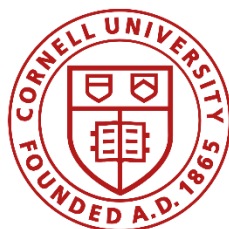


**Graduate Student Handbook**  
**Field of Microbiology**



Department of Microbiology  
Wing Hall  
Ithaca, NY 14853



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## Contacts

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## Foreword

The Microbiology graduate handbook is prepared to assist both new and continuing graduate students, not only with their studies, but also with policies and procedures of the Department of Microbiology as well as general policies of the Graduate School of Cornell University.

This handbook should be used as a guide to specific activities within the Field of Microbiology and the Department of Microbiology. Additional valuable information can be found in the *Guide to Graduate Study* which was sent to all new graduate students, on campus at the Graduate School in Caldwell Hall, and on-line at: <http://gradschool.cornell.edu/>.

The Cornell University Course of Study catalog is also a useful tool and is available through the Graduate School or on-line at: <http://courses.cornell.edu/>.

Other publications and forms may be obtained from the Microbiology student services office located in 107 Wing Hall or at: <http://gradschool.cornell.edu/>.

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## GENERAL GRADUATE INFORMATION

### University Policies

Detailed information on Graduate School policies is available on-line or in person in Caldwell Hall.

### Registration

A graduate student in residence in Ithaca must be registered and pay tuition for that part of the term while on campus, even if engage in thesis writing and taking no courses. Further details available at: <http://gradschool.cornell.edu/academics/requirements/registration>

During the summer you should receive a packet from the Cornell University Graduate School containing registration information. Filling out these forms will expedite the registration process when you arrive at Cornell. Official new graduate student registration takes place a week before the start of classes.

During the registration process you will pick up a New Student Information Packet, Cornell ID card, and receive a Cornell Network ID (NetID). This process will only register you as a Cornell student, but does NOT register you for courses. Registration for continuing graduate students occurs automatically when the student registers for classes in the fall and spring semesters. In order to register they cannot have a “hold” on their records.

### Student Computing and Networking

Cornell Information technologies (CIT) is located in the Communications and Computing Center (CCC). They offer a wide variety of computer hardware, operating systems, and general and specialized application programs. To make these resources readily accessible, CIT operates public computer terminal facilities and provides some free consulting services.

Cornell Information Technologies CIT: <https://it.cornell.edu/>

Software Licensing: <https://it.cornell.edu/software-licensing>

CALS does provide IT services to Graduate students. To place a help ticket:  
Help.CALS.Cornell.edu

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## **Cornell Health**

Cornell Health is located at 110 Ho Plaza and serves the Cornell community with medical care, counseling, and pharmacy services.

Hours of operation:

### **Academic Year**

|                                   |                  |
|-----------------------------------|------------------|
| Monday, Tuesday, Thursday, Friday | 8:30 am- 7:00 pm |
| Wednesday                         | 10:00 am-7:00 pm |
| Saturday                          | 10:00 am-4:00 pm |
| Sunday                            | Closed           |

### **Winter Session, Spring Break, Summer Session**

|                                   |                  |
|-----------------------------------|------------------|
| Monday, Tuesday, Thursday, Friday | 8:30 am- 4:30 pm |
| Wednesday                         | 10:00 am-4:00 pm |
| Saturday                          | Closed           |
| Sunday                            | Closed           |

**\*Closed on University holidays.**

To schedule same-day or routine appointments or consult with a health-care provide call 255-5155 during regular hours.

If there is an emergency call 911 or the Cornell Police at 255-1111.

A complete list of services can be found on-line at: <https://health.cornell.edu/>

## **Student Health Insurance Plan (SHIP)**

Cornell enrolls all graduate and professional students in SHIP. This plan has been developed especially for Cornell students and is reviewed annual by a committee of Cornell students, faculty, and staff members. All graduate and professional students will be enrolled automatically in Cornell's Student Health Insurance Plan. The premium is covered as part of your graduate student support package.

You can enroll dependents on the SHIP for an additional fee. Additional information can found at: <https://studenthealthbenefits.cornell.edu/health-plans/shp>

*They are NOT enrolled automatically.*

It is important to print your insurance card by visiting the Cornell University Office of Student Health Benefits website at:

<https://studenthealthbenefits.cornell.edu/health-plans/shp>

Student Insurance Office

Email: [sicu@cornell.edu](mailto:sicu@cornell.edu)

Phone: 607-255-6363

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## **GRADUATE DEGREE INFORMATION**

**Cornell Graduate School:** <https://gradschool.cornell.edu/>

### **Graduate Fellowships and Grants**

Financial support during first year is provided either through a Teaching Assistantship or a fellowship. After your required rotations and identifying which lab you will perform research and complete your PhD thesis in, financial support is provided by Graduate Research Assistantship or Teaching Assistantship. Students are encouraged to apply for fellowships and grants. The benefit of having a fellowship or grant is: 1) It will help your PI by freeing up resources that can be used for additional students, equipment, etc. and 2) benefits when applying for post-doc or job.

<https://gradschool.cornell.edu/costs-funding/graduate-school-supplement-external-fellowships>

### **Graduate Degree Programs**

The Graduate Field in Microbiology awards a Doctor of Philosophy (PhD). Detailed academic requirements for the degree can be found in the Guide to Graduate Study book which is published by the Graduate School.

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## FIELD OF MICROBIOLOGY

### Introduction

Overall administrative responsibility for the Microbiology Graduate Field rest with the Graduate Coordinating Committee chaired by Professor Joe Peters.

Questions for this committee should be directed to Professor Peters, Director of Graduate Studies (DGS) for the Field. Questions about the graduate program should be directed to either Professor Peters, or to Tina Daddona, Graduate Field Assistant (GFA), 107 Wing Hall.

Please become familiar with the information available to you concerning the timeline for graduation. *The Graduate School places the responsibility on you to know and meet all the requirements.*

### Selecting Chairperson and Committees

One of the most important decisions will be the selection of the Chairperson for your Special Committee or the person to supervise your project. For purpose of administration, the DGS automatically becomes your Committee Chairperson until after your three required lab rotations. After your rotations you will select a Chairperson and two additional committee members. The DGS will also select an additional two members from the Field of Microbiology, leaving the total committee to five members.

The special committee also imposes requirements upon the student for examinations and graduation, and should meet at least one a year. New graduate students are required to return forms to the Graduate School (Caldwell Hall) specifying the composition of their special committee. After the rotations are complete and selected your permeate lab; you need to fill out “A Special Committee Selection and Change” form.

The forms can be found on-line at: <https://gradschool.cornell.edu/forms>.

### Laboratory Rotations

Each first year graduate student is required to complete three laboratory rotations starting in the fall semester and ending in the spring semester. The objective of the rotations is to find a research topic, lab, and advisor that best fits the student.

The rotations are equal length (about three months) and the number of hours the student works in the lab is decided by the principal investigator. If during the rotations the student has decided which lab works best for them; the remaining rotations will continue until the end of the spring semester.

For more information or advise on laboratory rotations please contact Professor Joe Peters, DGS.



## First Year Course Requirements

Although students are encouraged to take any classes that interest them, the following courses are required of Microbiology students. Students may take courses in their potential minor fields to help expedite the process of completing the required curriculum.

### *BioMI 6900 Modules*

There are six total modules, three in the fall and three in the spring, graduate students are required to take all modules within the first five semesters of their program. 1 credit per course.

Fall 2017

| <u>Course</u>                               | <u>Schedule</u>   | <u>Instructor</u> |
|---|-------------------|-------------------|
| BioMI 6901 Microbial Structure & Function   | TR 10:10-11:25 am | Doerr             |
| BioMI 6902 Environmental Microbiology       | TR 10:10-11:25 am | TBD               |
| BioMI 6903 Microbial Physiology & Diversity | TR 10:10-11:25 am | Zinder            |

Spring 2018

| <u>Course</u>                          | <u>Schedule</u>   | <u>Instructor</u> |
|--|-------------------|-------------------|
| BioMI 6904 Microbial Genetics          | TR 10:10-11:25 am | Peters            |
| BioMI 6905 Microbial Pathogenesis      | TR 10:10-11:25 am | Winans            |
| BioMI 6906 Viral Diversity and Ecology | TR 10:10-11:25 am | Casey             |

### *BioMI 7970 Scientific Communication Skills*

This course is designed to hone your presentations and public speaking skills, as the ability to communicate effectively is essential for success as a scientist. Each first year student is required to take two semesters of BioMI 7970 (a third semester is optional). Each semester you will give presentations, based on primary literature on an assigned topic, or on the progress of your rotation project. Feedback for improving the presentation and peer evaluations will be emphasized.

1 credit.

Fall 2017

| <u>Schedule</u> | <u>Instructor</u> |
|-----------------|-------------------|
| F 2:30-3:20 pm  | Helmann/Winans    |

Spring 2018

| <u>Schedule</u> | <u>Instructor</u> |
|-----------------|-------------------|
| F 2:30-3:20 pm  | Madsen            |

***BioMI 7980 Graduate Research Seminar in Microbiology***

This course provides an opportunity for students in their second-year and beyond to give a seminar about their research progress. All students are required to enroll and attend each week. 1 credit. \*AS NEEDED\*

Fall 2017 and Spring 2018

|                 |                   |
|-----------------|-------------------|
| <u>Schedule</u> | <u>Instructor</u> |
| T 4:00-5:00 pm  | Peters            |

***BioMI 7990 Microbiology Seminar Series***

Microbiology seminar series featuring faculty from Cornell and other Universities. All students are required to enroll. 0 credit.

Fall 2017 and Spring 2018

|                 |                   |
|-----------------|-------------------|
| <u>Schedule</u> | <u>Instructor</u> |
| R 4:00-5:00 pm  | Peters            |

***BioMG 6330 Biosynthesis of Macromolecules***

This course offers a comprehensive review of synthesis of DNA, RNA, and proteins, and regulation of gene expression.

Fall 2017

|                 |                   |
|-----------------|-------------------|
| <u>Schedule</u> | <u>Instructor</u> |
| TR 9:05-9:55 am | Roberts/Wilson    |

**Teaching Opportunities**

The field of Microbiology requires that students perform at least one semester of teaching as a part of your graduate training.

TA training includes a weekly discussion of topics in pedagogy, such as backwards design, developing learning objectives, different assessment methods, Bloom's taxonomy and writing good questions, using grading rubrics, active learning, and facilitating a group discussion.

For more information on teaching in Microbiology:

<https://micro.cornell.edu/academics/graduate/teaching>

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### **Other Teaching Resources**

The Cornell Graduate School offers workshops and on-line resources to help enhance teaching and presentation skills.

<http://gradschool.cornell.edu/pathways-success>

Center for Teaching Excellence (CTE) supports graduate students with improving their teaching skills, offers weekly programs and workshops for students who are either TAing or teaching their own course.

<https://teaching.cornell.edu/>

Cornell Science Inquiry Partnerships (CSIP) is funded by grants from NSF and Cornell, graduate fellows integrate their personal scientific expertise and inquiry-based curricula into pre-college science and engineering curricula in rural and urban classrooms.

<http://csip.cornell.edu/>

Graduate Student School Outreach Program (GRASSHOPR) pairs Cornell graduate students with teachers in Tompkins County and Geneva to teach 3-5 mini courses on topics related to the graduate student's field or interest.

<https://sites.google.com/site/grasshopratcornell/>

### **A Examination**

Graduate students in the Field of Microbiology are required to complete their qualifying exam (A Exam) by the end of their sixth semester. The exam is comprised of two components 1) written and 2) oral.

The written component is a research proposal, about 15 pages in length, this should focus on the student's own research goals or related topic. The topic is chosen with consult from student's thesis advisor. The proposal should contain background information of the proposed study, small number of specific hypotheses, and should describe the experiments that will be done to test the hypotheses. Students should plan to spend about one month writing the proposal. The proposal needs to be distributed to the committee at least one week before the oral exam.

The oral exam is attended by the student's committee members and they will ask specific questions that test the knowledge of the experimental system that was discussed in your written portion. During the oral exam the committee will also ask question regarding the student's general knowledge of Microbiology.

### **B Examination**

The B Exam is an oral defense of your thesis or dissertation. The exam can be taken after completing all degree requirements, but not earlier than one month before completing the minimum Registration unit requirements. At least two registration units must be earned between the passing of the A exam and the scheduling of the B exam.

The form for scheduling the A or B exam and for providing results to the graduate school can be found at: <https://gradschool.cornell.edu/forms>

## **GRADUATE STUDENT INVOLVEMENT**

### **Journal Club**

The Department of Microbiology, a graduate student volunteer and Professor Esther Angert organize the Journal Club. One graduate student is paired with a faculty, post doc or senior graduate student to present background information and the results of a current research article. Participating in the Journal Club is an excellent way to keep up on current literature, trends in microbiology, provides the opportunity to critically evaluate the literature, interact with faculty members, and practice presenting scientific information to an audience of peers and professors.

All Microbiology graduate students are required to enroll in this course, BioMI 7910, after their first year during the semester preceding their A exam.

### **Field of Microbiology Students (FoMS)**

FoMS is a voluntary student organization that facilitates discussion on various topics relevant to Microbiology graduate students. Both academic and non-academic matters are covered at FoMS meetings such as: nomination of departmental and student-invited speakers, organization of activity schedules for recruitment weekend, organization of social/recreational events, dissemination of information for all Cornell graduate students (e.g. changes in health insurance, dissertation guidelines, etc.). FoMS is a great way to interact with Microbiology graduate students and graduate students across campus.

For more information on FoMS: <https://micro.cornell.edu/academics/graduate/foms>

### **Graduate and Professional Student Assembly (GPSA)**

GPSA is part of the Cornell's system of governance charged with representing the interest of graduate and professional students. Every graduate field and professional school selects a representative to attend the assembly; from the field representatives, voting members and executive officers are elected. Graduate and professional students pay a student activity fee, which the funds collected GPSA sponsors social events, such as the End-of-Year BBQ.

For more information on GPSA: <http://assembly.cornell.edu/GPSA/Home>

### **Seminars**

There are many opportunities to hear speakers from fields other than Microbiology, below is a list of possibilities.

#### *Microbiology Seminar-Thursday, 4:30 pm*

Required for all students in the field of Microbiology. Topics could include various aspects of microbiology, such as environmental microbiology and pathogenic microbiology. In addition to Cornell faculty, speakers from other Universities are invited to speak.

<https://micro.cornell.edu/news/events>

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*Biogeochemistry, Environmental Science and Sustainability-Friday, 4:00 pm*

This seminar series focuses on environmental microbiology such as carbon and nitrogen cycling.

[http://www.eeb.cornell.edu/igert/?page\\_id=60](http://www.eeb.cornell.edu/igert/?page_id=60)

*Infection & Immunity-Friday, 12:15 pm*

Required of students in the umbrella “Pathobiology” program. Invited speakers present seminars on the subjects of infection, pathogenesis, and immunology.

*Molecular Biology and Genetics-Friday, 4:00 pm*

<https://mbg.cornell.edu/news/events>

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## FACULTY IN THE FIELD OF MICROBIOLOGY

### **Beth A. Ahner**

*Department of Biological and Environmental Engineering*

B.S., Ph.D. Massachusetts Institute of Technology

Research Interest: biological indicators of environmental stresses, the toxicity and nutrition of trace metals, intercellular detoxification mechanisms in algae.

220 Riley-Robb Hall

[baa7@cornell.edu](mailto:baa7@cornell.edu)

### **Esther R. Angert**

*Department of Microbiology*

B.S. Indiana University of Pennsylvania, Ph.D. Indiana University

Research Interest: microbial ecology, evolution of novel bacterial developmental system and microbial phylogeny

157B Wing Hall

[era23@cornell.edu](mailto:era23@cornell.edu)

### **Ludmilla Aristilde**

*Department of Biological and Environmental Engineering*

B.S. Cornell, M.S., Ph.D. University of California-Berkeley

Research Interest: molecular environmental chemodynamics of organic molecules.

214 Riley Robb Hall

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### **Carl A. Batt**

*Department of Food Science*

Ph.D. Rutgers University

Research Interest: genomics, microbiology, and molecular biology

312 Stocking Hall

[cab10@cornell.edu](mailto:cab10@cornell.edu)

### **Adam Bogdanove**

*Department of Plant Pathology and Plant-Microbe Biology*

B.S., Yale University, Ph.D. Cornell University

Research Interest: computational biology, microbiology, plant biology, and plant pathology and plant-microbe biology

360 Plant Science

[ajb7@cornell.edu](mailto:ajb7@cornell.edu)

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**Kathryn J. Boor**

*Department of Food Science and Dean of College of Agriculture and Life Sciences*

B.S. Cornell University, M.S. University of Wisconsin, Ph.D. University of California, Davis

Research Interest: Food microbiology, food safety, food virulence determinants in *Escherichia coli* 0157:H7 and *Listeria monocytogenes*

413 Stocking Hall

[kjb@cornell.edu](mailto:kjb@cornell.edu)

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*Department of Biomedical Engineering*

A.B. Harvard University, Ph.D. Massachusetts Institute of Technology

Research Interest: infections disease, genetics, viral pathogens

289 Kimble Hall

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*Department of Entomology*

Ph.D. Universite d'Auvergne Clermont

Research Interest: Bacteriology, biomedical sciences, cancer biology, cell biology, computational biology, disease pathogenesis, entomology, genetics, genomics, immunology, molecular biology.

5124 Comstock Hall

[nicolas.buchon@cornell.edu](mailto:nicolas.buchon@cornell.edu)

**Dwight Bowman**

*Department of Microbiology and Immunology*

Ph.D. Tulane University

Research Interest: Soil transmitted parasites, parasites of wildlife, visceral larva migrans, host response to soil transmitted pathogens, detection of soil transmitted parasites.

C4 119 Veterinary Medical Center

[ddb3@cornell.edu](mailto:ddb3@cornell.edu)

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B.S. University of Rochester, Ph.D. Michigan State University

Research Interest: Ecology, genomics, microbiology, molecular biology

705 Bradfield Hall

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Research Interest: Viral Oncogenesis, viral hemorrhagic septicemia

C4 137 Veterinary Medical Center

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Research Interest: microbiota, physiology, immune system

C4 185 Veterinary Medical Center

[pamela.change@cornell.edu](mailto:pamela.change@cornell.edu)

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*Department of Molecular Medicine*

B.S./M.S. Brandeis University, Ph.D. Scripps Research Institute

Research Interest: Biochemistry & cell Biology, Biophysics, Microbiology, Molecular Biology, Pharmacology & Toxicology, Structural Biology

C3 165 Veterinary Medical Center

[jsc376@cornell.edu](mailto:jsc376@cornell.edu)

**Ruth Collins**

*Department of Molecular Medicine*

B.Sc. University of Oxford, Ph.D. Imperial College London/Cancer Research

Research Interest: Biophysics, cancer biology, cell biology, disease pathogenesis, genetics, genomics, molecular biology, neurobiology

C4 109 Veterinary Medical Center

[rnc8@cornell.edu](mailto:rnc8@cornell.edu)

**Alan Collmer**

*Department of Plant Pathology and Plant-Microbe Biology*

B.A. Antioch College, Ph.D. Cornell University

Research Interest: Bacterial Genomics, Bacterial Protein Secretion, Microbial Pathogenesis, Pathogenomics, Plant Disease, Plant-Microbe Biology, Plant-Microbe Interactions

308 Plant Science

[arc2@cornell.edu](mailto:arc2@cornell.edu)

**Matthew DeLisa**

*Department of Chemical and Biomolecular Engineering*

B.S. University of Connecticut, Ph.D. University of Maryland

Research Interest: molecular mechanisms, protein biogenesis,



254 Olin Hall  
[md255@cornell.edu](mailto:md255@cornell.edu)

**Tobias Doerr**

*Department of Microbiology*

M.Sc. University of Hannover, Ph.D. Northeastern University

Research Interest: Immunology and Infectious Diseases, Microbiology

361 Weill Hall

[td348@cornell.edu](mailto:td348@cornell.edu)

**Angela Douglas**

*Department of Entomology*

B.A. University of Oxford, Ph.D. University of Aberdeen

Research Interest: Animal Symbiosis with Microorganisms, Beneficial Microbes, and Cooperation in nature, Genetic and Physiological Basis of Microbiota-Dependent Traits of Animals, Insect Biology, Intracellular Symbiosis in Insects

5124 Comstock Hall

[aes326@cornell.edu](mailto:aes326@cornell.edu)

**Edward Dubovi**

*Department of Population Medicine and Diagnostic Sciences*

B.A. University of Pennsylvania, M.A. Purdue University, Ph.D. University of Pittsburgh School of Medicine

Research Interest: animal virology, pathogenic microbiology

A3 122 Veterinary Diagnostic Lab

[ejd5@cornell.edu](mailto:ejd5@cornell.edu)

**William Ghiorse**

*Department of Microbiology, Emeritus*

B.A. University of Vermont, M.S. Rensselaer Polytechnic Institute, Ph.D. Rensselaer Polytechnic Institute

Research Interest: Environmental microbiology, microbial ecology, physiology, and biogeochemistry

B75C Wing Hall

[wcg1@cornell.edu](mailto:wcg1@cornell.edu)

**Anthony Hay**

*Department of Microbiology*

B.S. Brigham Young University, Ph.D. University of California

Research Interest: Environmental microbiology, metabolism of man-made pollutants with specific applications to environmental toxicology

B53A Wing Hall

[agh5@cornell.edu](mailto:agh5@cornell.edu)

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**John Helman**

*Department of Microbiology, Department Chairperson*

B.A., University of California, Santa Cruz, Ph.D. University of California

Research Interest: RNA polymerase, transcriptional control in *Bacillus Subtilis*, Regulation of Gene Expression by metal ions

372 Wing Hall

[jdh9@cornell.edu](mailto:jdh9@cornell.edu)

**Tory Hendry**

*Department of Microbiology*

B.A. Williams College, Ph.D. University of Michigan

Research Interest: Host Microbe interactions

260A Wing Hall

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**Ian Hewson**

*Department of Microbiology*

B.S. University of Queensland, Ph.D. University of Southern California

Research Interest: Aquatic Biogeochemistry, Aquatic Microbiology, Marine, Oceanography, Virology

403 Wing Hall

[hewson@cornell.edu](mailto:hewson@cornell.edu)

**Ailong Ke**

*Department of Molecular Biology and Genetics*

B.S. University of Science and Technology of China, Ph.D. Johns Hopkins University School of Medicine

Research Interest: Crispr, Enzymology, Riboswitch, RNA Biology, RNA Structure and Function, Structural Biology

215 Biotchnology Building

[ak425@cornell.edu](mailto:ak425@cornell.edu)

**Hening Lin**

*Department of Chemistry and Chemical Biology*

B.S. Tsinghua University, Ph.D. Columbia University

Research Interest: Chemistry, biology, and application of enzymes that have important physiological functions with combination of synthetic and biochemical methods

287 Physical Sciences Building

[hl379@cornell.edu](mailto:hl379@cornell.edu)

---

**Leonard Lion**

*Department of Civil and Environmental Engineering*

Ph.D. Stanford University

Research Interest: Environmental engineering, groundwater contamination, aquatic chemistry

263 Hollister Hall

[lw13@cornell.edu](mailto:lw13@cornell.edu)

**Yuxin Mao**

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B.S. Nankai University, Ph.D. Yale University School of Medicine

Research Interest: Cell signaling, Proliferation, Cytoskeleton Organization, and Membrane Trafficking

357 Weill Hall

[yum253@cornell.edu](mailto:yum253@cornell.edu)

**Helene Marquis**

*Department of Microbiology and Immunology*

Ph.D. Texas A&M University, D.V.M. University of Montreal

Research Interest: Pathogenesis of *Listeria monocytogenes*, Mechanisms of regulation of specific virulence factors, signaling

C5169 Veterinary Medical Center

[hm72@cornell.edu](mailto:hm72@cornell.edu)

**Teresa Pawlowska**

*Department of Plant Pathology and Plant-Microbe Biology*

M.S. Jagiellonian University, Ph.D. University of Minnesota

Research Interest: Fungal biology, Plant-Microbe interactions, evolution

408 Bradfield Hall

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**Alice Pell**

*Department of Animal Science, Emeritus*

B.A. Harvard University, Ed.M. Harvard Graduate School of Education, M.S., Ph.D. University of Vermont

Research Interest: Gastrointestinal/ruminal Microbiology, Tolerance of Secondary plant compounds by ruminal bacteria

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**Joseph Peters**

*Department of Microbiology*

B.S. State University of New York of Stony Brook, Ph.D. University of Maryland at College Park

Research Interest: Chromosome integrity (Transposition, DNA Replication, Recombination and Repair), Functional Genomics

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**Ruth Richardson**

*School of Civil and Environmental Engineering*

B.S., M.S. Manhattan College, Ph.D. University of California, Berkeley

Research Interest: Bioenvironmental engineering, application of molecular techniques to assist biodegradation processes, microbial community communication and cooperation

271 Hollister Hall

[rer26@cornell.edu](mailto:rer26@cornell.edu)

**David Russell**

*Department of Microbiology and Immunology*

Ph.D. Imperial College, London University

Research Interest: Interaction between intracellular pathogens and their host cell, biology of microbe/host interplay

C5171 Veterinary Medical Center

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**James Shapleigh**

*Department of Microbiology*

B.S. Clemson University, Ph.D. University of Georgia

Research Interest: Electron transport proteins of bacteria, in particular those proteins involved in the anaerobic respiration of nitrogen oxides

257A Wing Hall

[jps2@cornell.edu](mailto:jps2@cornell.edu)

**Michael Shuler**

*Department of Biomedical Engineering, Chemical and Biomolecular Engineering*

B.S. University of Notre Dame, Ph.D. University of Minnesota

Research Interest: Bioengineering, minimal cell heterologous protein expression systems, cell culture analogs for pharmacokinetic models, vitro toxicology, biodegradation and bioremediation, nanobiotechnology

350 Duffield Hall

[mls50@cornell.edu](mailto:mls50@cornell.edu)

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**Kenneth Simpson**

*Department of Clinical Sciences*

BVM&S, University of Edinburgh, Ph.D. University Leicester

Research Interest: Internal Medicine, Gastroenterology, helicobacter infection

C2 011 Veterinary Medical Center Box 33

[kws5@cornell.edu](mailto:kws5@cornell.edu)

**Jeongmin Song**

*Department of Microbiology and Immunology*

Ph.D. Duke University

Research Interest: Pathogenic mechanisms of Salmonella Typhi

C5183 Veterinary Medical Center

[js2957@cornell.edu](mailto:js2957@cornell.edu)

**Gillian Turgeon**

*Department of Plant Pathology and Plant-Microbe Biology*

A.B./B.S., M.S. Carleton University, Ph.D. University of Dayton & C.F. Kettering Research Institute

Research Interest: Fungal biology, fungal plant interactions

334 Plant Science Building

[bgt1@cornell.edu](mailto:bgt1@cornell.edu)

**Brian VanderVen**

*Department of Microbiology and Immunology*

Ph.D. Colorado State University

Research Interest: Survival and maintenance of M. tuberculosis in mammals

C5-169 Veterinary Medical Center

[bcv8@cornell.edu](mailto:bcv8@cornell.edu)

**Gary Whittaker Ph.D. University of Leeds, UK**

*Department of Microbiology and Immunology*

Ph.D. University of Leeds, UK

Research Interest: Influenza viruses, virus-cell interaction, nuclear transport

C5141 Veterinary Medical Center

[grw7@cornell.edu](mailto:grw7@cornell.edu)

**Martin Wiedmann**

*Department of Food Science*

DVM University of Munich, Ph.D. Cornell University

Research Interest: Molecular bacterial pathogenesis, evolution of bacterial pathogens, molecular epidemiology, molecular detection and typing methods, listeria monocytogenes

347 Stocking Hall

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[mw16@cornell.edu](mailto:mw16@cornell.edu)

**Stephen Winans**

*Department of Microbiology*

B.A. University of California, Berkeley, Ph.D. Massachusetts Institute of Technology

Research Interest: Microbiology, Plant Biology, *Agrobacterium tumefaciens* as a model to study how cells detect other cells

360A Wing Hall

[scw2@cornell.edu](mailto:scw2@cornell.edu)

**Joseph Yavitt**

*Department of Natural Resources*

B.A. University of California, Santa Barbara, M.S. University of Arizona, Ph.D. University of Wyoming

Research Interest: Ecology, microbial ecology, biogeochemistry, wetlands

16 Fernow Hall

[jby1@cornell.edu](mailto:jby1@cornell.edu)

**Stephen Zinder**

*Department of Microbiology*

B.A. Keyon College, M.S. Colorado State University, Ph.D. University of Wisconsin

Research Interest: Anaerobic microorganisms, physiology and molecular biology of microbial reductive dechlorination of toxic chemicals.

272 Wing Hall

[shz1@cornell.edu](mailto:shz1@cornell.edu)

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## **MISCELLANEOUS DEPARTMENT INFORMATION**

### **CU INFO**

CUinfo is a website maintained by Cornell University that provides faculty, staff, and students with current campus alerts, Ithaca weather, and other happenings around Cornell.

<http://cuinfo.cornell.edu/>

### **STUDENT CENTER**

Student center provides students to check registration, add/drop classes, make changes to special committees, view financial aid information, and details on your student record.

[www.studentcenter.cornell.edu](http://www.studentcenter.cornell.edu)

### **MAIL AND MAILBOXES**

The Department of Microbiology mail room is located in 151 Wing Hall and is open from 8:00 am to 4:30 pm. Mailboxes are provided for all graduate students, faculty, and staff. Please check your mailbox regularly.

Campus mail is a free service and is to be used for University business only. Envelopes and mailing supplies are available in 107 Wing Hall.

Packages can be sent via UPS or Fed Ex with an account number. Please contact any staff member to help with the process.

### **BULLETIN BOARD**

The department provides bulletin boards to provide important information to the community:

- Seminar Announcements-outside 102 Wing Hall
- Job Postings-across 115 Wing Hall
- List of faculty, staff, and graduate students-outside 106 Wing Hall

### **PURCHASES**

If the project director expects you make frequent purchase, they can request that you gain access to the Cornell's purchasing system, eShop. Permission, account number, and detailed business purpose must be obtained from the project director *before* making the purchase. To gain the access needed the project director needs to contact Lillian Henry, Department Manager, 103 Wing Hall.

### **FLEET GARAGE VEHICLES**

A student with a valid driver's license and registered with the Fleet Office may use a vehicle for business purposes only, typically there are fees associated with the use of a vehicle. The

Department Manager will need to authorize the amount, once approved, they are charged to a department account.

<https://fcs.cornell.edu/content/lease-university-fleet-vehicle>

#### **PARKING ON CAMPUS**

All vehicles on campus must be registered with the University Transportation Services at 116 Maple Avenue. Parking is limited and permits are disbursed on a tier system. Their hours of operation are 7:30 am-4:00 pm, Monday-Friday.

<https://fcs.cornell.edu/content/parking-students>

#### **KEYS AND BUILDING ACCESS**

Wing Hall is open 7:30 am-5:00 pm daily. If you need access to the building please see Patti Brenchley, 102 Wing Hall.

If your PI would like you to have a key to an office or lab they must notify Patti Brenchley in 102 Wing Hall.

#### **LAB INFORMATION-TRAINING**

Students who will be working a lab are required to take the basic lab safety course.

The department also encourages students to take the Dry Ice and Hazardous Materials Shipping trainings.

For further information and available trainings please see the Environmental Health & Safety website: <https://sp.ehs.cornell.edu/lab-research-safety/Pages/default.aspx>