Record Nr. UNINA9910298409303321 Cell Culture Technology / / edited by Cornelia Kasper, Verena Charwat, Titolo Antonina Lavrentieva Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-74854-8 Edizione [1st ed. 2018.] Descrizione fisica 1 online resource (XII, 168 p. 64 illus., 60 illus. in color.) Learning Materials in Biosciences, , 2509-6125 Collana Disciplina 571.638 Soggetti Biomedical engineering Cell culture Science education Regenerative medicine Tissue engineering Biomedical Engineering/Biotechnology Cell Culture Science Education Regenerative Medicine/Tissue Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia History of cell culture - beyond animal cell lines -- Essentials in Cell Nota di contenuto Culture -- Cell Culture Media -- Primary cell culture -- 2 D vs 3 D cell culture -- Biomaterials -- Cell surface interaction -- Mimicking physiology in cell cultures -- Co-cultures -- Bioreactors and Automation. Sommario/riassunto This textbook provides an overview on current cell culture techniques, conditions, and applications specifically focusing on human cell culture. This book is based on lectures, seminars and practical courses in stem cells, tissue engineering, regenerative medicine and 3D cell culture held at the University of Natural Resources and Life Sciences Vienna BOKU and the Gottfried Wilhelm Leibniz University Hannover, complemented by contributions from international experts, and therefore delivers in a compact and clear way important theoretical, as well as practical

knowledge to advanced graduate students on cell culture techniques

and the current status of research. The book is written for Master students and PhD candidates in biotechnology, tissue engineering and biomedicine working with mammalian, and specifically human cells. It will be of interest to doctoral colleges, Master- and PhD programs teaching courses in this area of research.