

METHODS IN MOLECULAR BIOLOGY

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Clinical Proteomics

Methods and Protocols

Second Edition

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Preface

Clinical proteomics is a rapidly evolving field, characterized by continuous technological and methodological advancements. Since the publication of the Clinical Proteomics *Methods and Protocols* (volume I, Humana Press, 2008), significant methodological developments have resulted in increased sensitivity in protein identification, including analysis of protein posttranslational modifications as well as more reliable protein quantification. Multiple different types of biological samples can now be analyzed comprehensively for their protein context. In addition, tools for protein functional annotation, assignment to regulatory pathways and correlation to other—omics datasets are being continuously developed and optimized. Even more, significant progress towards proteomic biomarker implementation has been achieved with mass spectrometry-based approaches now being used for biomarker validation. This new volume of Clinical Proteomics captures these latest developments in the field and brings together a multidisciplinary team of leading researchers to provide step by step their latest protocols for clinical proteomics analysis. It is expected that the presented approaches may facilitate activities and serve as a reliable guide to researchers, including clinicians, chemists, molecular biologists, bioinformaticians, and computational biologists and, in general, investigators working on biomarker development.

Athens, Greece

*Antonia Vlahou
Manousos Makridakis*

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