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Titolo	Urine [[electronic resource]] : Promising Biomarker Source for Early Disease Detection // edited by Youhe Gao
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ISBN	981-13-9109-2
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VI, 244 p. 51 illus., 37 illus. in color.)
Disciplina	610.724
Soggetti	Laboratory medicine Proteomics Molecular biology Laboratory Medicine Molecular Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Urine is not a human waste but a medical treasure -- Human Urine proteome: a powerful source for clinical research -- Comparison of urinary proteomes among three animal models -- Urimen, a membrane that store urinary components for largescale biomarker study -- Post-translation modifications of human urine -- Application of Peptide Level and Post translational Modifications to Integrative Analyses in Proteomics -- Urinary Protein Biomarker Database 2.0: a literature-curated database for protein biomarkers in urine -- Urine glucose levels are disordered before blood glucose level increase was observed in Zucker diabetic fatty rats -- Cancer Biomarker Discovery in Urine of Walker 256 Tumor-bearing Models -- Candidate Urinary Biomarker Discovery in Gliomas -- Changes in the Urinary Proteome in a Patient-Derived Xenograft (PDX) Nude Mouse Model of Colorectal Tumor -- Urine is an ideal biomarker resource in early detecting neurodegenerative diseases -- Urinary proteome biomarkers for early detection of respiratory diseases -- Application of urine proteome in cardiac diseases biomarker discovery -- Changes of Urinary Proteins in infectious disease models -- The application of urinary proteomics in early detection of digestive diseases -- Serial changes of urinary

proteome in animal models of renal diseases -- Effects of extrinsic factors on the urinary proteome -- Exhaled Breath: Another Biomarker Source that Complementary to Urine -- Tears: potential window for monitoring systemic conditions.

Sommario/riassunto

This book demonstrates the potential of urine as a biomarker resource for early disease detection, covering the related theory, strategies, tools and findings. Biomarkers are measurable changes associated with diseases. Blood, as a critical part of its internal environment, is closely monitored and controlled by the body to maintain homeostasis, especially in the early stages of diseases. In contrast, urine, as a form of waste excreted by the body, collects a variety of substance changes. Accordingly, urine can offer an ideal resource for early biomarker discovery. In addition, urine is more stable than blood in vitro, and is easy to store and analyze. The book discusses exciting preliminary applications of urine biomarkers for diseases affecting major biological systems. Its main goal is to make scientists, clinicians and medical companies aware of this important, exciting, undeveloped, and profitable field.
