

## VITAL DIFFERENCES: INDETERMINACY AND THE BIOMEDICAL BODY

*Vital Differences: Indeterminacy and the Biomedical Body* is an interdisciplinary study of biomedicine and the living body in the context of advanced capitalism in North American and Western European societies. Drawing from critical studies of science and medicine, my dissertation tests out a simple hypothesis: that physiological processes and biomedical conditions are not coherent, given or stable, but are rather multiple and *in the making*, shifting according to specific variables such as place, time, social context, political climate, genre, law, technology, discipline or paradigm. I use the mathematical concept of *indeterminacy* to account for these shifting, uncertain manifestations of physical processes and the attending multiplicity of knowledge practices they give rise to, and which in turn constitute them. In order to test out my hypothesis, I *examine* a variety of biomedical narratives (in written and visual texts, alongside artifacts, objects, techniques and enactments) looking for symptoms, traces, vestiges of these multiple, often incongruent and fragmentary, configurations of the living body alternating between states of health and illness. I am interested in the language we use to describe physical and biomedical conditions, the metaphors, narratives and concepts we mobilize to make sense of them, the technologies and imagery we employ to visualize them, the techniques and equipment we rely on to detect, treat and manage them, and above all in the material archives we generate in order to understand and control them - and which continuously escape our fantasies of mastery and control. Central to my analysis is the *vitality* of the organic and inorganic matter whose agency participates in these lively enactments and encounters. I follow bodies, objects and substances by tracing their actions and responses, trajectories and orientations, the types of contact and exchanges they maintain between inside and outside of the organism, and the *vital disorder* they engender, whose permutations form the basis for the maintenance of metabolic activity and organic life. Each of the two specific case studies I examine in depth (multiple chemical sensitivity and Celiac disease) emerge during the twentieth century amidst radical technological, scientific, economic, philosophical, political, aesthetic and sociocultural shifts. Each configuration of these conditions relies on an understanding of the body derived from the fields of internal medicine, biomedical technology, physiology, genetics and biochemistry, unfolding alongside the implementation of diagnostic procedures like imaging techniques (e.g. colonoscopy and endoscopy) and fast developments in areas like immunology, genetics, anesthetics and clinical ecology.

*Vital Differences* is broadly situated within the fields of feminist science studies, body theory, and critical histories of the life and health sciences. Although my methodology borrows heavily from the interdisciplinary research methods of cultural studies and feminist theory, in particular material feminisms and poststructuralist thought, I am as interested in un-making the meta-position of any methodological framework as I am in mobilizing its critical strategies in my analysis. I hope to highlight throughout the assumptions, limitations and historicity of the routine disciplinary habits of any critical discourse, and to situate *methodological practices* as necessarily internal to, originating from, and embedded in the research work they may seem to support and legitimize from the outside.