

My research seeks to understand moral value within a scientific or naturalistic framework and wrestles with the broader philosophical ramifications of such an understanding. It is motivated by my interest in conceptual and normative relations within natural environments and can be thought of in terms of three distinct but related strands of investigation that grow around the development of an ecological ethics: semiotic perspectives on the environment, environmental bioethics, and ethics in science and engineering. Given its focus on interrelations, my research program is necessarily multidisciplinary, requiring both collaborative and also individual avenues of research. Although focused on applied issues for their potential to affect policy and social change, my research agenda is grounded by competences in value theory and in the history of philosophy.

1. One strand of my research centers on the ways we understand and justify value in the natural environment. My specific approach starts from a semiotic perspective on environmental value. This work is supported by publications and ongoing collaborative projects. Several published papers and others in progress have resulted thus far from my dissertation work on justifications for attributing value to the natural environment. Drawing together support from American philosopher C.S. Peirce, contemporary biosemiotics, American Indian spiritual traditions, and moral theory, the shared focus of those papers has been to develop and critique metanormative concepts at work in moral theory as they relate to questions of environmental justice and moral standing. Building upon concurrent work in semiotics and environmental philosophy, I argue that conceptual work from continental traditions, including that of French cultural theorist Jean Baudrillard's and Baltic biologist Jacob von Uexküll, can inform the ways we ground our moral relationships within the nonhuman natural world. Building concurrently on that line of argument and drawing on contemporary scientific and philosophical literatures, I work to develop an account of meaning that can account for the extension of meaning and meaningful experience across a wider cross-section of living organisms. These research interests have led to ongoing interdisciplinary collaborations as a means of bridging the presumed gap between analytic and continental traditions and of opening novel lines of inquiry for future interdisciplinary research. Numerous ongoing collaborations in bioethics, soundscape ecology, ecological science, and philosophy across institutions have provided additional avenues of inquiry around fundamental issues that help to ground environmental ethics, conservation ethics, and the philosophy of ecology more broadly in future research. Expanding on this work, I plan to further explore approaches to ethics and environmental philosophy from the continental tradition. My future research will continue build a coherent argument for ecological ethics as it relates to grounding the moral status of nonhumans and the environment, with the goal of producing a monograph.

2. My second strand of research focuses on the intersections between environmental ethics and



bioethics across disciplines. I argue that medical bioethics is too narrowly conceived and practiced to account for the diverse ways that environmental relationships effect both human health and environmental wellbeing. Broadening our understanding of bioethics through historical work and forward-looking conceptual development will strengthen the concept of bioethics in a developing professional landscape. Several collaborations across disciplines have led to workshop development, grant-writing, and publishing opportunities in support of this idea. For example, my 2012 co-edited book is a direct result of this research interest and focuses on framing the overlapping frontiers of bioethics including nonhuman animal, biotechnological, and environmental themes. Future work here will rely on furthering collaborations with colleagues in terms of research and engagement with an eye toward pushing the field of bioethics toward broader ecological and environmental considerations. Current in-progress articles, including on the genealogy of bioethics and the nature of autonomy of the research subject, evidence the start of this work. This cross-disciplinary collaborative work will not only help me fund and strengthen my own research program but will provide opportunities for me to continue my professional education in areas related to my research.

3. A third strand of research, with clear links to educational and policy-related outcomes, focuses on the relationship between science and ethics more broadly. I support the view that philosophers can play an active and positive role within disciplinary ethics and that such outreach efforts strengthen academic institutions. My projects here, including diverse public lectures and a grant from the National Science Foundation with colleagues in biomedical engineering, have focused on developing a broader conception of the role and nature of values in research integrity at the University level and the application of principlist methodologies to ethical decision-making in engineering. A series of planned publications will continue to build on this work. Outreach is vital to this facet of my research, so as a graduate student I co-founded the Purdue *Lectures in Ethics, Policy, and Science* ([www.purdue.edu/bioethics](http://www.purdue.edu/bioethics)), an ongoing interdisciplinary seminar series in bioethics. As a Post-Doctoral Scholar at Penn State, I initiated a similar ethics lecture series and engaged with research initiatives on ethics and science, bioethics, and ethics education, and began a co-authored book length manuscript on a novel approach to research integrity in science and engineering. The general purpose of each of these projects is to bring together scientists and philosophers in dialogue on ethical issues. Existing fellowships and grants, such as my 2012-1015 NSF funded project and my 2014 Mellon Foundation award, continue to support collaborative articles on ethics education in science and engineering. I will pursue additional funding at the federal and regional levels in support of both research and outreach, with the goal of closer examination of differences in ethical decision-making methodologies within disciplines.

In my capacity as researcher and as an extracurricular leader, I have worked with undergraduate and graduate students as well as members of the community, and I plan to continue this outreach as an integral part of my research program: ethics should always be directed toward helping others live better lives. Over the course of the next several years, I plan to focus my writing, research, and funding toward impact on policy-relevant issues in my vision of ecological ethics such as urgent ethical issues related to climate change, habitat destruction, and impacts on human health and nonhuman wellbeing.