Record Nr. UNINA9910253908903321 A Modern Approach to Biofilm-Related Orthopaedic Implant Infections: **Titolo** Advances in Microbiology, Infectious Diseases and Public Health Volume 5 / / edited by Lorenzo Drago Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2017 **ISBN** 3-319-52274-4 Edizione [1st ed. 2017.] 1 online resource (VI, 119 p. 20 illus. in color.) Descrizione fisica Collana Advances in Microbiology, Infectious Diseases and Public Health, 2365-2675;;971 616.9041 Disciplina Soggetti Medical microbiology Bacteriology Medical Microbiology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters and Nota di bibliografia Nota di contenuto Chapter 1: The concept of biofilm-related implant malfunction and "low-grade infection" -- Chapter 2: Mechanisms of bacterial colonization of implants and host response -- Chapter 3: Animal models of implant-related low grade infections -- Chapter 4: Microbiological diagnosis of implant-related infections: scientific evidence and cost/benefit analysis of routine antibiofilm processing --Chapter 5: The role of the new biomarkers for the diagnosis of implant-related infections in orthopaedics and trauma -- Chapter 6: Fast resorbable antibacterial hydrogel coating of implants to prevent bacterial colonization and implant malfunction: what is the evidence? -- Chapter 7: Prophylaxis and therapy in Orthopaedic implant infection: where are we? -- Chapter 8: Antibacterial bioglass for chronic bone infection -- Chapter 9: Prosthetic Joint Infections and cost analysis. Sommario/riassunto This book discusses Prosthetic Joint Infection (PJI), which remains one of the most common problems necessitating revision arthroplasty. It pursues a multidisciplinary approach, bringing together opinions from

the leading experts in the field. The book identifies the potential causes of these infections, provides sound diagnostic criteria

guidelines, and explains how these prosthetic infections are managed from orthopedic surgery, clinical and diagnostic perspectives. PJI can lead to multiple revision surgeries and significant patient morbidity. Periprosthetic infection rates remain around 1–2% after primary total hip and knee arthroplasty and account for approximately 7-12% of all revision cases. Orthopedic hardware infections are much-feared and costly complications that can occur when these devices are implemented both in traumatic cases as well as in joint replacement surgery. Because these infections can lead to higher morbidity, it is important to understand their pathophysiology and the principles behind their diagnosis and initial treatment. The pathogenesis of these kinds of infections is intimately connected to the biofilm-producing trait characteristic of many microorganisms, which can have a critical effect on the likely success of treatments. The book offers a unique guide for all scientists working in arthroplasty who are seeking an update on the field, and for newcomers alike.