1.	Record Nr.	UNINA9910165180103321
	Autore	Dessimoz Christophe
	Titolo	The Gene Ontology Handbook [[electronic resource] /] / edited by Christophe Dessimoz, Nives Škunca
	Pubbl/distr/stampa	Cham, : Springer Nature, 2017 New York, NY : , : Springer New York : , : Imprint : Humana, , 2017
	ISBN	1-4939-3743-X
	Edizione	[1st ed. 2017.]
	Descrizione fisica	1 online resource (XII, 305 p. 56 illus., 50 illus. in color.)
	Collana	Methods in Molecular Biology, , 1064-3745 ; ; 1446
	Disciplina	570.285
	Soggetti	Bioinformatics Handbooks. Handbooks and manuals.
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Primer on Ontologies -- The Gene Ontology and the Meaning of Biological Function -- Primer on the Gene Ontology -- Best Practices in Manual Annotation with the Gene Ontology -- Computational Methods for Annotation Transfers from Sequence -- Text Mining to Support Gene Ontology Curation and Vice Versa -- How Does the Scientific Community Contribute to Gene Ontology? -- Evaluating Computational Gene Ontology Annotations -- Evaluating Functional Annotations of Enzymes Using the Gene Ontology -- Community-Based Evaluation of Computational Function Prediction -- Get GO!: Retrieving GO Data Using AmiGO, QuickGO, API, Files, and Tools -- Semantic Similarity in the Gene Ontology -- Gene-Category Analysis -- Gene Ontology: Pitfalls, Biases, and Remedies -- Visualizing GO Annotations -- A Gene Ontology Tutorial in Python -- Annotation Extensions -- The Evidence and Conclusion Ontology (ECO): Supporting GO Annotations -- Complementary Sources of Protein Functional Information: The Far Side of GO -- Integrating Bio-Ontologies and Controlled Clinical Terminologies: From Base Pairs to Bedside Phenotypes -- The Vision and Challenges of the Gene Ontology.
	Sommario/riassunto	This book is open access under a CC BY 4.0 license. This book provides a practical and self-contained overview of the Gene Ontology (GO), the

leading project to organize biological knowledge on genes and their products across genomic resources. Written for biologists and bioinformaticians, it covers the state-of-the-art of how GO annotations are made, how they are evaluated, and what sort of analyses can and cannot be done with the GO. In the spirit of the Methods in Molecular Biology book series, there is an emphasis throughout the chapters on providing practical guidance and troubleshooting advice. Authoritative and accessible, The Gene Ontology Handbook serves non-experts as well as seasoned GO users as a thorough guide to this powerful knowledge system.