Record Nr. UNINA9910437850703321 Autore Foo Jong Yong Abdiel Titolo Ethics for biomedical engineers / / Jong Yong Abdiel Foo ...[et. al.] Pubbl/distr/stampa New York, : Springer Science, 2013 1-4614-6913-9 **ISBN** Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (vii, 121 pages): illustrations (some color) Collana Gale eBooks Disciplina 174.29028 Soggetti Biomedical engineers - Professional ethics Biomedical engineering - Moral and ethical aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface -- Ethical practices and engineering -- Ethics & biomedical engineering practice & research: origins of principles & consent --Ethical considerations in clinical engineering -- Ethics of biomaterials for implants -- Ethics and data mining in biomedical engineering --Whistle blowing: an option or an obligation? -- Index. Over the last few decades, there are increasing public awareness of Sommario/riassunto adverse events involving engineering failures that not only led to monetary losses but also more importantly, human injuries and deaths. Whilst it is vital for an engineering professional or student to acquire the necessary technical knowledge and skills in their respective field, they must also understand the ethical essences that are relevant to their profession. Engineering professionals like biomedical engineers, need to appreciate the fundamentals of best practices and recognise how any derivation from such practices can have undesirable impacts on human lives. Through this book, it is hoped that readers would draw the relevance between the study of ethics and biomedical engineering. The book would be a useful source and reference for college-level and university-level students. Moreover, the contents are written so as to also provide valuable insights even for existing biomedical engineers and those enrolled in continual engineering education program. The following aspects of biomedical engineering

are covered in the book: § Research and clinical studies involving

medical devices. § Working in a healthcare establishment.

§ Developing and servicing medical instrumentations. § Choice of biomaterials to develop implants. § Performing statistical analyses and data mining.