1. Record Nr. UNINA9910957639203321 Autore Leonelli Sabina Titolo Data-Centric Biology: A Philosophical Study / / Sabina Leonelli Pubbl/distr/stampa Chicago:,: University of Chicago Press,, [2016] ©2016 **ISBN** 9780226416502 022641650X Descrizione fisica 1 online resource : illustrations (black and white) Classificazione WC 3420 Disciplina 570.285 Soggetti Biology - Data processing - Philosophy Biology - Research - Philosophy Knowledge, Theory of Biology - Research - Sociological aspects Research - Philosophy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Previously issued in print: 2016. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Frontmatter -- Contents -- Introduction -- 1. Making Data Travel: Technology and Expertise -- 2. Managing Data Journeys: Social Structures -- 3. What Counts as Data? -- 4. What Counts as Experiment? -- 5. What Counts as Theory? -- 6. Researching Life in the Digital Age -- 7. Handling Data to Produce Knowledge -- Conclusion -- Acknowledgments -- Notes -- Bibliography -- Index In recent decades, there has been a major shift in the way researchers Sommario/riassunto 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

understand life-including ourselves? Leonelli is the first scholar to use

philosophical analysis of the epistemology of data. In analyzing the

pose. Are we witnessing the rise of an entirely new scientific epistemology? If so, how does that alter the way we study and

a study of contemporary data-intensive science to provide a

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.