Philosophy of Medicine
Mini-Elective
Spring 2010

Course Dates: March 24, 31, April 7, 14
Wednesdays, 6:00-8:00 PM

Maximum Students: 8

Class Year: MS1

Course Director: Edouard Machery, PhD
Associate Professor in History and Philosophy of Science

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Description:
Philosophy and medicine have a long, intertwined history. Indeed, Socrates’s mother was a nurse or midwife, and following Socrates himself philosophers have often described philosophy as the medicine of the mind or soul. Many important philosophers such as Aristotle and Descartes have also made important contributions to medical fields, such as anatomy. And philosophers have long discussed key notions and problems found in medicine.

This course is designed as an introduction to the philosophical issues that are raised by medicine. Among others, we will examine the following questions: What does it mean to be healthy? Can one define health and sickness purely objectively? Should human medical judgments (e.g., clinicians’ judgments) be replaced by purely automatic, computerized procedures? What is the nature of medical expertise? Are medical judgments influenced by various biases and can these biases be overcome? How much do we learn about health and disease by studying animals (e.g., rats) or developing biological, reductionist models? Can evolutionary biology be useful to medicine? The goal of this class is to provide students with a critical understanding of these philosophical issues. Previous knowledge of philosophy is not needed for this class.

This four-session mini-elective will attempt to connect the philosophical issues and controversies we will discuss with participants’ experience as medical students. The goal is to show that these philosophical debates are relevant for participants’ medical education and practice.

Course Objectives:
- To enhance participants’ acquaintance with key philosophical concepts and controversies in the philosophy of medicine.
- To enable participants to develop their own opinion about these controversies.
- To help participants gain an awareness of the views opposed to their own opinions and of the arguments in support of these views.
- Most important, to relate the philosophical concepts and controversies to the practices and experience of the participants.
**Requirements:**
Actively participate in all four course sessions including vigorous discussion.
One reading will be assigned for each meeting.

**Course Outline**

**Philosophy of Medicine**

**Course Director:**
Edouard Machery, PhD
Associate Professor in History and Philosphy of Medicine

**Location:**
All sessions, G28 Cathedral of Learning
6:00—8:00 PM

**Session 1: The Normal and the Pathological**
**March 24, 2020**
The first session will examine two key concepts in medicine: health and disease. More particularly, we will focus on the following questions: Can health and disease be defined in a purely factual, objective manner? If so, how? Can evolution provide a basis for such an objective definition? Or, perhaps, physiology? Or, rather, are the definitions of health and disease bound to include an irreducible normative element? And if so, which norms should matter? The physician’s, the patient’s, the society’s at large? Historically influential arguments attempting to reduce the normal to the typical (e.g., Quetelet) and more recent arguments that appeal to the environments in which humans evolved in order to define normality factually will be discussed.

**Session 2: The Nature of Explanation in Medicine**
**March 31, 2010**
The second session will examine whether good explanations in medicine are reductionist or rather whether reductionism is a bias in medicine. More precisely, we will examine the following questions: What is a reductionist explanation? Are reductionist explanations possible? Likely? Desirable? What is a non-reductionist explanation? Have non-reductionist explanations been successful? If physicians and medical scientists (including grant agencies such as the NIH) prefer reductionist explanations, where does this preference come from? To answer these questions, we will examine some case studies from psychiatry and we will rely on participants’ own experiences.

**Session 3: Methods in Medical Research: Case Studies vs. RCT**
**April 7, 2010**
Random control trials (RCTs) are the gold standard in medicine for assessing the efficiency of potential treatments. Since 1962, the US Food and Drug Administration requires that the efficiency of new drugs be established by means of an RCT, while evidence-based medicine is largely built on RCTs. However, RCTs have been heavily criticized on various grounds. For instance, some have argued that they are based on inadequate statistics, while others have argued that RCTs are easily manipulated by the pharmaceutical industries and others have defended idiographic, case-based methods. Thus, in this session, we will examine the criticisms developed against RCTs by philosophers, and we will investigate whether case studies might be an alternative to RCTs.

**Session 4: Lessons from the Psychology of Medical Decision-Making**
**April 14, 2010**
In this last session, we will consider the psychological research on medical decision-making. Particularly, we will examine the biases that influence medical judgments, the nature of medical expertise, and the controversy between actuarial and clinical decision-making. Psychological research has shown that the judgments of lay people and medical experts alike are influenced by biases, resulting in irrational choices and decisions. Furthermore, comparisons of actuarial, computational methods and clinical judgments have repeatedly shown that the former outperform the latter. We will examine the lessons that can be drawn from this surprising and somewhat depressing research.