuition	\$ 7,510
Non-LDS Tuition	\$15,020
Room and Board	\$13,384
Books and Supplies	\$ 896
Personal Expenses	\$ 3,016
Transportation	\$ 3,016
Loan Fees	\$ 184

### Two Semesters

LDS Total: \$28,862

Non-LDs Total: \$36,372

-Tuition is covered for all PhD and most MS students.

-TA or RA assistantships are available to all PhD and some MS students



## **Financial Assistance**

Master's students may receive financial support through complete or partial tuition award, teaching assistantships, research assistantships, and other scholarship opportunities, depending on department funding

PhD students may receive financial support through research or teaching assistantships and full tuition funding along with other scholarship opportunities.





# Our University

#1 largest religious/private university in the US

#3 Forbes America's Best Value Colleges

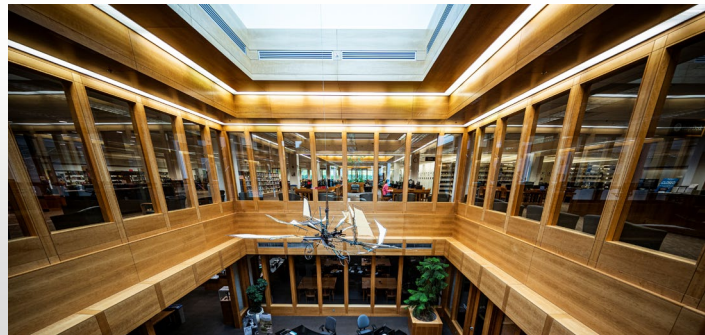
#3 top university for engaged learning

#4 graduates with least debt

#5 In graduates earning research doctorate degrees

Nationally recognized athletic program





# BYU Harold B. Lee Library

Ranked as one of  
the top 3 university  
libraries in the  
country



# Brigham Young University

BYU Physical Facilities received the 2019 **Award for Excellence in Facilities Management** from the Association of Physical Plant Administrators (APPA). The award is APPA's highest institution honor and underscores the essential role of facilities operations in an institution's mission and vision.







## Our Community-Provo, Utah

#1 US medium-sized city for jobs and job growth – *Forbes*

#1 most compassionate city

#1 US city for quality of life

#2 best city for Millennials

#2 best places to live in America – *Outside Magazine*

7 outstanding ski resorts can be found within a one-hour drive from campus

5 national parks



# Applying to BYU Graduate Program

Apply at: **gradstudies.byu.edu**

Deadline for applying to Neuroscience: **January 15, 2022**

What you will need to apply:

- Transcripts and degrees,
- GRE scores
- 3 Letters of Recommendation
- Statement of Intent – educational and career objectives



For more information

To learn more, visit [neuroscience.byu.edu](https://neuroscience.byu.edu)

Or contact the Graduate Program Supervisor for Neuroscience

**[neuroscience@byu.edu](mailto:neuroscience@byu.edu)**

**801.422.8633**



BRIGHAM YOUNG UNIVERSITY

*enter to learn; go forth to serve*