**Categories, Knowledge, and the Practice of Medicine**

**Prof. Bennett Holman**

Medical ethics became a topic of discourse in the 1970’s, prompted in part by a number of severe ethical violations in medical research. More recently, philosophers have brought philosophical tools to other areas of medical science. First, there has been a growing discourse on the metaphysics of medicine. Metaphysics is an attempt to understand the basic concepts of medicine, such as what is disease. Sometimes the question is framed generally, other times it may be more specific, such is extreme sadness a disease (e.g. depression). Traditional topics in philosophy of science have found expression and drawn examples from medicine as well, for example debates about causality, mechanisms, modeling, and clinical judgment are central to some aspects of medical research. On the other hand major movements in medicine, like evidence-based medicine tend to reject a reliance on theory. The question of how and when we know something blends concerns in epistemology and philosophy of science. Finally, more recently, some philosophers have suggested that we need to know about the contexts where knowledge is produced, how medical knowledge is distributed, and the role of third parties in our knowledge systems (e.g. medical journals, regulatory agencies, etc.). For these questions a newly forming philosophical area of social epistemology is emerging. This class will serve as a survey of philosophical issues in medicine and provide students of medicine a survey of the foundational issue in their discipline.

**Lecture 1: Medicine- Art or Science**

Is medicine a body of knowledge or a skilled practice. If it is a science, what obligation does a doctor have to take to form true beliefs? If it is a practice, what obligation does a doctor have to relieve suffering? Finally, is this this division a false dichotomy?

1. Francis Peabody, “The Care of the Patient” Peabody, F. W. (2015/1927). The care of the patient. *Jama*, *313*(18), 1868-1868.
2. Munson, R. (1981). Why medicine cannot be a science. *Journal of Medicine and Philosophy*, *6*(2), 183-208.
3. Hatcher, R. (1916). “The Duty of the Medical Profession to the Council on Pharmacy and Chemistry,” JAMA, 67: 1339-1342.

Recommended

1. Rosenberg, C. E. (1920). Holism in twentieth-century medicine. *Greater than the parts: Holism in biomedicine*, *1950*, 335-355.
2. Cassell, E. J. (1998). The nature of suffering and the goals of medicine. *Loss, Grief & Care*, *8*(1-2), 129-142.

**Lecture 2: Health and Disease**

Perhaps the most fundamental question of medicine concerns its basic concepts: health and illness. Most centrally we might ask, is there an objective (fact-of-the-matter) description about what constitutes health and illness or are these value-laden concepts that will naturally invoke human aims and interests.

Readings:

1. Medicine’s need for philosophy (Richard Smith) <http://blogs.bmj.com/bmj/2016/04/08/richard-smith-medicines-need-for-philosophy/>
2. Cooper, R., 2002. “Disease,” Studies in the History and Philosophy of Biology & the Biomedical Sciences, 33: 263–282.
3. ['Well-Being as an Object of Science'](http://dx.doi.org/10.1086/667870), Philosophy of Science 79 (2012): 678–689

Recommended

1. Hofmann, B. R. (2002). On the triad disease, illness and sickness. *The Journal of medicine and philosophy*, *27*(6), 651-673..
2. Schwartz, P., 2007. “Decision and Discovery in Defining 'Disease'”. in H. Kincaid and J.McKitrick (eds.), Establishing Medical Reality, Amsterdam: Springer:47–63.

**Lecture 3: Specific Diseases**

Beyond our basic concepts, medicine employs specific concepts, especially in its nosology. In this lecture we look at examples of contested categories. We will explore what makes something a disease and what is at stake by labeling someone as sick

1. Kukla, R. (Forthcoming) “Infertility as a Medical and as a Social Category” *Synthese*
2. Hacking, I. (1995). The looping effects of human kinds. *Causal cognition: A multidisciplinary debate*, 351-394.

Recommended

1. Worrall, J., & Worrall, J. (2001). Defining disease: Much ado about nothing?. In *Life Interpretation and the Sense of Illness within the Human Condition* (pp. 33-55). Springer Netherlands.
2. Horwitz, A. V. and J.C. Wakefield., 2007. The Loss of Sadness, New York: Oxford University Press. (selections)

**Lecture 4: Knowing More Than We Can Tell and Reasoning from Cases: Practical Knowledge and Medical Care.**

Practicing physicians are immersed in clinical practice have daily experience with the illness and its treatment. This far different manner of knowing than is captured by the medical experiment. This lecture explores contrasting views about the reliability of medical experience and the limits of clinical knowledge.

1. Braude, H. (Forthcoming), Clinical intuition In *Routledge Companion to Philosophy of Medicine*
2. Charlton, B. G., & Walston, F. (1998). Individual case studies in clinical research. *Journal of evaluation in clinical practice*, *4*(2), 147-155.
3. Sollman, T. (1917). “The Crucial Test of Therapeutic Evidence,” *JAMA,* 69*:* 199

Recommended

1. Ankeny, R. A. (2011). Using cases to establish novel diagnoses: Creating generic facts by making particular facts travel together. *How well do facts travel*, 252-72.
2. Polanyi, M. (1967). The tacit dimension.

**Lecture 5: Causation and Causal Mechanisms**

This lecture considers the merits of causal models in understanding and treating illness. We explore how causation can be established and consider what evidential weight it carries when attempting to understand health, illness, and treatments.

1. Doll, R.; Hill, A. B. (1 September 1950). "Smoking and Carcinoma of the Lung". British Medical Journal **2** (4682): 739–748.
2. Hill, A. B. (1965). "The Environment and Disease: Association or Causation?". Proceedings of the Royal Society of Medicine **58** (5): 295–300.
3. Russo, F. and Williams, J. (2004). "Interpreting causality in the health sciences." International Studies in the Philosophy of Science, 21: 1157-1170.

Recommended

1. Worrall J (2011). "Causality in medicine: Getting back to the Hill top". Preventive Medicine **53** (4-5): 235–238
2. Howick, J. H. (2011). *The philosophy of evidence-based medicine*. John Wiley & Sons. (Selection)

**Lecture 6: Evidence-Based Medicine, RCTs and the Hierarchy of Evidence**

Evidence-Based Medicine (EBM) has become the dominant force in medical epistemology. In this lecture we examine what EBM is, how it grounds claims of medical knowledge

1. Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *Bmj*, *312*(7023), 71-72
2. Cartwright, N. (2010). "What are randomized controlled trials good for?" *Philosophical Studies*, 147: 59-70.
3. Stegenga, J. (2011). Is meta-analysis the platinum standard of evidence?. *Studies in history and philosophy of science part C: Studies in history and philosophy of biological and biomedical sciences*, *42*(4), 497-507.

Recommended

1. Howick, J. H. (2011). *The philosophy of evidence-based medicine*. John Wiley & Sons. (Selection)
2. Worrall, J. (2010). Evidence: philosophy of science meets medicine. *Journal of evaluation in clinical practice*, *16*(2), 356-362.

**Lecture 7: Race, Gender, and Gender Identity**

BiDil has been approved only for congestive heart failure, but only for African Americans. Serafem has been approved for “premenstrual dysphoric disorder.” Do such indications herald a new dawn of personalized medicine or a well-crafted marketing ploy? Are race and gender real or social constructs? If they are real how should they factor into medical practice? If they are not, how can there be specific treatments for people inhabiting such categories?

1. De Melo, I. & Intemann, K. (Forthcoming). Gender in medicine (Inmaculada de Melo Martin and Kristin Intemann); In *Routledge Companion to Philosophy of Medicine*
2. Valles, S. (Forthcoming). Race in medicine. In *Routledge Companion to Philosophy of Medicine*

Recommended

1. Fernandez-Pinto, M. (Forthcoming). Diversity Troubles: Niche Standardization and Niche Marketing in Medical Research. *Philosophy of Science*
2. Plemmons, E. (Forthcoming). Contested Authority: epistemic claims to transgender surgical outcomes *Synthese*

**Lecture 8: Medical Knowledge in a Social World**

In contrast to an epistemological focus on an isolated knower confronting a fixed set of evidence, social epistemology attempts to make room both for the social practices that promote knowledge and those that obscure it. The broader purview offered by social epistemology opens up opportunities for philosophers interested in medical knowledge to discuss topics such as the role of consensus conferences, continuing medical education, and industry funding.

1. Solomon, M. (Forthcoming), A social epistemological analysis of attempts to correct the shortfalls of evidenced-based medicine, *Synthese]*
2. Smith, R. (Forthcoming), Alternatives to medical journals as systems to disseminate knowledge in the 21st century, *Synthese*

Recommended

1. Holman, B. (Forthcoming), Philosophers on Drugs, *Synthese*
2. Biddle, J. (2007). “Lessons from the Vioxx Debacle: What the Privatization of Science

Can Teach Us about Social Epistemology.” *Social Epistemology* 21: 21-39.