Record Nr. UNINA9910254650103321 Patient-Derived Xenograft Models of Human Cancer // edited by **Titolo** Yuzhuo Wang, Dong Lin, Peter W. Gout Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Humana,, 2017 **ISBN** 3-319-55825-0 Edizione [1st ed. 2017.] 1 online resource (204 pages) Descrizione fisica Collana Molecular and Translational Medicine, , 2197-7852 Disciplina 616.9940072 Soggetti Oncology Oncology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction -- History and Evolution of PDX Cancer Models --Establishment and Characterization of PDX Models -- Methods of Generating PDX Models -- Fidelity and Stability of PDX Models --Applications of PDX Models -- Studies of Cancer Heterogeneity -- PDX and Cancer Stem Cells -- Modeling Cancer Metastasis -- Modeling Drug Resistance -- PDX and Biomarker Development -- PDX and Preclinical Drug Screening -- Co-clinical Trials and Personalized Cancer Therapy/Precision Medicine -- Epilogue -- Future Perspective. Sommario/riassunto This book provides a comprehensive, state-of-the-art review of PDX cancer models. In separately produced chapters, the history and evolution of PDX models is reviewed, methods of PDX model development are compared in detail, characteristics of available established models are presented, current applications are summarized and new perspectives about use of PDX models are proposed. Each chapter is written by a world-renowned expert who is conducting cutting-edge research in the field. Each of the subsections provide a comprehensive review of existing literature addressing the particular topic followed by a conclusive paragraph detailing future directions. Extensive illustrations make this an interactive text. Patient-Derived Xenograft Models of Human Cancer will serve as a highly useful

resource for researchers and clinicians dealing with, or interested in,

this important topic. It will provide a concise yet comprehensive summary of the current status of the field that will help guide preclinical and clinical applications as well as stimulate investigative efforts. This book will propagate innovative concepts and prompt the development of ground-breaking technological solutions in this field.