

# PUBLIC HEALTH AND PLANETARY HEALTH (GRADUATE FIELD)

Program Website (<https://publichealth.cornell.edu/>)

## Field Description

The field of Public Health & Planetary Health unites and facilitates the university's basic and applied research at the intersection of human population health and ecosystem health. The field currently offers Master of Public Health (MPH), accelerated MPH, and a complementary MPA/MPH program.

## Master of Public Health

Cornell's MPH curriculum is designed to help students build and develop skills in areas that are critical for public health. Different from large undergraduate programs, this professional master's program is designed to create a 'community of practice' where we all push each other to grow and improve, in both traditional public health knowledge areas, and in professional competence (e.g., "soft skills", "leadership", "emotional intelligence", etc.). We are a small cohort of students and core faculty, drawing on expertise from across campus and across the world. At this time, we offer two concentration areas, with interdisciplinary instruction from both researchers and practitioners:

### Emergency Preparedness & Management

Students in this concentration will learn the drivers of emergencies and environmental disasters, and the organizational theories, policies, and practices that influence prevention, preparedness, and response. Students will assess and analyze disaster-related risks to community health, spatially map physical and socioeconomic vulnerabilities, anticipate how those risks and vulnerabilities will change over time, and use this understanding to inform response.

### Environment, Climate & Health

Students in the Environment, Climate & Health concentration will become leaders of change. Critically, they will not only learn the downstream, harmful impacts of current behaviors, but will learn how to design, implement, and test interventions at both the local and global levels that promote inter-related human health and environmental health. Students will expand their toolkits by considering externalities and risks, elevating indigenous voices and lived experiences, working collaboratively, and making data-based decisions that recognize tradeoffs and future consequences.

### Food Systems for Health

Students learn to take a systems approach to assess and coordinate policies or interventions that ensure safe and sustainable land use, food production, food storage, food processing, food delivery, and consumption. This includes training in toxicology, food safety, food and water security, and/or nutrition. Students learn how to engage local and global communities to assess systems or needs, develop interventions from a One Health approach, and lead monitoring and evaluation processes to ensure public health needs are being met.

### Infectious Disease Epidemiology

Graduates are prepared to manage, prevent, identify, and respond to infectious disease threats, covering ongoing and emerging viral, bacterial, fungal or parasitic disease concerns in both humans and animals.

Students learn how to measure and track disease spread, map and disseminate appropriate public health communications, and to lead a coordinated response to address the public health need. This includes training in epidemiological techniques specifically related to infectious diseases and outbreak investigation, as well as training in vector borne diseases.

## Data and Statistics

- Professional Master's Program Statistics (<https://gradschool.cornell.edu/about/program-metrics-assessments-and-outcomes/professional-masters-program-statistics/?SelectGradField=A6>)

## Field Manual

- Manual (<https://publichealth.cornell.edu/resources/>)

## Subject and Degrees

### Public Health

- Public Health (MPH) (<https://catalog.cornell.edu/programs/public-health-mp/>)

## Concentrations by Subject

### Public Health

- Emergency preparedness and management
- Environment, climate and health
- Food systems and health
- Infectious disease epidemiology

## Faculty

Christopher Brendan Barrett (<http://dyson.cornell.edu/people/profiles/barrett.php>)

- Campus:** Ithaca
- Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Ana Isabel Ramos Bento (<http://www.vet.cornell.edu/ana-bento-phd/>)

- Campus:** Ithaca
- Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- Research Interests:** pathogen evolution and phylodynamics, seasonal disease transmission, anthropogenic effects (e.g. vaccines), adaptive behavior, the role of climate

Jennifer Bloodgood (<http://www.vet.cornell.edu/jennifer-bloodgood-dvm-phd-ms/>)

- Campus:** Ithaca - (Divisional Member)
- Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- Research Interests:** pathology, infectious disease, and the interface of human and wildlife health

Casey Lu Cazer (<http://www.vet.cornell.edu/research/faculty/casey-cazer-dvm-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology
- **Research Interests:** epidemiology of zoonotic diseases; evidence-based medicine; One-Health

Kevin J. Cummings (<http://www2.vet.cornell.edu/research/faculty/kevin-cummings-dvm-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Julia L. Finkelstein (<http://www.human.cornell.edu/people/jlf288/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Kathryn Fiorella (<http://www.kathrynfiorella.com/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Maria Fitzpatrick (<http://publicpolicy.cornell.edu/people/maria-fitzpatrick/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Elizabeth Lorraine Fox (<http://www.vet.cornell.edu/research/faculty/elizabeth-l-fox-phd-rdn/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Lorraine Ayana Francis (<http://www.vet.cornell.edu/research/faculty/lorraine-francis/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Amandine Gamble (<http://amandinegamble.github.io/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology
- **Research Interests:** Host contributions to pathogen dynamics across biological scales, emerging bat-borne viruses and their hosts, and bacterial pathogens of endangered seabirds, translate scientific outputs into sustainable, targeted solutions against pathogen threats, with the focus on ecological interventions

H. Oliver Gao (<http://www.engineering.cornell.edu/faculty-directory/h-oliver-gao/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Rodman Guy Getchell (<http://www.vet.cornell.edu/research/faculty/rodman-getchell-phd/>)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Laura Goodman (<http://www2.vet.cornell.edu/research/faculty/laura-goodman-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Karla Hanson (<http://www.vet.cornell.edu/karla-l-hanson/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Laura C Harrington (<http://cals.cornell.edu/laura-c-harrington/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Alistair T. Hayden (<http://www.vet.cornell.edu/alistair-hayden-phd/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology
- **Research Interests:** pathology, infectious disease, and the interface of human and wildlife health

Jarra F. Jagne (<http://www.vet.cornell.edu/research/faculty/jarra-jagne/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Yihong Li (<http://www.vet.cornell.edu/yihong-li-drph-mph-dds/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Josephine E.M. Martell (<http://www.vet.cornell.edu/research/josephine-martell-phd-ms/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology
- **Research Interests:** social equity, implementing public policy, and building cross-sector partnerships, strategic communication, environmental conservation, climate

Katherine A. McComas (<http://cals.cornell.edu/katherine-mccomas/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health*: food systems and health; infectious disease epidemiology

Gen Meredith (<http://www.vet.cornell.edu/research/faculty/gen-meredith-drph-otr/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Jamila Michener (<http://government.cornell.edu/jamila-michener/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Jeanne M. Moseley (<http://www.vet.cornell.edu/jeanne-moseley-mph/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** engaged learning partnerships and programs; integrating the arts and the humanities; utilizing evaluation methodologies to strengthen programs, partnerships and pedagogy; student success; collaboration and partnerships focused on the linkages between the environment and human health

Courtney Cuinn Murdock (<http://cals.cornell.edu/courtney-murdock/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Rebecca Judith Nelson (<http://cals.cornell.edu/rebecca-judith-nelson/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Jeff D. Niederdeppe (<http://cals.cornell.edu/jeff-niederdeppe/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Corinna A Noel (<http://www.vet.cornell.edu/corinna-noel-phd/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** behavioral and environmental influence on population health; disease surveillance; evidence-based public health; opioid use in rural settings

Daryl Van Nydam (<http://www2.vet.cornell.edu/research/faculty/daryl-nydam/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Todd Olmstead (<http://www.vet.cornell.edu/research/todd-olmstead-phd-ms/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** Health economics, Cost-benefit analysis, Cost-effectiveness analysis, Cost-utility analysis

Raina K. Plowright (<http://www.vet.cornell.edu/raina-plowright-phd-ms-bvsc/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** pathogen spillover; pandemic prevention; ecosystem and human health; viral pathogens, one health

Amelia Greiner Safi (<http://www.vet.cornell.edu/research/faculty/amelia-greiner-safi/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Krysten L. Schuler (<http://www2.vet.cornell.edu/research/faculty/krysten-schuler/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Linda Shi (<http://aap.cornell.edu/people/linda-shi/?keyword=shi>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Laura Elizabeth Smith (<http://www.vet.cornell.edu/research/faculty/laura-smith-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** maternal and child nutrition; micronutrients; one health

Alexander J.A. Travis (<http://www.vet.cornell.edu/research/faculty/alexander-j-travis-vmd-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Jamie Vanucchi (<http://landscape.cals.cornell.edu/people/jamie-vanucchi-hartung/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Isaac B. Weisfuse (<http://www.vet.cornell.edu/research/faculty/isaac-b-weisfuse-md-mph/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Nancy M. Wells (<http://www.human.cornell.edu/people/nmw2/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Gary R Whittaker (<http://www2.vet.cornell.edu/research/faculty/gary-whittaker-phd/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology

Charley E. Willison (<http://charleywillison.publichealth.cornell.edu/>)

- **Campus:** Ithaca
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology
- **Research Interests:** health policy; homelessness

Caroline B. Yancey (<http://www.vet.cornell.edu/research/faculty/caroline-yancey/>)

- **Campus:** Ithaca - (Divisional Member)
- **Concentrations:** *Public Health:* food systems and health; infectious disease epidemiology