Why come here for research?
UW-Madison is a top research institution

- Research expenditures: $1.2 billion in 2018-19; sixth overall
- Selected by the NIH to be a national Cryo-EM center
- PhDs granted: 735 during the 2019-2020 academic year
- Patents granted to a university: Eighth
- Number of grad programs ranked in the top ten nationally: 40
There are outstanding facilities and centers at UW-Madison for research

Biophysics Instrumentation Facility
Mass Spectrometry Facility
National Magnetic Resonance Facility
LS-CAT Synchrotron Beamline
Waisman Clinical Biomanufacturing Facility
Peptide Synthesis Facility
Molecular Interaction Facility
Gene Expression Center
Genome Center of Wisconsin
Transgenic Animal Facility
Cryo-EM Facility

W.M. Keck Lab for Biological Imaging
Lab for Optical and Computer Imaging
Materials Science Center
Wisconsin Institutes for Discovery
Flow Cytometry Facility
Keck Small Molecule Screening Facility
Biology Media Lab
Wisconsin Center for Applied Microelectronics
Wisconsin Alumni Research Foundation
DNA Sequencing Lab
There are a lot of new laboratory buildings on campus.
UW-Madison can provide a quality education

- Ranked consistently among the premier research universities in the country
- Campus is home to approximately 44,000 students; of these, over 8,900 are graduate students
- Over 100 Doctoral Programs
UW-Madison Biological Science Programs

- Agronomy: MS, PhD
- Animal Sciences: MS, PhD
- Applied Biotechnology: MS
- Audiology: AuD
- Bacteriology: MS (for PhD, see Microbiology)
- Biochemistry: PhD
- Biomedical Data Science: MS, PhD
- Biometry: MS
- Biophysics: PhD
- Biotechnology: MS
- Botany: MS, PhD
- Cancer Biology: PhD
- Cellular and Molecular Biology: PhD
- Cellular and Molecular Pathology: PhD
- Clinical Investigation: MS, PhD
- Clinical Nutrition: MS
- Communication Sciences and Disorders: MS, PhD
- Comparative Biomedical Sciences: MS, PhD
- Dairy Science: MS, PhD
- Endocrinology - Reproductive Physiology: MS, PhD
- Entomology: MS, PhD
- Environmental Conservation: MS
- Epidemiology: MS, PhD
- Food Science: MS, PhD
- Forestry: MS, PhD
- Freshwater and Marine Sciences: MS, PhD
- Genetics: PhD
- Horticulture: MS, PhD
- Kinesiology: MS, PhD
- Medical Physics: MS, PhD
- Microbiology: PhD
- Molecular and Cellular Pharmacology: PhD
- Molecular and Environmental Toxicology: MS, PhD
- Neuroscience: PhD
- Nursing Practice: DNP
- Nursing: PhD
- Nutritional Sciences: MS, PhD
- Occupational Therapy: MS (For PhD, see Kinesiology)
- Occupational Therapy: OTD
- Pharmaceutical Sciences: PhD
- Plant Breeding and Plant Genetics: MS, PhD
- Plant Pathology: MS, PhD
- Population Health: MS, PhD
- Wildlife Ecology: MS, PhD
- Zoology: MA, MS, PhD
Our Students

• Each graduate program individually works to create a sense of community amongst its students

• University-wide programs and groups enhance students’ experiences during graduate school
  • They organize community activities, outreach opportunities and professional development sessions to help connect underrepresented students
Student organizations on campus

• SACNAS student chapter
• Wisconsin Black Students Union
• Dreamers of UW-Madison
• Native American Center for Health Professions (NACHP)
• Q-Grads
• OSTEM (Out in Science, Technology, Engineering and Mathematics)
• Science and Medicine Graduate Research Scholars (SciMed GRS)
• Fellowship funding (stipend, health insurance and tuition coverage)

• Community and supportive network of peers, staff and faculty

• Professional development, networking, leadership and social opportunities

• Large group meetings monthly, first-year student cohort seminar and events

• 155 students from 34 grad programs (started with 18 students in 2008)

• 96% Retention (130 PhD, 56 MS)

• Contact: Abbey Thompson
  • abbey.thompson@wisc.edu
Funding opportunities at UW-Madison

• 85% of all doctoral students have full University funding
  • Most bioscience students have research assistant appointments
  • Average monthly stipend: $2179/month

• Grant opportunities:
  • Training grants (39 across campus)
  • Institution specific:
    • Morgridge Research Institute
    • Wisconsin Alumni Research Foundation
    • From colleges on campus (CALS, L&S, SMPH)
  • Travel grants from the Graduate School

• Funding stipend levels and mechanisms are set by individual graduate degree programs
  • Additionally, all funded graduate research students qualify for tuition remission and are eligible for a comprehensive benefits package
UW offers a number of summer research opportunities to undergraduate students

Some current topics are:
- Biological Interactions: Phenotype, Genotype, & Environment
- REU in the Chemistry of Materials for Renewable Energy
- Chemistry and Chemical and Biological Engineering
- Summer Research Program in Biomedical Data Science
- Psychology Research Experience Program (PREP)
- Molecular and Environmental Toxicology Summer Research Program
Living in Madison

- Madison is a vibrant community where many outdoor recreation activities are possible including boating, swimming, biking, skiing, and hiking.
- Madison’s early city planners incorporated gardens, parks and green spaces to blend urban life with the natural landscape.
- Consistently ranked as one of the healthiest cities in the United States.
- Excellent local restaurants.
Living in Madison

Winter offers many outdoor activities including skiing, ice skating, and snowshoeing.

Wisconsin springs are in full bloom and open up many opportunities for biking around town (over 1000 miles in Wisconsin!)

Summer brings several music festivals to Madison and top artists regularly visit venues like the Majestic and the Sylvee.

Fall is a great time to spend attending a sporting event in Madison or enjoy one of the many apple orchards in the state.
Choosing a Graduate Program

Biological science graduate programs vary in many ways:

• Size
• Focus/scope (highly interdisciplinary versus more focused)
• Laboratory rotations vs. direct admission
• Faculty
  • Many faculty are trainers in multiple programs; research is highly interdisciplinary
• Course requirements
• TA requirement
• Admissions requirements
Advice on Applying

• You can (and should!) apply for up to 3 programs with one application fee
  • Application fee is $75, but you may be eligible for an application fee waiver; contact the program you are interested in and/or visit https://grad.wisc.edu/apply/fee-grant to see if you qualify

• Faculty do read your entire application!
  • Admissions committees focus most on research experience, as explained in your personal statement, CV, and letters of recommendation
  • Address anything that might be lacking in your portfolio
    • How did the pandemic affect your ability to get research experience?
    • If you have a lower GPA, address the reasons

• Check program websites for specific program requirements
UW-Madison Biological Science Programs that don’t require the GRE

- Agronomy: MS, PhD
- Applied Biotechnology: MS
- Bacteriology: MS
- Biochemistry: PhD
- Biophysics: PhD
- Biotechnology: MS
- Botany: MS, PhD
- Cancer Biology: PhD
- Cellular and Molecular Biology: PhD
- Cellular and Molecular Pathology: PhD
- Clinical Nutrition: MS
- Communication Sciences and Disorders: MS, PhD
- Comparative Biomedical Sciences: MS, PhD
- Dairy Science: MS, PhD
- Endocrinology - Reproductive Physiology: MS, PhD
- Entomology: MS, PhD
- Forestry: MS, PhD
- Freshwater and Marine Sciences: MS, PhD
- Genetics: PhD
- Kinesiology: MS, PhD
- Medical Physics: MS, PhD
- Microbiology: PhD
- Molecular and Cellular Pharmacology: PhD
- Molecular and Environmental Toxicology: MS, PhD
- Neuroscience: PhD
- Nursing Practice: DNP
- Nutritional Sciences: MS, PhD
- Occupational Therapy: OTD
- Pharmaceutical Sciences: PhD
- Plant Breeding and Plant Genetics: MS, PhD
- Plant Pathology: MS, PhD
- Wildlife Ecology: MS, PhD
- Zoology: MA, MS, PhD
Personal statement tips

• Why should you be selected for an interview?
  • Talk about your motivations and goals

• How have you prepared for entering a PhD program?
  • Describe previous research experiences, including general details of the project and what you learned

• Why are you interested in this PhD program?
  • What faculty are you interested in working with? How will this PhD program help you achieve your goals?
  • **Custom for every program you apply for**
Letters of recommendation tips

• Should be from those who can attest to skills that will help you in a bioscience graduate degree program
  • Research abilities, problem solving skills, scientific creativity, work ethic, leadership, data interpretation, maturity, etc.
• You need to have letters from research mentors
  • Letters from postdoc or graduate student mentors are beneficial in addition to a letter from the PI
• Letters from course instructors are okay if the courses are relevant to the degree you are pursuing
  • i.e. no letters from your French instructor
Contact Us/Questions?

• Visit individual program websites for program contact information

• The Biosciences Initiative for Recruiting and Networking would love to help! birn@mailplus.wisc.edu

• Questions?