

Everything you need to begin conducting your own proteomics research

Proteomics: Introduction to Methods and Applications is the ideal introduction to the field of proteomics, giving readers the skills and knowledge needed to study proteins, their structure, and their function in cells, tissues, and organisms. Written by experienced researchers, the text not only covers all the basic concepts, techniques, and applications, it also offers readers insights and practical tips based on the authors' many years of hands-on work in proteomics research. Moreover, the text has been carefully edited to ensure a thorough, consistent, and highly readable approach throughout all the chapters.

This text offers everything readers need to begin conducting their own proteomics research, including:

- A full chapter dedicated to laboratory exercises and protocols to help readers apply their skills
- Step-by-step explanations of key analytical methods, including mass spectrometry, sample preparation, chromatographic and electrophoretic separation, and micro-total analysis systems
- Complete coverage of bioinformatics, including an introduction to important proteomics databases
- A glossary defining the key terms in the field
- An appendix with an annotated list of Internet resources, information on post-translational modifications, and the masses and compositions of amino acid residues

This text is designed for upper-level undergraduate and graduate courses in proteomics. Upon successful completion of the text, students are able to apply their skills and knowledge to solve problems in such fields as biotechnology, drug discovery, and medical research.

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