## The Ethos of Organism-Based Communities

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## Abstract

This paper explores the social dimensions of the epistemology of scientific practices, and particularly the norms and commitments that affect the choices and intellectual directions of researchers working with model organisms. Much of the historical, philosophical and sociological scholarship on model organisms has stressed the importance of social ties between members of specific 'model organism communities'. We go one step further by arguing that organism-based communities such as the ones centered around Arabidopsis, C. elegans and Drosophila have developed a unique ethos – an ensemble of norms and values that includes a strong emphasis on strategic collaboration and the sharing of resources. This ethos is expressed and enforced through specific institutional mechanisms (such as steering committees and infrastructures); and strongly affects both the research directions pursued by these communities and the types of results, materials and methods favoured by the scientists involved. We conclude that a study of the epistemology of research practices in experimental biology needs to include references to the ethos of organism-based communities, which continue to play an important role as reference points for cross-species analyses (particularly when involving genomic data).

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