Record Nr. UNINA9910458628003321 History, wild mice, and genetics [[electronic resource] /] / edited by **Titolo** James G. Fox ... [et al.] Pubbl/distr/stampa Amsterdam; ; Boston, MA, : Academic Press, : Elsevier, c2007 **ISBN** 1-280-75151-7 9786610751518 0-08-046906-X Edizione [2nd ed.] Descrizione fisica 1 online resource (352 p.) Collana American College of Laboratory Animal Medicine series The mouse in biomedical research; ; 1 Altri autori (Persone) FoxJames G Disciplina 616.027333 616.027334 Soggetti Mice as laboratory animals Animal models in research 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 bibliographies and indexes. Nota di contenuto Front Cover; The Mouse in Biomedical Research: History, Wild Mice, and Genetics; Copyright Page; Table of Contents; List of Reviewers; List of Contributors; Foreword; Preface; Chapter 1. Building a Better Mouse: One Hundred Years of Genetics and Biology; Chapter 2. Systematics of the genus Mus; Chapter 3. The Secret World of Wild Mice; Chapter 4. Breeding Systems: Considerations, Genetic Fundamentals, Genetic Background, and Strain Types; Chapter 5. Mouse Strain and Genetic Nomenclature: an Abbreviated Guide: Chapter 6. The Mouse Genome: Chapter 7. Gene Mapping: Chapter 8. Genetic Monitoring Chapter 9. CytogeneticsChapter 10. Mouse Embryology: Research Techniques and a Comparison of Embryonic Development between Mouse and Man; Chapter 11. Gamete and Embryo Manipulation; Chapter 12. Chemical Mutagenesis in Mice; Chapter 13. Gene-Specific Mutagenesis; Chapter 14. Gene Transfer Studies Using Mouse Models; Chapter 15. Mouse and Human Pluripotent Stem Cells; Chapter 16. Drugs and the Mouse: Pharmacology, Pharmacogenetics, and

Pharmacogenomics; Index; Colour Plates

## Sommario/riassunto

History, Wild Mice, and Genetics, the first volume in the four volume set, The Mouse in Biomedical Research, provides information about the history, biology and genomics of the laboratory mouse (Mus musculus), as well as basic information on maintenance and use of mouse stocks. Mouse origins and relationships are covered in chapters on history, evolutionary taxonomy and wild mice. Genetics and genomics of the mouse are covered in chapters on genetic nomenclature, gene mapping, cytogenetics and the molecular organization of the mouse genome. Maintenance of laboratory mice is descr