

1. Record Nr.	UNINA9910409697703321
Titolo	Animal Models of Human Birth Defects / / edited by Aimin Liu
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-2389-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (vii, 244 pages) : illustrations
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1236
Disciplina	616.043
Soggetti	Diagnosis, Laboratory Animal models in research Molecular biology Laboratory Medicine Animal Models Molecular Medicine Malformacions Naixement Investigació Experimentació animal Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Using forward and reverse genetics in mouse to study birth defects -- Chapter 2: Using animals to study neural tube defects -- Chapter 3: Using animals to study ciliopathies -- Chapter 4: Using animals to model human skeletal defects -- Chapter 5: Understanding eye defects using animal models -- Chapter 6: Modelling kidney and urinary tract defects in animals -- Chapter 7: Pancreas development and type I diabetes -- Chapter 8: Using animals to study human birth defects affecting the functions of the digestive system -- Chapter 9: Modelling human birth defects with zebrafish -- Chapter 10: Modelling diseases with C. elegans -- Chapter 11: Infectious disease and birth defects.
Sommario/riassunto	This book focuses on the use of animal models to study various human defects. It summarizes our current understanding of a variety of

common human birth defects and the essential role of animal models in shedding light on the underlying mechanisms of these disorders. Birth defects are the leading cause of infant deaths, and cost billions of dollars in care for those affected. Unfortunately, the lack of a clear understanding of the mechanisms leading to many of these developmental disorders has hindered effective prevention and early intervention strategies. Studies using animal models have provided essential insights into several human birth defects. This book serves as a valuable reference resource for researchers and graduate students who are interested in learning the basic principles as well as the latest advances in the study of the mechanisms of human birth defects.

---