1. Record Nr. UNINA9910557717303321

Autore	Martín Hidalgo David
Titolo	The Era of Assisted Reproductive Technologies Tailored to the Specific Necessities of Species, Industry and Case Reports
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2021
Descrizione fisica	1 electronic resource (258 p.)
Soggetti	Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Sommario/riassunto

Nowadays, assisted reproductive technologies (ARTs) have a pivotal role not only in achieving fertilization in subfertile animals, but they are also involved in the management of the herd, decreasing disease spread and even allowing offspring sex selection. Nonetheless, there are differences between species or even within species that have led researchers worldwide to focus on those differences in order to bypass these specific difficulties. This Special Issue, titled “The Era of Assisted Reproductive Technologies Tailored to the Specific Necessities of Species, Industry and Case Reports” and published in Animals, is composed of 12 original manuscripts and three reviews that offer an overview of current and future ARTs used to improve reproductive outcomes, mainly focused on farm animals, such as horse, pig, bovine, rabbit and ovine species. Thus, the Special Issue covers information from the classical point of view, including comparative studies of different semen extenders, to the most advanced technologies of sperm selection by thermotaxis or chemoattractants, as well as the improvement of sperm features by red light irradiation. The female and embryo contributions to ART outcomes are also covered, for instance, with a study that improves our knowledge by the metabolomic description of follicular fluid composition or the description of better culture conditions of oocytes. In brief, this Special Issue provides a balanced overview of emerging techniques and technologies used to

preserve, improve, rescue or even create fertility for domestic farm animals with high economic impact.