Physiology Reproductive System Lab Study Guide

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Sertoli Cell Biology Academic Press This concise lab manual is designed for those wanting a briefer and less expensive lab manual than traditionally available for the two-semester anatomy & physiology lab course and who also want their readers to develop critical thinking skills in the lab. Laboratory Investigations in Anatomy & Physiology, Cat Version, Second Edition contains only 31 exercises, providing just the core exercises done in most lab courses, in contrast to the 40 or 50 lab exercises included in the leading anatomy & physiology lab manuals. Through the use of frequent and engaging Questions to Consider, author Stephen Sarikas helps readers think about complex ideas and make connections between concepts. By challenging readers not only to observe but also to interpret what they experience in the lab, he gives readers an investigative experience that ensures they will retain what they have learned—a tremendous benefit to any reader going into a healthcare-related career. The Second Edition features all-new activities on surface anatomy, a fascinating new feature on forensic science, enlarged illustrations with more deeply contrasting colors to make learning easier, a new website for practice and quizzing, and the new Practice Anatomy Lab (PAL™) 2.0 anatomy practice and assessment tool. Main and Pig Versions of this lab manual are also available. Body Organization and Terminology, Care and Use of the Compound Light Microscope, Cell Structure and Cell Division, Membrane Transport, Epithelial and Connective Tissues, The Integumentary System, The Axial Skeleton, The Appendicular Skeleton, Articulations, Histology of Muscle Tissue, Gross Anatomy of the Muscular System, Physiology of the Muscular System, Histology of Nervous Tissue, The Brain and Cranial Nerves, The Spinal Cord and Spinal Nerves, Human Reflex Physiology, Special Senses, The Endocrine System, Blood Cells, Gross Anatomy of the Heart, Anatomy of Blood Vessels, Cardiovascular Physiology, The Lymphatic System, Anatomy of the Respiratory System,

Respiratory Physiology, Anatomy of the Digestive System, Actions of a Digestive Enzyme, Anatomy of the Urinary System, Urinary Physiology, The Male Reproductive System, The Female Reproductive System, Introduction to the Cat and Removal of the Skin, Dissection of the Cat Muscular System, Dissection of the Cat Peripheral Nervous System, Dissection of the Cat Ventral Body Cavities and Endocrine System, Dissection of the Cat Cardiovascular System, Dissection of the Cat Lymphatic System, Dissection of the Cat Respiratory System, Dissection of the Cat Digestive System, Dissection of the Cat Urinary System,Dissection of the Cat Reproductive System Intended for those interested in learning the basics of anatomy & physiology laboratory.

Nuclear Science Abstracts Pearson College Division

Sertoli cells assist in the production of sperm in the male reproductive system. This book provides a state-of-the-art update on the topic of sertoli cells and male reproduction. It addresses such highly topical areas as stem cells, genomics, and molecular genetics, as well as provides historical information on the discovery of this type of cell, and the pathophysiology of male infertility. * Presents the state-of-the-art research on topics such as stem cell research, transplantation and genomics * Includes contributions from leaders in the field, including several members of the National Academy of Science

Biology of the laboratory mouse National Academies Press

A comprehensive guide for trainee embryologists and medical students in the specialized techniques and technology of assisted reproduction.

Practice Anatomy Lab 3.0 **Pearson College Division**

Some investigators have hypothesized that estrogens and other hormonally active agents found in the environment might be involved in breast cancer increases and sperm count declines in humans as well as deformities and reproductive problems seen in wildlife. This book looks in detail at the science behind the ominous prospect of "estrogen mimics" threatening health and well-being, from the level of ecosystems and populations to individual people and animals. The committee identifies research needs and offers specific recommendations to decisionmakers. This authoritative volume: Critically evaluates the literature on hormonally active agents in the environment and identifies known and suspected toxicologic mechanisms and effects of fish, wildlife, and humans. Examines whether and how exposure to hormonally active agents occurs--in diet, in pharmaceuticals, from industrial releases into the environment--and why the debate centers on estrogens. Identifies significant uncertainties, limitations of knowledge, and weaknesses in the scientific literature. The book presents a wealth of information and investigates a wide range of examples across the spectrum of life that might be related to these agents.

Inventory of Federal Energy-related Environment and Safety Research for ... Masson

Using an approach that is geared toward developing solid, logical habits in dissection and identification, the Laboratory Manual for Anatomy & Physiology, 10th Edition presents a series of 55 exercises for the lab — all in a convenient modular format. The exercises include labeling of anatomy, dissection of anatomic models and fresh or preserved specimens, physiological experiments, and computerized experiments. This practical, full-color manual also includes safety tips, a comprehensive instruction and preparation guide for the laboratory, and tear-out worksheets for each exercise. Updated lab tests align with what is currently in use in today’s lab setting, and brand new histology, dissection, and

procedures photos enrich learning. Enhance your laboratory skills in an interactive digital environment with eight simulated lab experiences — eLabs. Eight interactive eLabs further your laboratory experience in an interactive digital environment. Labeling exercises provide opportunities to identify critical structures examined in the lab and lectures; and coloring exercises offer a kinesthetic experience useful in retention of content. User-friendly spiral binding allows for hands-free viewing in the lab setting. Step-by-step dissection instructions with accompanying illustrations and photos cover anatomical models and fresh or preserved specimens — and provide needed guidance during dissection labs. The dissection of tissues, organs, and entire organisms clarifies anatomical and functional relationships. 250 illustrations, including common histology slides and depictions of proper procedures, accentuate the lab manual’s usefulness by providing clear visuals and guidance. Easy-to-evaluate, tear-out Lab Reports contain checklists, drawing exercises, and questions that help you demonstrate your understanding of the labs you have participated in. They also allow instructors to efficiently check student progress or assign grades. Learning objectives presented at the beginning of each exercise offer a straightforward framework for learning. Content and concept review questions throughout the manual provide tools for you to reinforce and apply knowledge of anatomy and function. Complete lists of materials for each exercise give you and your instructor a thorough checklist for planning and setting up laboratory activities, allowing for easy and efficient preparation. Modern anatomical imaging techniques, such as computed tomography (CT), magnetic resonance imaging (MRI), and ultrasonography, are introduced where appropriate to give future health professionals a taste for — and awareness of — how new technologies are changing and shaping health care. Boxed hints throughout provide you with special tips on handling specimens, using equipment, and managing lab activities. Evolve site includes activities and features for students, as well as resources for instructors.

The Effects of Food Restriction and Social Defeat Stress on Cognition, Behavior and Neuroendocrine Physiology of a Monogamous and Territorial Rodent

Benjamin Cummings

to Human Physiology D. F. Horrobin Published by MTP Press Limited SI. Leonard's House, Lancaster, England Copyright © 1973, D. F. Horrobin ISBN-13: 978. . ()-85200-048-9 e-ISBN-13: 978-94-010-2349-8 001: 10. 1007/978-94-010-2349-8 First pUblished 1973 No part of this book may be reproduced in any form without permission from the publishers except for the quotation of brief passages for the purpose of review Reprinted 1975 and 1976 by the Blackburn Times Press, Northgate, Blackburn BBZ lAB Contents Introduction 2 The Maintenance of a Constant Internal Environment 7 21 3 Biochemistry The Nervous System 45 4 The Endocrine System 5 79 The Body Fluids and Blood 6 93 7 Circulation 105 8 The Respiratory System 119 9 The Kidneys and Urinary Tract 129 10 The Alimentary Tract 137 11 The Reproductive System 145 12 Responses of the Whole Body 159 An Introduction to Human Physiology Author's

Preface In many fie1dliof study it is difficult to understand the sig nificance of the part before one understands the whole. Yet one cannot understand the whole without a prior understanding of the parts. The dilemma is one of the most difficult problems to be solved by the teacher and in no subject is it more important than in physiology. In physiology more than in most subjects the part serves the whole and the whole serves the parts in an extraordinarily intimately integrated manner.

Research Grants Index Elsevier

For one-semester courses in anatomy & physiology. Guiding readers through challenging A&P concepts Celebrated for its precise illustrations, time-saving navigation and study tools, and engaging clinical content, Essentials of Anatomy & Physiology is crafted especially for readers with no prior knowledge of anatomy & physiology and little science background. The Seventh Edition eases readers through tough A&P topics, answering the need to help A&P readers learn and retain challenging content. New book features, all supported by interactive MasteringA&P media, include new Build Your Knowledge activities, new Spotlight Figures Coaching activities, new Bone and Organ Dissection Videos, and new Dynamic Study Modules that help readers study on the go. Also available with MasteringA&P. MasteringA&P is an online homework, tutorial, and assessment program designed to work with this text to engage students and improve results. Instructors ensure students arrive ready to learn by assigning educationally effective content before class, and encourage critical thinking and retention with in-class resources such as Learning Catalytics(tm). Students can further master concepts after class through traditional and adaptive homework assignments that provide hints and answer-specific feedback. With a wide range of activities available, students can actively learn, understand, and retain even the most difficult concepts. Note: You are purchasing a standalone product; MasteringA&P does not come packaged with this content. Students, if interested in purchasing this title with MasteringA&P, ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If you would like to purchase both the physical text and MasteringA&P, search for: 0134098617 / 9780134098616 Essentials of Anatomy & Physiology Plus MasteringA&P with eText -- Access Card Package, 7/e Package consists of: 0134074882 / 9780134074887 MasteringA&P with Pearson eText -- ValuePack Access Card -- for Essentials of Anatomy & Physiology, 7/e 0134098846 / 9780134098845 Essentials of Anatomy & Physiology, 7/e

Cat version Pearson

The Reproductive Biology of Bats presents the first comprehensive, in-depth review of the current knowledge and supporting literature concerning the behavior, anatomy, physiology and reproductive strategies of bats. These mammals, which occur world-wide and comprise a vast assemblage of species, have evolved unique and successful reproductive strategies through varied anatomical and physiological specialization. These are accompanied by individual and/or group behavioral interactions, usually in response to environmental mechanisms essential to their reproductive success. Is the first book devoted to the reproductive biology of bats Contains in-depth reviews of the literature concerned with bat reproduction Contributors are widely

recognized specialists Provides a powerful database for future research

A Visual Analogy Guide to Human Anatomy & Physiology Lippincott Williams & Wilkins

"Gain a foundational understanding of how endocrine and metabolic physiology affects other body systems in health and disease, including the clinical dimensions of reproductive endocrinology. Endocrine and Reproductive Physiology, a volume in the Mosby Physiology Series, explains the fundamentals of this complex subject in a clear and concise manner, while helping you bridge the gap between normal function and disease with pathophysiology content throughout the book"--Publisher's description.

Endocrine and Reproductive Physiology Createspace Independent Pub

Anatomy and Histology of the Laboratory Rat in Toxicology and Biomedical Research presents the detailed systematic anatomy of the rat, with a focus on toxicological needs. Most large works dealing with the laboratory rat provide a chapter on anatomy, but fall far short of the detailed account in this book which also focuses on the needs of toxicologists and others who use the rat as a laboratory animal. The book includes detailed guides on dissection methods and the location of specific tissues in specific organ systems. Crucially, the book includes classic illustrations from Miss H. G. Q. Rowett, along with new color photo-micrographs. Written by two of the top authors in their fields, this book can be used as a reference guide and teaching aid for students and researchers in toxicology. In addition, veterinary/medical students, researchers who utilize animals in biomedical research, and researchers in zoology, comparative anatomy, physiology and pharmacology will find this book to be a great resource. Illustrated with over 100 black and white and color images to assist understanding Contains detailed descriptions and explanations to accompany all images, thus helping with self-study Designed for toxicologic research for people from diverse backgrounds, including biochemistry, pharmacology, physiology, immunology and general biomedical sciences

Curriculum handbook with general information concerning ... for the United States Air Force Academy Pearson College Division

The Visual Analogy Guides to Human Anatomy & Physiology, 3e is an affordable and effective study aid for students enrolled in an introductory anatomy and physiology sequence of courses. This book uses visual analogies to assist the student in learning the details of human anatomy and physiology. Using these analogies, students can take things they already know from experiences in everyday life and apply them to anatomical structures and physiological concepts with which they are unfamiliar. The study guide offers a variety of learning activities for students such as, labeling diagrams, creating their own drawings, or coloring existing black-and-white illustrations to better understand the material presented.

Anatomy & Physiology Laboratory Manual and E-Labs E-Book Elsevier

One in eight Australian couples of reproductive age is infertile and in more than 40% of these couples, the infertility is due, at least in part, to male factors. In view of this finding, research is committed to addressing male fertility issues. Several regulatory genes have been identified as having a potential role in male infertility and animal models are widely used to establish functional activity. As a corollary of such research, many proteins are being assessed for their potential value as contraceptive targets. The mammalian cysteine-rich secretory proteins (CRISPs) are a family

of four proteins exhibiting a high amino acid sequence similarity and belonging to the CAP (CRISP, Antigen-5 proteins and the plant Pathogenesis related-1 proteins) superfamily. CRISPs are predominantly expressed and localised to the male reproductive tract and were therefore investigated for their potential as fertility markers. Functional evidence of mammalian CRISPs is emerging, and data from snake venom CRISPs and from mouse CRISPs in our own lab, is suggesting that all CRISPs function as ion channel regulators.To determine the localization of all 4 members of the mouse CRISP family, I identified 16 tissues likely to express CRISPs, from EST databases and conducted RT-PCR to identify the transcripts and confirmed the localization of the proteins using immunohistochemistry. Consistent with published data, my results showed that Crisps have an expression bias to the male reproductive tract. In addition, however, my data showed that Crisps have a wider expression profile than was previously understood, and as such, raises the possibility of a role of CRISPs in the normal physiology of multiple organs.To investigate the effect of CRISP4 on sperm function, I expressed recombinant full length CRISP4 in a bacterial system but upon purification, it was found to be insoluble. After extensive efforts, CRISP4 was solubilized and refolded and is currently being characterized by other researchers. In a parallel study, I expressed and purified the CRISP domain of CRISP4 for use in sperm functional assays. At that time, our lab had determined that CRISP4 CRISP domain could regulate calcium flow through TRPM8 ion channels on the sperm plasma membrane. As such, I explored the potential for change on sperm function induced by TRPM8 activation, and the ability of CRISP4 to reverse such changes. Results from in vitro studies showed that TRPM8 activation results in a suppression of the ability of spermatozoa to undergo the progesterone-induced acrosome reaction. This effect was reversed by CRISP4. In order to extend the significance of this finding regarding the in vitro situation, I characterized the reproductive phenotype of Crisp4-deficient mice. An investigation of the function of sperm from Crisp4 null mice showed that the percentage of sperm undergoing the acrosome reaction in response to progesterone was significantly reduced compared to wild type sperm. These in vivo results are consistent with the in vitro experiments and provide the first direct evidence that endogenous CRISP4 is a regulator of ion channel (including TRPM8) function, with implications in acrosome maturation within the epididymis and potentially in the fine tuning of the timing of the acrosome reaction within the female reproductive tract. The novel findings in this study provide, for the first time, a conclusive function of endogenous mouse CRISP4 and add to the growing evidence that mammalian CRISPs are regulators of fertility. These findings have significant implications for identifying the function of human CRISPs and their potential as male contraceptive targets.

United States Air Force Academy National Academies Press

The Practice Anatomy Lab ™ 3.0 Lab Guideprovides students with engaging, structured exercises and quizzes to maximize their anatomy lab experience using PAL™ 3.0. Whether a student is using PAL 3.0 in an on-campus “wet” lab, in an online “virtual” lab, or in a combination “hybrid” lab course, they will save study time by using the Activity Guide to direct their learning, stay on task, and reinforce their comprehension.

The Sertoli Cell Academic Press

The California mouse (Peromyscus californicus) is peculiar among mammals, and especially most other rodents in that they are monogamous and biparental. These particular traits are shared with humans and suggest that there may be overlapping or homologous neurocircuits within these species. Additionally, California mice, like humans, breed all year round. Therefore, as far a rodent models

go, this species may provide more insight into physiology and behavior with human relevance than traditional domesticated rodents. In the present work I conducted three lines of study that examined how various stressors, both nutritional and social, affected physiology and behavior in California mice. Photoperiod or daylength is a robust cue that signals upcoming environmental conditions. Reduced food availability can lead to restriction in food intake and can serve as a stressor. Given that food availability varies with season its salience as a stressor may be photoperiod dependent. Although sex differences in response to stress are well established, most animal models use males. Consequently, these studies all employed females to provide insight into female stress responses. In the first study I examined how restriction to 80% baseline food intake interacted with photoperiod (daylength) on spatial memory and anxiety in a Barnes maze. I found that under short days food restriction (FR) increased latency to complete the maze in an acquisition task, but decreased latency in a reversal task. Time freezing correlated positively with latency suggesting anxiety was a contributing factor, but partial correlations showed it did not fully explain the results and that spatial memory was also likely affected. The effects of FR during short days may occur by decreasing hippocampal synapsin I levels, a synaptic protein associated with spatial memory. In the second study I examined how photoperiod and 80% FR interacted on the reproductive system of female California mice. Stress from poor nutrition is known to impair reproduction in both sexes but in this species all work has examined males, even though the female is the one who cycles and carries the offspring. The results showed that under short days, FR caused significant regression of the reproductive tract. Under long days, an increase in expression of gonadotropin releasing hormone I (GnRH), a peptide that positively regulates reproductive axis activity, was observed in the tuberal hypothalamus of FR mice which may have counteracted the effects of FR on reproductive tissue mass atrophy. In the third and final study I examined how social defeat stress, or stressful interactions with a dominant individual of the same species affected social behavior via changes in the arginine vasopressin system (AVP) of California mice. Typically the social defat paradigm does not work well in female rodents, however, in this species male and female mated pairs co-defend a territory. Previous work from our lab showed that social defeat causes social withdrawal in females but not males. AVP is well established to be important in social behavior and stress response and its expression following social defeat in males has been examined in several studies. In the present study I examined how social defeat affected AVP circuits in female mice and directly compared this with males. I found that during social defeat AVP neurons were similarly activated in both sexes but that two and four weeks later males showed significant reductions in AVP-immunoreactivity, particularly in the hypothalamus. Since the effect was most pronounced in males and is also associated with aggression, I then employed resident-intruder testing to examine how social defeat affected response to territorial intrusion. Interestingly, defeated males tried to escape the home cage and continued to bite the intruder while females froze more and completely ceased to bite. This suggests defeated males employed an active form of coping was the females were more passive. In both sexes defeat eliminated the correlation between AVP cell counts and aggression suggesting an uncoupling of the role of AVP in aggressive. In all, the studies provide some mechanistic insight into how various aspects of behavior and physiology are affected by stressors in California mice, especially in females.

Male Reproductive System Academic Press

Reproductive toxicology is a complex subject dealing with three components—parent, placenta, and fetus—and the continuous changes that occur in each. Reproductive and Developmental Toxicology is a comprehensive and authoritative resource providing the latest literature enriched with relevant references describing every aspect of this area of science. It addresses a broad range of topics including nanoparticles and radiation, gases and solvents, smoking, alcohol and drugs of abuse, food additives, nutraceuticals and pharmaceuticals, and metals, among others. With a special focus on placental toxicity, this book is the only available reference to connect the three key

risk stages, and is the only resource to include reproductive and developmental toxicity in domestic animals, fish, and wildlife. Provides a complete, integrated source of information on the key risk stages during reproduction and development Includes coverage of emerging science such as stem cell application, toxicoproteomics, metabolomics, phthalates, infertility, teratogenicity, endocrine disruption, surveillance and regulatory considerations, and risk assessment Offers diverse and unique in vitro and in vivo toxicity models for reproductive and developmental toxicity testing in a user-friendly format that assists in comparative analysis

Reproductive Biology of Bats Morton Publishing Company

This concise lab manual is designed for those wanting a briefer and less expensive lab manual than traditionally available for the two-semester anatomy & physiology lab course and who also want their readers to develop critical thinking skills in the lab. Laboratory Investigations in Anatomy & Physiology, Pig Version, Second Edition contains only 31 exercises, providing just the core exercises done in most lab courses, in contrast to the 40 or 50 lab exercises included in the leading anatomy & physiology lab manuals. Through the use of frequent and engaging Questions to Consider, author Stephen Sarikas helps readers think about complex ideas and make connections between concepts. By challenging readers not only to observe but also to interpret what they experience in the lab, he gives readers an investigative experience that ensures they will retain what they have learned—a tremendous benefit to any reader going into a healthcare-related career. The Second Edition features all-new activities on surface anatomy, a fascinating new feature on forensic science, enlarged illustrations with more deeply contrasting colors to make learning easier, a new website for practice and quizzing, and the new Practice Anatomy Lab (PAL™) 2.0 anatomy practice and assessment tool. Main and Cat Versions of this lab manual are also available. Body Organization and Terminology, Care and Use of the Compound Light Microscope, Cell Structure and Cell Division, Membrane Transport, Epithelial and Connective Tissues, The Integumentary System, The Axial Skeleton, The Appendicular Skeleton, Articulations, Histology of Muscle Tissue, Gross Anatomy of the Muscular System, Physiology of the Muscular System, Histology of Nervous Tissue, The Brain and Cranial Nerves, The Spinal Cord and Spinal Nerves, Human Reflex Physiology, Special Senses, The Endocrine System, Blood Cells, Gross Anatomy of the Heart, Anatomy of Blood Vessels, Cardiovascular Physiology, The Lymphatic System, Anatomy of the Respiratory System, Respiratory Physiology, Anatomy of the Digestive System, Actions of a Digestive Enzyme, Anatomy of the Urinary System, Urinary Physiology, The Male Reproductive System, The Female Reproductive System, Introduction to the Pig and Removal of the Skin, Dissection of the Pig Muscular System, Dissection of the Pig Peripheral Nervous System, Dissection of the Pig Ventral Body Cavities and Endocrine System, Dissection of the Pig Cardiovascular System, Dissection of the Pig Lymphatic System, Dissection of the Pig Respiratory System, Dissection of the Pig Digestive System, Dissection of the Pig Urinary System, Dissection of the Pig Reproductive System. Intended for those interested in learning the basics of anatomy & physiology laboratory.

Marine Research Elsevier Health Sciences

A respected resource for decades, the Guide for the Care and Use of Laboratory Animals has been updated by a committee of experts, taking into consideration input from the scientific and laboratory animal communities and the public at large. The Guide incorporates new scientific information on common laboratory animals, including aquatic species, and includes extensive references. It is organized around major components of animal use: Key concepts of animal care and use. The Guide sets the framework for the humane care and use of laboratory animals. Animal care and use program. The Guide discusses the concept of a broad Program of Animal Care and Use,

including roles and responsibilities of the Institutional Official, Attending Veterinarian and the Institutional Animal Care and Use Committee. Animal environment, husbandry, and management. A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment, husbandry, behavioral and population management, and more. Veterinary care. The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian. It includes recommendations on animal procurement and transportation, preventive medicine (including animal biosecurity), and clinical care and management. The Guide addresses distress and pain recognition and relief, and issues surrounding euthanasia. Physical plant. The Guide identifies design issues, providing construction guidelines for functional areas; considerations such as drainage, vibration and noise control, and environmental monitoring; and specialized facilities for animal housing and research needs. The Guide for the Care and Use of Laboratory Animals provides a framework for the judgments required in the management of animal facilities. This updated and expanded resource of proven value will be important to scientists and researchers, veterinarians, animal care personnel, facilities managers, institutional administrators, policy makers involved in research issues, and animal welfare advocates.

Biology and Diseases Wiley

Progesterone (P4) is an ovarian-derived female sex steroid hormone that is essential for female reproductive functions and gestation in mammals. Aberrant P4 signaling results in female infertility and has been shown to contribute to several reproductive diseases including endometrial cancer and endometriosis. Many of its actions are mediated by the classical progesterone receptor (PGR), a P4 activated transcription factor that regulates gene expression. While the actions of P4 have been mainly studied through the activation of PGR, recent research has highlighted the importance of two purported non-classical P4 receptors, progesterone receptor membrane component (PGRMC) 1 and PGRMC2. In the female reproductive system, several studies have characterized the expression of PGRMC1 and PGRMC2 during pregnancy and estrous/menstrual cyclicity. Other studies have concluded that PGRMC1 and PGRMC2 function in several cellular reproductive processes. While recent descriptive studies have well-characterized the expression of PGRMC1 and PGRMC2, and several others have found disrupted PGRMC1/2 expression in multiple female reproductive diseases, much less is known about the functional contributions of these genes in fertility. Recent conditional mutagenesis studies from our lab have revealed Pgrmc1 and Pgrmc2 are essential for normal female fertility. To further assess the physiological significance of Pgrmc1 in female fertility, as well as in the male in which essentially nothing is known about PGRMC actions, our lab developed a transgenic mouse that allows for conditional over-expression of PGRMC1. While conditional over-expression of PGRMC1 in the male germ line resulted in an increase in testis weight, as well as a large number of sloughing seminiferous tubules, it did not impact male fertility. In contrast, conditional over-expression of PGRMC1 in the female reproductive system resulted in a severe fertility defect, with a decrease in fecundity as well as the number and size of pups at weaning. Further investigation revealed that conditional over-expression of PGRMC1 impairs post-implantation pre-natal development. Overall,

the studies outlined in this thesis are novel due to their utilization of a unique transgenic approach to analyze the physiological significance of PGRMC1 in reproduction.

The Laboratory Rat Cambridge University Press

This brief, hands-on lab manual is built specifically to accommodate the fast pace of one-semester A&P labs. It complements any one-semester A&P text and provides 27 concise, activity-based exercises. Each lab includes a new pre-lab quiz, learning objectives, summaries of key concepts, a variety of activities, and an integrated review sheet. The manual also includes a full-color Histology Atlas with 55 photomicrographs.

Inventory of Federal Energy-related Environment and Safety Research for FY 1978: Project listings and indexes ????? ???????

Laboratory Investigations in Anatomy & PhysiologyCat versionPearson College Division