

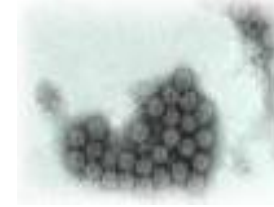
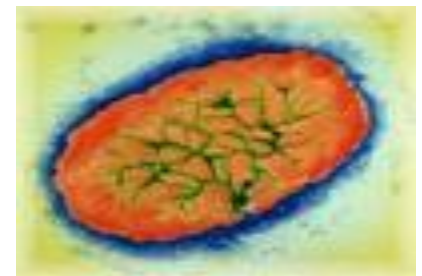
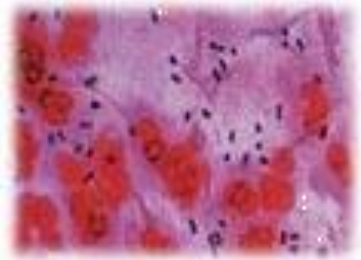


Global Health and Planetary Health Syllabus

Worcester College, Oxford
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OVERVIEW OF COURSE

- **SESSION 1: OVERVIEW AND SOME BASIC METHODOLOGY**
 - An overview of the changing state of the world's health
 - Overview of the DALY methodology to measure burden of disease
 - Constraints on health system performance
 - Performance against Millennium Development Goals
 - Numerous disease case studies
- **SESSION 2: SOME BIG HEALTH CHALLENGES**
 - Antimicrobial resistance
 - Disease eradication
 - Global pandemics. Responding to Ebola
- **SESSION 3: COVID-19**
 - Everything you ever wanted to know about COVID-19
 - The nature of the virus and how the virus affects the human body
 - Risk factors and spread
 - Cases and deaths
 - Developing different types of vaccine and speed of development
 - Access to vaccines and vaccine equity
 - 100-day mission
 - mRNA hub and spoke network, role of Africa

OVERVIEW OF COURSE

- **SESSION 4: RESEARCH AND DEVELOPMENT (R&D) OF VACCINES AND DIGITAL HEALTH**
 - Potential contribution of new vaccines
 - Issues in the Research and Development (R&D) of new products.
 - The role of public (GAVI, PAHO, WHO) and private organisations
 - Some novel financing mechanisms
 - Case studies (e.g., HPV, HIV, hep B, pneumococcal, rotavirus, malaria, cholera, pandemic flu, COVID-19)
- **SESSION 5: DISEASE MAPPING, ECONOMICS AND COST EFFECTIVENESS METHODOLOGY, WITH CASE STUDIES OF DENGUE AND MALARIA**
 - Mapping diseases
 - Dengue mapping as a worked example
 - Economics of dengue
 - Dengue vaccine and dengue vector-control case studies
 - Malaria vaccine cost effectiveness worked example
 - Other case studies

OVERVIEW OF COURSE

- **SESSION 6: PLANETARY HEALTH**
 - What is planetary health?
 - What do we know about climate change?
 - Impact of climate change on human health
 - Impact of pollution on human health
 - Food and human health and planetary health
 - Urban and rural health
 - Ecosystems and health
 - Economics, business, the natural capital approach
 - Systems and dynamics
- **SESSION 7: BIODIVERSITY, MEDICINE, AND HEALTH**
 - A new global initiative to speed development of medicines from nature, especially from tropical rainforests
 - Importance of biodiversity for medicine
 - Obstacles to development of medicines from nature
 - Drugs from plants
 - A new toolbox