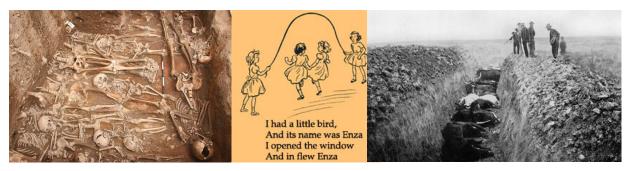
# Global Health History

BIOL-267 Fall 2017 W6:30-9:00 Regents Hall 551 Office Hour W4:00-6:00 Professor: Dr. Timothy P. Newfield timothy.newfield@georgetown.edu ICC 520F



How did climate change affect the distribution of arthropod-borne diseases, like malaria, in antiquity? Did the emergence of measles in the first millennium of the Common Era result in widespread loss of life? Are trade and migration to blame for the globalization of pathogens before the modern era? In what ways have poverty and conflict shaped the disease burden of our ancestors? Many issues current today in global health have a deep history. Our experience as a species with infectious disease can be assessed over a long period. This course considers the global history of infectious disease. Topics addressed cover the planet and span millennia, from tuberculosis' alleged 'out-of-Africa' trek and the zoonotic origins of major human pathogens to plague's Andean and Mongolian foci and the ecological triggers of epidemics. Lectures and readings are interdisciplinary and written sources of all sorts (from ancient annals to 21st-century WHO statistics) are married with the fruits of the paleosciences (paleo-pathology, -microbiology, -genetics and-climatology) in order to flesh out our evolving history with infectious disease. Students will be introduced to the methods of multiple fields of study relevant to the history of health and to the advantages and challenges of interdisciplinarity. They will gain historical perspective on global health issues faced today and discover how an understanding of the past can help us now and going forward.

#### **Format**

GHH is a seminar, discussion-based course. There are two sorts of GHH classes: 'Big Themes', which tackle major topics in the history of global health, and 'Case Studies', which zero in on momentous episodes in the global history of health. For both Big Themes and Case Studies students will read a number of assigned readings and participate in a class discussion of these readings. Weekly reading and participation are vital to your success in this class. In addition to reading what is assigned each week and preparing for a discussion, each class also consists of two or three article presentations where students will read and summarize an additional scholarly article not read by the other students. Not all classes have the same format: one class (II) will be partially given to research tactics and another (IV) to tips for writing up a research synthesis. Two classes (X and XI) will be given in large part to presentations.

#### Readings

There is no textbook. Readings will be made available on Blackboard. Students will read articles, chapters and primary sources, upwards of ten works per week. Most of these are rather short, about or less than 10 pages. As will become quickly apparent, this class is thoroughly interdisciplinary. Students will read scholarship from the social and natural sciences written by archaeologists, epidemiologists, evolutionary biologists, historians, geneticists, palaeoclimatologists, palaeomicrobiologists, palaeopathologists and policy makers. There are major advantages to this engagement with diverse scholarship. Most simply, every field of study brings something useful to the table and through interdisciplinarity we acquire a fuller, more nuanced appreciation of a topic.

## Attendance and Grading

Participation in Weekly Discussions 30%

Article Presentations 10%

Research Synthesis I – 18 October – 20%

Presentation of Research Synthesis 2 (in Progress) – 15 November – 10%

Research Synthesis 2 – 12 December – 30%

### **Topics**

I Introduction

II Big Themes 1: Zoonotic Origins of Major Pathogenic Diseases

III Case Studies 1: Plagues of the Ancient World

IV Big Themes 2: Plague's Medieval and Modern Globalizations

V Case Studies 2: Early Modern Mortalities: The peste de provence (1720-22)

VI Big Themes 3: Malaria, Long Humanity's Heaviest Burden

VII Big Themes 4: Afro-Eurasian Pathogens Arrive in the Americas

VIII Big Themes 5: Epizootics, From the Noric Plague to Colonial Rinderpest

IX Case Studies 3: Viruses on the Move, Fijian Measles (1875), Global Influenza (1918-

20) and English FMDV (2001)

X Big Themes 6: Tuberculosis' Vast and Deep Reach

XI Case Studies 4: African Ebola (1976-2017)