1. Record Nr. UNINA9910838371103321 Autore Stevens Hallam Titolo Life Out of Sequence : A Data-Driven History of Bioinformatics / / Hallam Stevens Pubbl/distr/stampa Chicago:,: University of Chicago Press,, [2013] ©2013 **ISBN** 0-226-08017-X 0-226-08034-X Descrizione fisica 1 online resource (303 p.) Disciplina 572.330285 572/.330285 Soggetti Bioinformatics - History Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Frontmatter -- Contents -- Introduction -- 1. Building Computers --2. Making Knowledge -- 3. Organizing Space -- 4. Following Data -- 5. Ordering Objects -- 6. Seeing Genomes -- Conclusion: The End of Bioinformatics -- Acknowledgments -- Archival Sources -- Notes --Bibliography -- Index Sommario/riassunto Thirty years ago, the most likely place to find a biologist was standing at a laboratory bench, peering down a microscope, surrounded by flasks of chemicals and petri dishes full of bacteria. Today, you are just as likely to find him or her in a room that looks more like an office,

poring over lines of code on computer screens. The use of computers in biology has radically transformed who biologists are, what they do, and how they understand life. In Life Out of Sequence, Hallam Stevens

looks inside this new landscape of digital scientific work. Stevens chronicles the emergence of bioinformatics-the mode of working across and between biology, computing, mathematics, and statistics-from the 1960s to the present, seeking to understand how knowledge about life is made in and through virtual spaces. He shows how scientific data moves from living organisms into DNA sequencing machines, through software, and into databases, images, and scientific publications. What he reveals is a biology very different from the one of

predigital days: a biology that includes not only biologists but also highly interdisciplinary teams of managers and workers; a biology that is more centered on DNA sequencing, but one that understands sequence in terms of dynamic cascades and highly interconnected networks. Life Out of Sequence thus offers the computational biology community welcome context for their own work while also giving the public a frontline perspective of what is going on in this rapidly changing field.