# Philosophy of Medicine

#### Instructors: Lorenzo Casini & Marcel Weber

The philosophy of medicine uses philosophical methods in order to analyze medical concepts such as health and disease and to provide formal justifications for medical methods such as those used in evidence-based medicine as well as in basic medical research and in disease classification. In the first semester of this annual course we will examine in particular the foundations of evidence-based medicine such as the methodology behind randomized controlled trials. We will also discuss an argument to the effect that a rational agent ought to have low confidence the efficacy of medical treatments in general ("medical nihilism"). In the second semester we will take a deeper look at concepts of health and disease, the classification of diseases (in particular psychiatric disorders), the treatment-enhancement distinction and the question of whether aging is a disease. (A note to non-philosophy majors: It is possible to take the course for only one semester, no matter which one).

**MedNih**: Stegenga, J., 2018. *Medical Nihilism*, Oxford: Oxford University Press.

**M**: 'mandatory' **O**: 'optional'

#### **First Semester**

# Week 1 (20 Sept): Introduction

# Week 2 (27 Sept): Evidence-based Medicine

- (M) Worrall, J. 2002. What Evidence in Evidence-Based Medicine? *Philosophy of Science*, 69: S316-30.
- (O) Evidence-Based Medicine Working Group, 1992. Evidence-based Medicine: A new approach to teaching the practice of medicine, *The Journal of the American Medical Association* 268: 2420-25 Sackett, D.L., Rosenberg, W.M.C., Gray, J.A.M., Haynes, and R.B., and Richardson, W.S., 1996. Evidence based medicine: what it is and what it isn't. *Br Med J* 312(7023):71−72 Rogers, W. and Hutchison, K. 2017. Evidence-based medicine in theory and practice: epistemological and normative issues, in Schramme, T. and Edwards, S. (eds), *Handbook of the Philosophy of Medicine*, Springer, ch. 52 [MedNih] ch 5: Down with the Hierarchies.

# Week 3 (4 Oct): Randomized controlled trials

- (M) Howick, J. and Mebius, A. 2017. Randomized trials and observational studies: the current philosophical controversy, in Schramme, T. and Edwards, S. (eds), *Handbook of the Philosophy of Medicine, Springer*, ch. 53
- (O) Cartwright, N. 2010. What are randomised controlled trials good for? *Philos Stud* 147: 59–70
  Steel, D. 2011. Causal inference and medical experiments, in Gifford, F. (ed), *Philosophy of Medicine*, Elsevier, 159-85
  Patrick, J.K. 2017. 10 Types of study bias. HowStuffWorks.com.

# Week 4 (11 Oct): Mechanisms (I)

- (M) Clarke, B., Gillies, D., Illari, P., Russo, F., and Williamson, J. 2014. Mechanisms and the evidence hierarchy. *Topoi* 33(2): 339-360.
- (O) Bradford Hill, A., 1965. The environment and disease: association or causation? *Proc R Soc Med* 58: 295–300

# Week 5 (18 Oct): Mechanisms (II)

- (M) Howick, J. 2011. Exposing the vanities—and a qualified defense—of mechanistic reasoning in health care decision making. *Philosophy of Science* 78 (5): 926-40
- (O) [MedNih] ch. 4: Magic Bullets Russo, F. and Williamson, J. 2007. Interpreting causality in the health sciences. *Int Stud Philos Sci* 21(2): 157–70

# Week 6 (25 Oct): Meta-analysis

(M) [MedNih] ch. 6: Malleability of Meta-Analysis

# Week 7 (1 Nov): Quality assessment tools

(M) [MedNih] ch. 7: Assessing Medical Evidence

# Week 8 (15 Nov): Consensus conferences

- (M) Solomon, M. 2017. Group judgement and the medical consensus conference, in Gifford, F. (ed), *Philosophy of Medicine*, Elsevier, pp. 239-54.
- (O) Stegenga J, 2014. Three criteria for consensus conferences, *Found Sci*. DOI 10.1007/s10699-014-9374-y

# Week 9 (22 Nov): Risk (I)

- (M) Fuller, J. and Flores, L.J. 2015. The Risk GP Model: The standard model of prediction in medicine. *Studies in History and Philosophy of Biological and Biomedical Sciences* 54: 49-61.
- (O) Kennedy, A. 2016. Evaluating diagnostic tests. *Journal of Evaluation in Clinical Practice* 22(4): 575-79.

# Week 10 (29 Nov): Risk (II)

- (M) [MedNih] ch. 8: Measuring Effectiveness
- (O) [MedNih] ch. 3: Effectiveness and Medicalization Douglas, H. 2000. Inductive risk and values in science. *Philosophy of Science* 67(4): 559-79.

#### Week 11 (6 Dec): Harm

- (M) [MedNih] ch. 9: Hollow Hunt for Harms
- (O) Plutynski, A. 2017. Safe, or sorry? Cancer screening and inductive risk. In Elliott, K.C. and Richards, T., *Exploring Inductive Risk*, Oxford University Press.

#### Week 12 (13 Dec): Bias

- (M) [MedNih] ch. 10: Bias and Fraud
- (O) Wilholt, T. 2009. Bias and values in scientific research. Studies in History and Philosophy of Science, 40: 92–101

#### Week 13 (20 Dec): Nihilism?

- (M) [MedNih] ch. 11: Medical Nihilism
- (O) [MedNih] ch. 1: Introduction [MedNih] ch. 12: Conclusion

#### **Second Semester**

#### Week 14 (20 Feb): Jacob Stegenga's visit

# Week 15 (27 Feb): What is health?

- (M) Boorse, C. 1977. Health as a theoretical concept. *Philosophy of Science* 44 (4):542-73.
- (O) Kingma, E. 2007. What is it to be healthy? Analysis 67 (294):128-33 Nordenfelt, L., 2017, On Concepts of Positive Health, in Schramme T and Edwards S (eds.) *Handbook of the Philosophy of Medicine*, Springer, pp. 29-43.

# Week 16 (6 Mar): What is disease?

- (M) Wakefield J.C., 1992. The concept of mental disorder. On the boundary between biological facts and social values. *Am Psychol*. 47(3):373-88.
- (O) McNally R.J. 2001. On Wakefield's harmful dysfunction analysis of mental disorder. Behav Res Ther. 39(3):309-14 • Kingma, E. 2017, Disease as Scientific and as Value-Laden Concept, in Schramme, T. and Edwards, S. (eds.) *Handbook of the Philosophy of Medicine*, Springer, pp. 45-64.

# Weeks 17 (13 Mar): Are diseases natural kinds (I)?

(M) Pickard, H. 2009. Mental illness is indeed a myth, in L Bortolotti and M Broome (eds.), *Psychiatry as Cognitive Science: Philosophical Perspectives*, pp. 83-101

# Week 18 (20 Mar): Are diseases natural kinds (II)?

(M) Tsou, J. 2016. Natural kinds, psychiatric classification and the history of the DSM. *History of Psychiatry* 27(4) 406-24.

# Week 19 (27 Mar): Are there culture-bound syndromes?

- (M) Blease, C. 2010. Scientific progress and the prospects for culture-bound syndromes. *Stud Hist Philos Biol Biomed Sci.* 41(4):333-39.
- (O) Cooper, R. 2010. Are culture-bound syndromes as real as universally-occurring disorders? *Stud Hist Philos Biol Biomed Sci.* 41(4):325-32.

# Week 20 (3 Apr): Is aging a disease (I)?

- (M) Caplan, A.L. 2005. Death as an unnatural process. Why is it wrong to seek a cure for aging? *EMBO Rep.* 6, S72–S75
- (O) Murphy, T. F. 1986. A cure for aging? *J Med Philos.* 11(3):237-55.

# Week 21 (17 Apr): Is aging a disease (II)?

(M) De Winter, G. 2015. Aging as Disease. Med Health Care and Philos 18:237-43.

# Week 22 (8 May): Treatment-enhancement distinction

- (M) Daniels, N. 2000. Normal functioning and the treatment-enhancement distinction. Cambridge Quarterly of Healthcare Ethics 9(3):309-22.
- (O) Bloodworth, A. 2017. Enhancing Human Abilities and Characteristics Beyond Normality, in Schramme, T. and Edwards, S. (eds) *Handbook of the Philosophy of Medicine*, Springer, 223-32.

# Week 23 (15 May): Do we need a definition of 'disease' (I)?

(M) Worrall, J. and Worrall, J. 2001. Defining disease: Much ado about nothing? In Tymieniecka, A.T. and Agazzi, E. (eds.), Life Interpretation and the Sense of Illness Within the Human Condition. Kluwer Academic Publishers. pp. 33-55.

# Week 24 (22 May): Do we need a definition of 'disease' (II)?

- (M) Maël. L. 2014. The Naturalization of the Concept of Disease. In Huneman P, Lambert G and Silberstein M (eds.), *Classification, Disease and Evidence: New Essays in the Philosophy of Medicine*. Springer. pp. 19-41.
- (O) Kincaid, H. 2008. Do we need theory to study disease?: lessons from cancer research and their implications for mental illness. *Perspect Biol Med* 51:367-78.