1. Record Nr. UNINA9911049218703321

Autore	Somuncu Ozge Sezin
Titolo	Organoids for Preclinical Disease Modeling and Personalized Medicine / / edited by Ozge Sezin Somuncu
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-032-10024-0
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (229 pages)
Collana	Stem Cell Biology and Regenerative Medicine, , 2196-8993 ; ; 78
Altri autori (Persone)	Somuncu
Disciplina	571.6 616.02774
Soggetti	Stem cells Regenerative medicine Diseases - Animal models Immunology Neurosciences Cancer Stem Cell Biology Regenerative Medicine and Tissue Engineering Disease Models Neuroscience Cancer Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Emerging roles of organoids in cancer research -- University of Greenwich -- Preclinical organoid models for modeling cancer -- Dana Farber Cancer Institute -- Prognostication of DNA repair inhibitor response in cancer organoids -- Ramya Ravindranathan -- Unraveling radiation response Insights from organoid systems -- Zeinaf Muradova -- Bladder organoids for healthy and diseased tissue modeling -- Dilara Akbulut -- Organoids to investigate immune functions immunological diseases and therapy -- Alexander Cicala -- Lymphoma organoid models for evaluating and targeting tumor immune microenvironment -- Sahin Lacin -- The use of organoids for modeling bone tumors and testing drugs -- Doruk Somuncu -- Lung organoids

	in disease modeling and treatment -- Organoid technology for brain disease modeling -- Deniz Altunsu Kurt -- Investigating pediatric diseases with organoid systems -- Fulden Aycan -- Engineering transplantable organoids for children with pediatric disorder -- Tansu Salman -- Organoid technology in cardiology for disease modeling and treatment -- Irem Turkmen -- Gastrointestinal organoids from pluripotent stem cells Jose Guillermo Sanchez Arriola Cincinnati Children Hospital Medical Center -- Brain organoids for unraveling human brain development and evolution -- Organoids for modeling skin hair pigmentation -- Proteomics applications on organoids to improve preclinical research.
Sommario/riassunto	Organoid technologies are preclinical models in which drug responses or radiotherapies are determined very closely to patient response. While until the recent past there were no three-dimensional systems in which the entire cellular content of an organ could be reflected, we can now create the physiological and structural features of an organ in vitro and model a disease effectively. As these diseases may be developmental defects, chronic diseases can also be investigated in detail at the gene and protein level with these systems. In terms of developmental biology, thanks to the use of organoids, it is possible to learn the physiological internal dynamics of organs and to model diseases other than cancer. Chapters include introductions to their respective topics, recent advancements and how future applications can be implemented to organoid models. Organoids for Preclinical Disease Modeling and Personalized Medicine serves as an aid to researchers working in this vital area of research.