Research Statement

My research analyzes forms of inquiry and the forms of knowledge they seemingly produce. My evolving research interests are illustrated by three related book projects. I am currently working on *Writing in the Disciplines: A Rhetoric for the Natural and Social Sciences* (under contract to Lawrence Erlbaum Associates). In this book I take up how researchers identify intellectual problems and form questions that can, and should, be pursued. Identifying these problems and questions is generally the province of disciplinary narratives. However, through an emphasis on paradigmatic inquiry, instrumentalism and research quantity, disciplinary rhetoric often dulls the research imagination. I believe we need to develop and to teach shared criteria, sensibilities and judgments regarding what inquiry is, should, and can be. In so doing, I envision ways to help renew academic inquiry. We should, I claim, regard argument, rhetoric, and public discourse as elements of a coherent narrative informing our judgments about epistemic inquiry. I believe we need a forum for explicitly rendering these judgments. *Writing in the Disciplines* advances this forum.

My initial research brought together work in the fields of Scientific and Technical Communication and Science and Technology Studies (STS) — the history, sociology and philosophy of science and technology. In *Scientific and Technical Communication: Theory, Practice and Policy* I demonstrate how a critical understanding of science and technology can make for more informed technical communications practices. Since the field of technical communication requires theoretical perspectives on science and technology, STS offers a way for technical communicators to conceptualize and critically engage the objects of their inquiry. My research, and its resulting practices, advocates a role for technical communicators as brokers facilitating knowledge production processes.

To act as epistemic brokers, technical communicators need to know how persuasion works. Early work on rhetoric in science focused on different ways to employ ancient rhetoric to interpret canonical scientific texts. However, the import of this work has not gone unquestioned. In response, my research argues for a normative philosophy as a basis for moving research forward in the rhetoric of science. In my dissertation and in a series of articles, I articulate normative criteria for adjudicating knowledge claims made by researchers about the nature and conduct of science and technology. In developing these criteria I ask: How do we know what we know about science and technology? What counts as knowledge about science and technology? What ought we do as a result? These questions have led me to consider the relative efficacy of case studies, the concept of contextualization, the differences in humanistic and intellectual inquiry, the nature of knowledge about science (meta-scientific knowledge), and the ways in which academics identify, pose and resolve intellectual problems.

Academics engage intellectual problems in seemingly endless ways. However, tacit and often unrealized regulations exist regarding what counts as proper, or good, academic inquiry. In *Philosophy, Rhetoric and the End of Knowledge: A New Beginning for Science and Technology Studies*, Steve Fuller and I consider philosophy's place in improving the course of contemporary knowledge production. We argue for a normative epistemology in which the means and ends of producing knowledge are explicitly analyzed and enacted. While our focus is science, my current work takes up the question of how academics understand their own inquiry.

My current work examines the means by which academics, particularly in the humanists and social scientists, identify intellectual problems that can and should be pursued. I claim that the critical research imagination has been dulled by current emphases on paradigmatic inquiry, instrumentalism and research quantity. Seemingly novel responses garnered by pluralism, contextualism and interdisciplinary admixtures often perpetuate the notion that more, and more "interesting," research is better. Subsequently, we share no explicit criteria or sensibility of what good or novel research can

be. I believe this shared sensibility can be developed through a sustained, philosophical examination of how, and why, we know what we know (meta-knowledge). In the midst of our rush to apply and advance our knowledge about the world, we need to address questions of what our knowledge should be in the world.