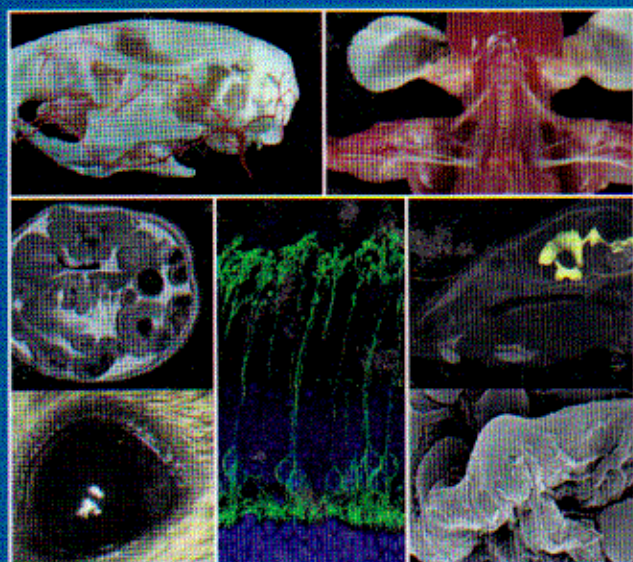


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Morphological Mouse Phenotyping

*Anatomy, Histology
and Imaging*

Animal models of disease are fundamental in research to improve human health. The success of using genetically engineered mice to evaluate molecular disease hypotheses has encouraged the development of massive European and global projects making the mouse the most used animal model. Consequently, laboratory mouse populations are straining the housing capacity of pharmaceutical and biotechnology companies, as well as public research institutions. However, the scientific community often lacks sufficient expertise in morphological phenotyping to effectively characterize and validate these animal models.

Although the mouse displays fundamental morphological similarities to humans, a mouse is not a man. Here we present a complete and integrative description of normal mouse morphology. The main characteristics of this book are:

- More than 2,200 original images have been specifically produced for this book in the Mouse Imaging Platform (Center for Animal Biotechnology and Gene Therapy, Universitat Autònoma de Barcelona, Spain).
- These images show the anatomy, histology and cellular structure of mouse organs.
- In addition, correlative X-ray, Computed Tomography, Magnetic Resonance and Ultrasound images complete this integrative vision of mouse morphology.
- Classical anatomical techniques such as conventional dissection, skeletal preparations, vascular injections, as well as histological, immunohistochemical and electron microscopy techniques have been employed to characterize mouse morphology.

This book, essentially an atlas, also contains explanatory diagrams and text that guide the reader through normal mouse anatomy, histology and imaging, and is aimed for mouse researchers as well as veterinarian and human pathologists.



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