

1. Record Nr.	UNINA9910300342003321
Titolo	Posttranslational Protein Modifications in the Reproductive System // edited by Peter Sutovsky
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4939-0817-0
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (259 p.)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 759
Disciplina	572.645
Soggetti	Reproductive health Endocrinology Molecular biology Reproductive Medicine Molecular Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Sperm Proteases and Extracellular Ubiquitin-Proteasome System Involved in Fertilization of Ascidiens and Sea Urchins (Hitoshi Sawada, Masako Mino and Mari Akasaka) -- Isylation: A Conserved Pathway in Mammalian Pregnancy (Thomas R. Hansen and James K. Pru) -- Src-family Tyrosine Kinases in Oogenesis, Oocyte Maturation and Fertilization: An Evolutionary Perspective (William H. Kinsey) -- Posttranslationally Modified Tubulins and Other Cytoskeletal Proteins: Their Role in Gametogenesis, Oocyte Maturation, Fertilization and Pre-implantation Embryo Development (Heide Schatten and Qing-Yuan Sun) -- Deubiquitinating Enzymes in Oocyte Maturation, Fertilization and Preimplantation Embryo Development (Namdori R. Mtango, Keith E. Latham and Peter Sutovsky) -- Posttranslational Modifications of Zona Pellucida Proteins (Naoto Yonezawa) -- Role of aberrant protein modification, assembly and localization in cloned embryo phenotypes (Keith E. Latham) -- Role of Posttranslational Protein Modifications in Epididymal Sperm Maturation and Extracellular Quality Control (Gail A. Cornwall) -- Ubiquitin-Proteasome System in Spermatogenesis (Rohini Bose, Gurpreet Manku, Martine Culty and Simon S. Wing) -- Role of Posttranslational Modifications in <i>C. elegans</i> and <i>Ascaris</i>

Sommario/riassunto

This book's aim is to increase the awareness of a great variety of posttranslational modifications in the male and female reproductive system. Some of the most intriguing reproductive strategies, mechanisms, and pathways involving PTM are discussed, with an added angle of evolutionary conservation and diversity. The book also chapters on sperm-egg binding, as well as on histone modification in both the embryo and sperm. Chapters are also devoted to protein ubiquitination, the regulation of sperm function during fertilization in mammals and tubulin modifications in gametes and embryos. There are no other current books on posttranslational protein modifications as they relate to reproduction, making this contribution unique in the field. It is useful for both researchers and graduate students alike.