

**Nonhuman Primates in Perinatal Research.** Edited by YVES W. BRANS and THOMAS J. KUEHL. Published 1988 by J. Wiley & Sons, New York and Toronto. No. of pages: 472. ISBN: 0-471-84916-2.

The aim of this book is to present a cohesive review of research involving the physiology and pathology of reproduction in nonhuman primates. Four major aspects of the reproductive cycle: the pregnant animal, the embryo, the fetus, and the neonate, are covered separately, although there is obviously a great deal of overlap between these sections. The authors of each chapter were asked to review the literature relevant to their topic, to compare data obtained with various species of primates, and to discuss the implications and applicability of the work with nonhuman primates to human perinatal research and clinical medicine. In many instances, reviews of the literature are updated by new, as yet unpublished, data from the authors' own studies. Each section of the book is concluded by a chapter placing the information presented into perspective in context of past, current, and future perinatal research.

Most of the information discussed is the result of many years of careful investigations. Yet more recent studies, sometimes preliminary and requiring confirmation, have not been neglected and are presented with the hope that they will stimulate further interest.

The following main sections are contained in this book:

- Endocrinology of pregnancy;
- Pregnancy-induced hypertension: experimental studies in the nonhuman primate, with clinical correlation;
- Anatomy and function of the myometrium;
- Perspective on the pregnant primate;
- Fertilization and preimplantation embryonic development;
- Implantation and early embryonic development in primates;
- In vitro* development of the primate embryo;
- Placental morphology;
- Perspective on the embryo;
- Bioelectronic monitoring of the fetus;
- Amniotic fluid volume, composition, ingestion, and digestion by the fetus;
- Model of diabetes: fetal hyperinsulinemia and macrosomia;
- Chronic instrumentation of the fetal primate;
- Intrauterine intervention: fetal surgery in the nonhuman primate;
- Model of cigarette smoking;
- Perspective on the fetus;
- Pathology of perinatal lung disease;
- Surfactant studies;
- Cardiopulmonary studies and high-frequency ventilation;
- Structure and function of the developing diaphragm;
- Baboon model for meconium aspiration;
- The development of extracorporeal membrane oxygenation for the treatment of human neonates using nonhuman primates as models;
- Pharmacology of cerebral and mesenteric arteries;
- Perspective on neonatal pulmonary cardiovascular functions;
- Fetal and neonatal body composition;
- Bilirubin metabolism in fetus and neonate;
- Behavioral testing;
- A Rhesus monkey of neonatal group B streptococcal infection;
- Fetal, neonatal, and maternal growth and hydration: a brief overview.

This book would be very useful for gynecologists, endocrinologists, biologists, and advanced students.