Record Nr. UNINA9910647775103321 Microbiome in 3P Medicine Strategies: The First Exploitation Guide // **Titolo** edited by Nadiya Boyko, Olga Golubnitschaja Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 **ISBN** 3-031-19564-7 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (434 pages) Collana Advances in Predictive, Preventive and Personalised Medicine, , 2211-3509;;16 Disciplina 616.01 Soggetti Medical microbiology Medical informatics Metabolism - Disorders Medical Microbiology **Health Informatics** Metabolic Disease Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Chapter 1: Microbiome in the framework of Predictive. Preventive and Nota di contenuto Personalised Medicine -- Chapter 2: Artificial Intelligence-based Predictive, Preventive, and Personalised Medicine applied to Bacteraemia Diagnosis -- Chapter 3: Vaginal microbiome and its role in HPV induced cervical carcinogenesis -- Chapter 4: Microbiome in lean Individuals: Phenotype-specific Risks and Outcomes -- Chapter 5: Microbiome and Obesity -- Chapter 6: Pathophysiology-based approach for individualized use of probiotics and prebiotics for metabolic syndrome: implementing predictive, preventive, and personalized medical approach -- Chapter 7: Selection of prebiotic substances for individual prescription -- Chapter 8: Probiotic Administration for the Prevention and Treatment of Gastrointestinal, Metabolic and Neurological Disorders -- Chapter 9: Microbial therapy

with indigenous bacteria. From idea to clinical evidence -- Chapter 10: Fecal microbiota transplantation in diseases not associated with Clostridium difficile: current status and future therapeutic option -- Chapter 11: Personalized microbiome correction by application of

individual nutrition for type 2 diabetes treatment -- Chapter 12: Pro-, pre- and synbiotic supplementation and oxalate homeostasis in 3PM context: focus on microbiota oxalate-degrading activity -- Chapter 13: In vitro study of specific properties of probiotic strains for effective and personalized probiotic therapy -- Chapter 14: Probiotic concepts of predictive, preventive, and personalized medical approach for obesity: Lactic acid bacteria and Bifidobacteria probiotic strains improve glycemic and inflammation profiles -- Chapter 15: Oral Microbiome and Innate Immunity in Health and Disease: Building a Predictive, Preventive and Personalized Therapeutic approach.

## Sommario/riassunto

The book analyses microbiome-relevant findings focused on clinical needs providing the roadmap to implement recent achievements in the area representing a valuable contribution to the paradigm shift from reactive to predictive, preventive and personalised medicine (PPPM / 3PM) considered as the most advanced concept in medicine. Already well-acknowledged as well as future advantages of application of pre-. pro- and pharma-biotics are detailed in the book. Socio-economic impacts of the area are considered in the context of the entire spectrum of healthcare services from disease care provided to patients up to health care provided to persons in suboptimal health conditions. Innovative technologies including phenotyping, genotyping, individualised profiling, patient stratification, big data analysis, and multi-omics, amongst others are all involved in the book. The book is unique from view point of multi-professional expertise involved. International network presents more than 10 countries worldwide including Belgium, China, Germany, Israel, Ukraine and USA. The data presented are of great scientific value and of particular importance for educating a broad spectrum of professionals including researchers, healthcare givers, policy makers, business people, policy makers and general population.