1. Record Nr. UNINA9910437852103321 Autore Longo Lawrence D **Titolo** The Rise of Fetal and Neonatal Physiology: Basic Science to Clinical Care / / by Lawrence D. Longo New York, NY:,: Springer New York:,: Imprint: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4614-7921-5 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (546 p.) Perspectives in Physiology, , 2625-2813;; 1 Collana Disciplina 612.647 Soggetti Human physiology Medicine—History Reproductive medicine Obstetrics Medicine Human Physiology History of Medicine Reproductive Medicine Obstetrics/Perinatology/Midwifery Biomedicine, general 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 and index. Nota di contenuto Introduction -- A Scientific Genealogy: The Development of Fetal-Neonatal Research -- Oxford and the Development of Physiology, with Notes on the Nuffield Institute -- Geoffrey S. Dawes: A Life in Science -- Dawes and Fetal Asphyxia: The Primate Colony in Puerto Rico --Dawes, the Pulmonary Vasculature and his Foetal and Neonatal Physiology -- Embryology and Early Developmental Physiology -- Some Aspects of the Physiology of the Placenta -- Governmental Support of Research in Fetal and Newborn Physiology -- Fetal-Neonatal Growth

and Metabolism -- Epigenetics and the Fetal Origins of Adult Heath and Disease -- Related Developments in Fetal and Neonatal Endocrinology -- Further Developments in Fetal and Neonatal Physiology -- Some Clinical Aspects of Developmental Physiology -- Bioethical Issues in Research on the Fetus and Newborn Infant -- Textbooks, Monographs

and other Volumes on Fetal and Newborn Physiology -- Dawes and Fetal "Breathing" in the 1970s, and Fetal Heart Rate Analysis in the 1980s and early 1990s -- Dawes' Contributions to Symposia and a Summing Up -- Dawes as a Mentor: Reminisces of Former Graduate Students, Postdoctoral Fellows, and Associates -- Early Years of the Society for Gynecologic Investigation, the Fetal and Neonatal -- Epilogue -- Index.

## Sommario/riassunto

During the mid- to late-twentieth century, study of the physiology of the developing fetus and newborn infant evolved rapidly to become a major discipline in the biomedical sciences. Initially of interest from a standpoint of function of the placenta and oxygenation of the fetus, the field advanced to explore both normal functional mechanisms as well as pathophysiologic aspects of their regulation. Examples include studying the role and regulation of circulatory vascular anatomic shunts in oxygenation, cardiac function, certain aspects of asphyxia in the fetus and newborn infant, the role of fetal "breathing" movements. cyclic electroencephalographic activity, and analysis of electronic monitoring of fetal heart rate variability and its significance. Included in this book are reminisces of several dozen individuals who played a vital role in these developments. Overall, this survey considers a number of aspects of the development of the science of fetal and neonatal physiology, and its role in the greatly improved care of pregnant women and their newborn infants.