Record Nr. UNINA9910451074103321 The mouse in animal genetics and breeding research [[electronic **Titolo** resource] /] / Eugene J. Eisen [editor] Pubbl/distr/stampa London, : Imperial College Press Hackensack, NJ:: London,: Distributed by World Scientific Pub. Co., c2005 **ISBN** 1-281-34751-5 9786611347512 1-86094-716-6 Descrizione fisica 1 online resource (376 p.) Altri autori (Persone) EisenEugene J Disciplina 616/.027333 Soggetti Mice - Genetics Mice as laboratory animals Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto TABLE OF CONTENTS: PREFACE: CHAPTER 1 THE BEGINNINGS: ODE TO A WEE MOUSE; CHAPTER 2 TESTING QUANTITATIVE GENETIC SELECTION THEORY; CHAPTER 3 MATERNAL EFFECTS, GENOMIC IMPRINTING AND **EVOLUTION: CHAPTER 4 INBREEDING AND CROSSBREEDING: CHAPTER 5** GENOTYPE BY ENVIRONMENT INTERACTION: LESSONS FROM THE MOUSE; CHAPTER 6 GENETICS OF GROWTH IN THE MOUSE; CHAPTER 7 GENETICS OF BODY COMPOSITION AND METABOLIC RATE: CHAPTER 8 GENETICS OF REPRODUCTION; CHAPTER 9 GENETICS AND BEHAVIOR; CHAPTER 10 GENETICS OF DISEASE RESISTANCE; CHAPTER 11 GENOMIC DISSECTION OF COMPLEX TRAIT PREDISPOSITION CHAPTER 12 MOUSE MUTAGENESISCHAPTER 13 EMBRYO BIOTECHNOLOGIES; CHAPTER 14 TRANSGENICS; CHAPTER 15 THE MOUSE IN BIOMEDICAL RESEARCH; CHAPTER 16 THE MOUSE GENOME SEQUENCING PROJECT: AN OVERVIEW; Index Sommario/riassunto The sequencing of the mouse genome has placed the mouse front and

center as the most important mammalian genetics model. However, no recent volume has detailed the genetic contributions the mouse has

made across the spectrum of the life sciences; this book aims to fill that vacuum. Mouse genetics research has made enormous contributions to the understanding of basic genetics, human genetics, and livestock genetics and breeding. The wide-ranging topics in the book include the mouse genome sequencing effort, molecular dissection of quantitative traits, embryo biotechnology, ENU mutagenesis, and