1. Record Nr. UNINA9910345964803321 Autore Julio Vera Titolo Foundations of Theoretical Approaches in Systems Biology Frontiers Media SA, 2019 Pubbl/distr/stampa Descrizione fisica 1 online resource (216 p.) Collana Frontiers Research Topics Soggetti Biology, life sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia If biology in the 20th century was characterized by an explosion of new Sommario/riassunto technologies and experimental methods, that of the 21st has seen an equally exuberant proliferation of mathematical and computational methods that attempt to systematize and explain the abundance of available data. As we live through the consolidation of a new paradigm where experimental data goes hand in hand with computational analysis, we contemplate the challenge of fusing these two aspects of the new biology into a consistent theoretical framework. Whether systems biology will survive as a field or be washed away by the tides of future fads will ultimately depend on its success to achieve this type of synthesis. The famous quote attributed to Kurt Lewin comes to mind: "there is nothing more practical than a good theory". This book presents a wide assortment of articles on systems biology in an attempt

> to capture the variety of current methods in systems biology and show how they can help to find answers to the challenges of modern biology.