## MASTER OF PUBLIC HEALTH PROGRAM

# One Health Approach

Linking Animals, Humans, and the Environment

# Public Health Focus

on Epidemiology, Infectious Disease, Food Systems, and Sustainability

Uniting Under One Health...
...Improving Public Health Around the World

# 1 University

10 Colleges + Schools

## 20 Departments

40 Students

70 Faculty

focusing on

#### ONE HEALTH

for

### PUBLIC HEALTH

#### ONE HEALTH FOR PUBLIC HEALTH

Public health takes a systems approach to prevent disease, promote health, and prolong life among the population as a whole. The interactive nature of our global community, and the effects of our activities on the global environment, mean that public health is global health.

- Infections cross species
- Diseases cross boundaries
- Illnesses cross races and ethnicities

The "One Health" approach serves to meet these integrated global public health needs. In order to ensure a healthy world and healthy public, the One Health paradigm:

- Focuses on the multiple types of relationships connecting humans, animals, and the environment
- Recognizes that we must take an interdisciplinary approach to solving public health issues
- Encourages us to draw from the best practices of complementary disciplines
- Allows us to look beyond traditional human health models

#### ONE UNIVERSITY

Cornell University exemplifies cutting-edge research and innovation in human, animal and environmental sciences, the core elements of One Health. This includes research and development in:

- Human and animal medicine
- Soil, water and air quality
- Biodiversity

- Strategic leadership
- Climate change
- Agriculture
- Urban planning
- Management systems

Building on its research strengths, its commitment to sustainability and community engagement for impact, and its strong graduate school programs, Cornell University is offering a professional degree program in public health (MPH) to train public health leaders who are inspired, developed, and deployed to ensure the health of people and the world in which we live.

This program works with cross-campus initiatives that demonstrate commitment to One Health and public health, including:

- Atkinson Center for a Sustainable Future
- Internationalization Council and Global Cornell Initiative
- Engaged Cornell

#### PUBLIC HEALTH TRAINING

based on:

## **GROUNDING**PARADIGMS

- Essential public health services
- One health
- Leadership for sustainability

## PUBLIC HEALTH COMPETENCIES

- Epidemiology & statistics
- Data–driven practice
- Planning & management
- Prevention & care
- Systems & policy
- Leadership & communication
- Interdisciplinary teamwork
- Systems thinking

#### **FOCUSED PRACTICE**

- Case-driven learning
- Cohort-driven problem solving
- Community engagement
- Community service

#### INFECTIOUS DISEASE EPIDEMIOLOGY

Graduates from this program will be trained from a human, animal, and vector (insect) perspective to be well equipped to respond to emerging viral, bacterial, or parasitic disease outbreaks. This will include the ability to measure and track disease spread, map and disseminate appropriate public health communications, and lead coordinated routine or emergency responses to address public heath needs.

In an era of routine Ebola, Zika, MERS, SARS, Measles, Dengue, Lyme, E. coli, Cholera, and Chikungunya outbreaks, such public health expertise is imperative. There is a global commitment to global disease detection and response, global health security, and bio- and agro-defense; our graduates will play a role in this.

Faculty from the College of Veterinary Medicine (Population Medicine, Diagnostic Sciences, Microbiology and Immunology) and the College of Agriculture and Life Sciences (Entomology) will lead this concentration area.

#### FOOD SYSTEMS FOR HEALTH

Graduates from this program will be trained from a systems perspective to be equipped to assess and coordinate policy, programs, and interventions that ensure safe and sustainable land use, food production and processing, food delivery, and consumption, as well as food and water security. These public health practitioners will become leaders and administrators of food-related programs within local, state, and federal public health departments, as well as development-focused nonprofits.

In an era of paradoxes such as famine and food waste, and undernutrition and obesity, and the ongoing challenges of food-borne illness and product recall, GMO and food labeling debates, and concern about sustainable food production and land use, such public health expertise will be highly valued.

Faculty from the College of Veterinary Medicine (Population Medicine, Diagnostic Sciences, Microbiology and Immunology), and the College of Agriculture and Life Sciences (Soil and Integrated Plant Sciences) will lead this concentration area.

#### WHY STUDY PUBLIC HEALTH AT CORNELL UNIVERSITY

Cornell University is a private Ivy League and federal landgrand university that was established in 1865 by Ezra Cornell and Andrew Dickson White. Upon the university's inception, Ezra Cornell pledged, "I would found an institution where any person can find instruction in any study." The university remains committed to that promise to this day. Cornell's mission is to teach and make contributions in all fields of knowledge in a manner that prioritizes public engagement to help improve the quality of life in our state, the nation, and the world. The Master of Public Health program will represent a critical capstone to Cornell University's founding principles and mission.

The MPH will be housed in the Graduate School and administered through the College of Veterinary Medicine (CVM) Ranked among the top veterinary colleges in the world, the CVM is recognized as a leader in veterinary medical education, biomedical research, and public health. The CVM is dedicated to advancing animal and human health through discovery-based research, the delivery of excellent clinical care, and continued vigilance against the spread of diseases, making it the ideal home for our integrated One Health-centered Master of Public Health.

In addition to its DVM degree program, the CVM offers programs of study for Master and PhD degrees. These graduate degrees draw on the expertise from faculty and researchers across Cornell University in areas such as infectious disease epidemiology, biomedical and biological science, and food systems for global health, training graduates for positions of leadership within industry, government, and academia.

#### FOR MORE INFORMA ON

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