

In recent decades, there has been a major shift in the way researchers process and understand scientific data. Digital access to data has revolutionized ways of doing science in the biological and biomedical fields, leading to a data-intensive approach to research that uses innovative methods to produce, store, distribute, and interpret huge amounts of data. In *Data-Centric Biology*, Sabina Leonelli probes the implications of these advancements and confronts the questions they pose. Are we witnessing the rise of an entirely new scientific epistemology? If so, how does that alter the way we study and understand life—including ourselves?

Leonelli is the first scholar to use a study of contemporary data-intensive science to provide a philosophical analysis of the epistemology of data. In analyzing the rise, internal dynamics, and potential impact of data-centric biology, she draws on scholarship across diverse fields of science and the humanities—as well as her own original empirical material—to pinpoint the conditions under which digitally available data can further our understanding of life. Bridging the divide between historians, sociologists, and philosophers of science, *Data-Centric Biology* offers a nuanced account of an issue that is of fundamental importance to our understanding of contemporary scientific practices.

“The first critical book-length study of data centrism in the life sciences and beyond, *Data-Centric Biology* sheds new and surprising light on the phenomenon of big data. Analytically competent, historically informed, sociologically sensitive, this book is a brilliant and successful demonstration of what bringing together philosophy, history, and social studies of science can achieve.”

Hans-Jörg Rheinberger, Max Planck Institute for the History of Science

“Going far beyond the epistemic concerns that preoccupy many philosophers, *Data-Centric Biology* brilliantly shows readers the practices that make data informative and meaningful, the biocurators who carefully attend to data’s forms, and the social, economic, and political resources on which our systems of Big Data Sciences depend. Leonelli is a leader in this area of scholarship, commanding a vast comprehensive knowledge of the historical, philosophical, and social studies of the life sciences and the data practices that sustain them.”

Mike Fortun, Rensselaer Polytechnic Institute

Sabina Leonelli is associate professor of philosophy and history of science at the University of Exeter.

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