

# BIOLOGICAL SCIENCES

Biology is the study of life. Biologists analyze organism functions at the cellular and molecular levels using genetics, biochemistry, and microscopy. They also study interactions between organisms and with the environment by examining behavior, morphology, physiology, and genetics. Students can take a broad curriculum within Biological Sciences or focus on specific areas, such as ecology, evolution and behavior, cell and molecular biology, or microbiology.

Studies in Biological Sciences have applications across many areas including agriculture, medicine, and the environment. Biological Sciences is a popular choice for students preparing for careers in healthcare, agriculture, natural resources and environmental sciences, food management, bioremediation, as well as the biomedical and biotechnology fields. A degree in Biological Sciences also prepares students for professional careers in medicine, dentistry, pharmacy, veterinary science, and education, and graduate studies in the life sciences.

## Field Stations

Pigeon Lake Field Station is a natural laboratory sponsored by the 14 campuses of the University of Wisconsin System, located in the Chequamegon National Forest, 30 miles from Lake Superior in northern Wisconsin's Bayfield County. Pigeon Lake Field Station offers summer programs in a variety of disciplines, including biology. Work completed at Pigeon Lake is credited as resident study by UWM. For additional information, contact the Biological Sciences Department office.

The UWM Field Station is an area of almost 2,500 acres devoted to the study of natural history and biology. Located about 25 miles north of campus on the Cedarburg Bog in the Town of Saukville, the station includes a wide variety of natural areas ranging from old-growth forest to acid bog and several lakes. Many biological sciences courses use the Field Station for instruction and to provide hands-on research opportunities. The Field Station provides internship and independent study opportunities for biology students; it also offers short courses for credit through the department. For additional information, contact the Biological Sciences Department office.

## Programs

- Biological Sciences, BA (<https://catalog.uwm.edu/letters-science/biological-sciences/biological-sciences-ba/>)
- Biological Sciences, BS (<https://catalog.uwm.edu/letters-science/biological-sciences/biological-sciences-bs/>)
- Biological Sciences, Minor (<https://catalog.uwm.edu/letters-science/biological-sciences/biological-sciences-minor/>)
- Biological Sciences, MS (<https://catalog.uwm.edu/letters-science/biological-sciences/biological-sciences-ms/>)
- Biological Sciences, PhD (<https://catalog.uwm.edu/letters-science/biological-sciences/biological-sciences-phd/>)
- Microbiology, BS (<https://catalog.uwm.edu/letters-science/biological-sciences/microbiology-bs/>)
- Neuroscience, BS (Department of Biological Sciences) (<https://catalog.uwm.edu/letters-science/biological-sciences/neuroscience-bs/>)

## Faculty

| Name                       | Rank                    | Degree   | School                             | Graduate Faculty | Emeritus Faculty |
|----------------------------|-------------------------|----------|------------------------------------|------------------|------------------|
| Filipe Alberto             | Associate Professor     | PhD      | University of Algarve, Portugal    | ✓                |                  |
| Sonia Bardy                | Associate Professor     | PhD      | Queen's University, Ontario        | ✓                |                  |
| John Berges                | Professor               | PhD      | University of British Columbia     | ✓                |                  |
| Gerald Bergtrom            | Professor               | PhD      |                                    |                  | ✓                |
| Martin Boraas              | Associate Professor     | PhD      |                                    |                  | ✓                |
| Arthur S. Brooks           | Professor               | PhD      |                                    |                  | ✓                |
| John Buntin                | Professor               | PhD      |                                    |                  | ✓                |
| James R. Coggins           | Associate Professor     | PhD      |                                    |                  | ✓                |
| Mary Lynne Perille Collins | Professor               | PhD      | Rutgers University                 |                  | ✓                |
| Claire de la Cova          | Assistant Professor     | PhD      | Columbia University                | ✓                |                  |
| Madhusudan Dey             | Associate Professor     | PhD      | Jawaharlal Nehru University, India | ✓                |                  |
| Peter Dunn                 | Distinguished Professor | PhD      | University of Alberta              | ✓                |                  |
| Timothy Ehlinger           | Associate Professor     | PhD      | Michigan State University          | ✓                |                  |
| Millicent S. Ficken        | Professor               | PhD      |                                    |                  | ✓                |
| Steven Forst               | Professor               | PhD      | New York University                | ✓                |                  |
| Ralph Grunewald            | Associate Professor     | PhD      |                                    |                  | ✓                |
| Jennifer Gutzman           | Associate Professor     | PhD      | University of Wisconsin-Madison    | ✓                |                  |
| R. David Heathcote         | Professor               | PhD      | University of California, Berkeley |                  | ✓                |
| Gerlinde Hoebel            | Associate Professor     | DNS, PhD | University of Ulm, Germany         | ✓                |                  |
| Sara B. Hoot               | Professor               | PhD      |                                    |                  | ✓                |
| Reinhold Hutz              | Professor               | PhD      | Michigan State University          |                  | ✓                |

|                      |                                    |          |   |   |   |
|----------------------|------------------------------------|----------|---|---|---|
| Jeffrey Karron       | Associate Professor                | PhD      | University of Colorado  | ✓ |   |
| Geoffrey S. Kennedy  | Associate Professor                |          |   |   | ✓ |
| Sergei Kuchin        | Associate Professor                | PhD      | Institute of Genetics, Moscow   | ✓ |   |
| Emily Latch          | Associate Professor                | PhD      | Purdue University   | ✓ |   |
| Jakob R. Loewenberg  | Professor                          | PhD      |   |   | ✓ |
| Mark McBride         | Distinguished Professor            | PhD      | University of Wisconsin-Madison   | ✓ |   |
| Gretchen A. Meyer    | Adjunct Senior Scientist           | PhD      | Cornell University  | ✓ |   |
| James R. Moyer Jr.   | Associate Professor,<br>Psychology | PhD      | Northwestern University   |   |   |
| Julie A. Oliver      | Associate Professor                | PhD      | University of Wisconsin-Madison   | ✓ |   |
| Marianna Orlova      | Instrument Innovator               | PhD      | Institute of Genetics and Selection of<br>Industrial Microorganisms, Moscow |   |   |
| Heather A. Owen      | Senior Scientist                   | PhD      | Miami University  | ✓ |   |
| Andrew Petto         | Senior Lecturer                    | PhD      | University of Massachusetts, Amherst  |   | ✓ |
| Ruth B. Phillips     | Professor                          | PhD      |   |   | ✓ |
| Gyaneshwar Prasad    | Associate Professor                | PhD      | Maharaja Sayajirao University of<br>Baroda, India                           | ✓ |   |
| Christopher C. Quinn | Associate Professor                | PhD      | Yale University   | ✓ |   |
| Valerica Raicu       | Professor, Physics                 | PhD      | University of Bucharest, Romania  |   |   |
| James A. Reinartz    | Adjunct Senior Scientist           | PhD      | Duke University   | ✓ |   |
| Charles C. Remsen    | Professor                          | PhD      |   |   | ✓ |
| Rafael Rodríguez     | Associate Professor                | PhD      | University of Kansas  | ✓ |   |
| Daad A. Saffarini    | Professor                          | PhD      | University of Wisconsin-Milwaukee   | ✓ |   |
| Colin Scanes         | Professor                          | PhD, DSc |   |   | ✓ |
| Marius Schmidt       | Professor                          | PhD      | Technical University of Munich  |   |   |
| Dianne Seale         | Associate Professor                | PhD      |   |   | ✓ |
| Cynthia V. Sommer    | Associate Professor                | PhD      |   |   | ✓ |
| Douglas Steeber      | Associate Professor, Chair         | PhD      | University of Wisconsin-Madison   | ✓ |   |
| J. Rudi Strickler    | Shaw Distinguished<br>Professor    | PhD      | Swiss Federal Institute of Technology                                       | ✓ |   |
| Ava Udvadia          | Associate Professor                | PhD      | Duke University   | ✓ |   |
| Donna Van Wynsberghe | Professor                          | PhD      |   |   | ✓ |
| Eldon D. Warner      | Professor                          | PhD      |   |   | ✓ |
| Roslyn P. Warren     | Professor                          | PhD      |   |   | ✓ |
| Peter J. Wejksnora   | Associate Professor                | PhD      | Brandeis University   |   | ✓ |
| Linda A. Whittingham | Professor                          | PhD      | Queens University, Ontario  |   | ✓ |
| Charles F. Wimpee    | Associate Professor                | PhD      | University of California, Los Angeles                                       | ✓ | ✓ |
| Jane Witten          | Associate Professor                | PhD      | University of Chicago   |   | ✓ |
| Ching-Hong Yang      | Professor                          | PhD      | University of California, Riverside   | ✓ |   |
| Erica Young          | Associate Professor                | PhD      | Monash University (Melbourne,<br>Australia)                                 | ✓ |   |
| Dazhong (Dave) Zhao  | Professor                          | PhD      | The Chinese Academy of Sciences,<br>Beijing, China                          | ✓ |   |