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Nota di contenuto	Machine generated contents note: I. Oocyte and early embryo 1. Polarity, cell cycle control and developmental potential of Xenopus laevis oocyte. Malgorzata Kloc & Jacek Z. Kubiak. (The Methodist Hospital, Houston, USA & IGDR, CNRS/Univ. Rennes 1, France). 2. Cell cycle regulation & cytoskeleton in Xenopus. Marc W. Kirschner (Harvard University, USA) or Kinases and phosphatases in Xenopus oocytes and embryos. Tim Hunt (University of Cambridge, GB) or Randall W. King (Harvard University, USA). 3. DNA replication and repair in Xenopus. Julian J. Blow (University of Dundee, Wellcome Trust Centre for Gene Regulation & Expression, GB) or Marcel Mechali (IGH, CNRS, Montpellier, France). 4. Gene expression in Xenopus laevis development and nuclear transfer. John B. Gurdon (The Wellcome Trust/Cancer Research UK Gurdon Institute, GB). 5. Translational control in Xenopus development. Joel D. Richter (Univ. of Massachusetts, USA). II. Midblastula transition, gastrulation and neurulation 6. Apoptosis in Xenopus embryos. Sally Kornbluth (Duke University, USA) or Jean Gautier Columbia University College of Physicians and Surgeons, New York, USA. 7. Cell cleavage

and polarity in *Xenopus laevis* embryo epithelium. Jean-Pierre Tassan (IGDR, CNRS/Univ. Rennes, France) or John B. Wallingford (University of Texas at Austin, TX, USA) 8. Germ cell specification, Mary Lou King (University of Miami, USA). 9. Mesoderm formation in *Xenopus*. James C. Smith (The Gurdon Institute, GB) or Laurent Kodjabachian (CNRS/Univ. Provence, Marseille, France) or Sergei Y. Sokol (Mount Sinai School of Medicine, New York, USA) or Eddy De Robertis (University of California, Los Angeles, USA) or Pierre McCrea (MDAnderson Cancer Center, Houston TX, USA). 10. Neural tube formation in *Xenopus*. Naoto Ueno (National Institute for Basic Biology, Okazaki, Japan.). 11. Left-right axis control in *Xenopus* development. Ali H. Brivanlou (The Rockefeller University, New York, USA). III. Metamorphosis and organogenesis 12. Metamorphosis and endocrine system development in *Xenopus*. Barbara A. Demeneix (CNRS, Paris, France). 13. *Xenopus laevis* kidney development. Rachel Miller (MD Anderson Cancer Center, University of Texas, Houston, USA). 14. *Xenopus* nervous system development. Christine E. Holt (Cambridge University, GB) or Eric J. Bellefroid (Universite Libre de Bruxelles, Institut de biologie et de medecine moleculaires, Belgium). 15. Gonads development in *Xenopus* and other anurans. Rafal P. Piprek (Jagiellonian University, Krakow, Poland). 16. Immune system development in *Xenopus*. Louis Du Pasquier (Universitat Basel, Switzerland). IV. Novel techniques and approaches 17. MicroRNA in *Xenopus* development. Nancy Papalopulu (University of Manchester, GB). 18. Genetics of *Xenopus tropicalis* development. Richard M. Harland (University of California, Berkeley, USA) or Nicolas Pollet (Institute of Systems and Synthetic Biology, Genopole, CNRS, Universite d'Evry Val d'Essonne, Evry, France). 19. Transgenic *Xenopus laevis* as an experimental tool for amphibian regeneration study. Yoko Ueda (Nara Women's University, Nara, Japan). 20. The *Xenopus* model for regeneration research. Jonathan MW Slack (Centre for Regenerative Medicine, University of Bath, Bath, BA2 7AY, United Kingdom and Stem and Cell Institute, University of Minnesota, MN, USA).

Sommario/riassunto

"*Xenopus* frogs have long been used as model organisms in basic and biomedical research. These frogs have helped unlock basic developmental and cellular processes that have led to scientific breakthroughs and have had practical application in cancer research and regenerative medicine. *Xenopus Development* discusses the biology and development of this important genus, and will be a great tool to researchers using these frogs in their research. Divided into four sections, the highlights key *Xenopus* development from embryo to metamorphosis, and the cellular processes, organogenesis, and biological development"--
"Provides broad overview of the developmental biology of both *Xenopus laevis* and *Xenopus tropicalis*"--
