

1. Record Nr.	UNINA9910825126503321
Titolo	Oogenesis : the universal process // editors, Marie-Helene Verlhac and Anne Villeneuve
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, 2010
ISBN	9786612550294 9781282550292 1282550292 9780470687970 0470687975 9780470687987 0470687983
Edizione	[1st ed.]
Descrizione fisica	1 online resource (534 p.)
Altri autori (Persone)	VerlhacMarie-Helene VilleneuveAnne <1959->
Disciplina	571.8/45 571.845
Soggetti	Oogenesis Embryology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Oogenesis: The Universal Process; Contents; List of contributors; Foreword; Section I: Oocyte determination; 1 The sperm/oocyte decision, a C. elegans perspective; 2 Sex determination and gonadal development; 3 Clytia hemisphaerica: A Cnidarian model for studying oogenesis; Section II: Oocyte growth; 4 Soma-germline interactions in the ovary: an evolutionary perspective; Section III: Homologous chromosome pairing and recombination; 5 Homologous chromosome pairing and synapsis during oogenesis; 6 Meiotic recombination in mammals; Section IV: Meiosis resumption 7 Initiation of the meiotic prophase-to-metaphase transition in mammalian oocytes 8 Oocyte-specific translational control mechanisms; 9 MPF and the control of meiotic divisions: old problems, new concepts; Section V: The cytological events of meiotic divisions; 10 Meiotic spindle assembly and chromosome segregation in oocytes; 11

Mechanisms of asymmetric division in metazoan meiosis; Section VI: Biological clocks regulating meiotic divisions; 12 The control of the metaphase-to-anaphase transition in meiosis I; 13 Mechanisms controlling maintenance and exit of the CSF arrest
14 Cytostatic arrest: post-ovulation arrest until fertilization in metazoan oocytes Section VII: Oocyte ageing in mammals; 15 Mammalian oocyte population throughout life; Section VIII: From oocyte to embryo; 16 Fertilization and the evolution of animal gamete proteins; 17 Remodeling the oocyte into a totipotent zygote: degradation of maternal products; 18 Chromatin remodeling in mammalian oocytes; 19 Follicles and medically assisted reproduction; Index; Colour Plates

Sommario/riassunto

Oogenesis - the process by which female germ cells develop into mature eggs, or ova - is a complex process involving many important elements of developmental and cellular biology: from cell-cell interactions, complex signalling cascades, specialized cell cycles and cytoskeleton organization. Oocytes from various species (including clam, starfish, xenopus and mouse) are excellent model systems to study the biochemistry of cell division with important implications for basic and clinical research. This book describes the entire process of oogenesis in chronological order with contributions
