

Cambridge Elements

Elements in the Philosophy of Biology

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MODEL ORGANISMS

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Model Organisms

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Abstract: This Element presents a philosophical exploration of the concept of the 'model organism' in contemporary biology. Thinking about model organisms enables us to examine how living organisms have been brought into the laboratory and used to gain a better understanding of biology and to explore the research practices, commitments, and norms underlying this understanding. We contend that model organisms are key components of a distinctive way of doing research. We focus on what makes model organisms an important type of model and how the use of these models has shaped biological knowledge, including how model organisms represent, how they are used as tools for intervention, and how the representational commitments linked to their use as models affect the research practices associated with them. This title is also available as Open Access on Cambridge Core.

Keywords: models, representation, experimentation, abstraction, research practices

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