The Integrative Neurobiology of Affiliation

Aug 31 2020
This book examines the biological, especially the neural, substrates of affiliation and related social behaviors. Affiliation refers to social behaviors that bring individuals closer together. This includes such associations as attachment, parent-offspring interactions, pair-bonding, and the building of coalitions. Affiliations provide a social matrix within which other behaviors, including reproduction and aggression, may occur. While reproduction and aggression also reduce the distance between individuals, their expression is regulated in part by the positive social fabric of affiliative behavior.Until recently, researchers have paid little attention to the regulatory physiology and neural processes that subserve affiliative behaviors. The integrative approach in this book reflects the constructive interactions between those who study behavior in the context of natural history and evolution and those who study the nervous system. The book contains the partial proceedings of a conference of the same title held in Washington, DC, in 1996. The full proceedings was published as part of the Annals of the York Academy of Sciences.

Adenosine and Adenine Nucleotides: From Molecular Biology to Integrative Physiology
Dec 16 2021
Holistic Anatomy Apr 27 2020
Complementary and alternative approaches to health and medicine have become increasingly widespread as the limits of conventional treatments become more apparent. "Holistic" "Anatomy "presents an authoritative study of anatomy, physiology, and pathology but expands the discussion by connecting the science of the body to a variety of alternative modalities to explore how human beings exist within--and interact with--their environment, and how they experience existence in emotional and spiritual terms. Basic scientific terminology and detailed descriptions are interwoven with informal, sometimes humorous observations, facts, and ideas about life. The mechanisms, structure, and functions of the body are explored, along with how they relate to spiritual and energetic paradigms, emotions, and ecological principles. The first half of the book covers basic anatomy and physiology, describing each major system of the body and how they interrelate. This part includes a thoughtful discussion of aging and the dying process. The second half focuses on models of health and disease, both traditional and holistic. Topics include western pathology, emotional health, five element medicine, and the spiritual cause for disease.

Anatomy and Physiology
Mar 19 2022
The Logic of Life Oct 26 2022
A highly challenging collection of essays by eminent scientists on the theme of integrative approaches to physiological questions, this book discusses the changing boundaries between different disciplines in modern experimental biology. The contributors are experts in the fields of integrative physiology, cellular evolution, control mechanisms, endocrinology, and behavioral biology. Conceived as a tribute to the 1993 International Congress of Physiological Sciences, this important work matches the immense challenge of modern biological science at the end of the twentieth century.

Integrative Plant Anatomy
Oct 02 2020
Presents the basic concepts and terminology of plant anatomy with a special emphasis on its significance and applications to other disciplines. This book also highlights the important contribution made by studying anatomy to the solutions of a number of problems. It is illustrated with line drawings and photographs.

Elsevier's Integrated Physiology E-Book
Aug 24 2022
Each title in the new Integrated series focuses on the core knowledge in a specific basic science discipline, while linking that information to related concepts from other disciplines. Case-based questions at the end of each chapter enable you to gauge your mastery of the material, and a color-coded format allows you to quickly find the specific guidance you need. Bonus STUDENT CONSULT access - included with the text - allows you to conveniently access the book's content online - clip content to your handheld device - link to content in other STUDENT CONSULT titles - and more! These concise and user-friendly references provide crucial guidance for the early years of medical training, as well as for exam preparation. Includes case-based questions at the end of each chapter. Features a colour-coded format to facilitate quick reference and promote effective retention. Offers access to STUDENT CONSULT! At www.studentconsult.com, you'll find the complete text and illustrations of the book online, fully searchable. - "Integration Links" to bonus content in other STUDENT CONSULT titles - content clipping for handheld devices - an interactive community center with a wealth of additional resources - and much more!

The Integrative Physiology of Metabolic Downstates
Jul 11 2021
Integrative Nursing Jun 29 2020
Fully updated and revised, the second edition of Integrative Nursing is a complete roadmap to integrative patient care, providing a guide to whole person/whole systems assessment and clinical interventions for individuals, families, and communities. Treatment strategies described in this version employ the full complement of evidence-informed methodologies in a tailored, person-centered approach to care. This text explores concepts, skills, and theoretical frameworks that can be used by healthcare leaders interested in creating and implementing an integrative model of care within institutions and systems, featuring exemplar nurse-led initiatives that have transformed healthcare systems. This volume covers the foundations of the field; the most effective ways to optimize wellbeing; principles of symptom management for many common disorders like sleep, anxiety, pain, and cognitive impairment; the application of integrative nursing techniques in a variety of clinical settings and among a diverse patient population;
and integrative practices around the world and how it impacts planetary health. The academic rigor of the text is balanced by practical and relevant content that can be readily implemented into practice for both established professionals as well as students enrolled in undergraduate or graduate nursing programs. Integrative medicine is defined as healing-oriented medicine that takes account of the whole person (body, mind, and spirit) as well as all aspects of lifestyle; it emphasizes the therapeutic relationship and makes use of appropriate therapies, both conventional and alternative. Series editor Andrew Weil, MD, is Professor and Director of the Arizona Center for Integrative Medicine at the University of Arizona. Dr. Weil's program was the first such academic program in the U.S., and its stated goal is "to combine the best ideas and practices of conventional and alternative medicine into cost effective treatments without embracing alternative practices uncritically."

Cardiovascular Physiology Dec 28 2022

Anatomy & Physiology Feb 27 2023

ISE Anatomy and Physiology: an Integrative Approach May 01 2023

Integrative Organismal Biology Sep 12 2021 Integrative Organismal Biology synthesizes current understandings of the causes and consequences of individual variation at the physiological, behavioral and organismal levels. Emphasizing key topics such as phenotypic plasticity and flexibility, and summarizing emerging areas such as ecological immunology, oxidative stress biology and others, Integrative Organismal Biology pulls together information from diverse disciplines to provide a synthetic view of the role of the individual in evolution. Beginning with the role of the individual in evolutionary and ecological processes, the book covers theory and mechanism from both classic and modern perspectives. Chapters explore concepts such as phenotypic plasticity, genetic and epigenetic variation, physiological and phenotypic variation, homeostasis, and gene and physiological regulatory networks. A concluding section interweaves these concepts through a series of case studies of life processes such as aging, reproduction, and immune defense. Written and edited by leaders in the field, Integrative Organismal Biology will be an important advanced textbook for students and researchers across a variety of subdisciplines of integrative biology.

Human Physiology Jan 05 2021 This test broke ground with its thorough coverage of molecular physiology seamlessly integrated into a traditional homeostasis-based systems approach. This edition introduces a major reorganisation of the early chapters to provide the best foundation for the course and new art features that streamline review and essential topics so that students can access them more easily on an as-needed basis.

Muscle Mechanics, Extracellular Matrix, Afferentation, Structural and Neurological Coupling and Coordination in Health and Disease Nov 02 2020 Disclosure statement: Topic Editor Prof. Silvia Salinas Blemker is a Co-founder and Vice President of Springbok, Inc. Charlottesville, VA. All other Topic Editors declare no competing interests with regards to the Research Topic subject.

Anatomy and Physiology Jun 02 2023

Anatomy and Physiology Feb 03 2021 Anatomy and Physiology: An Integrated Approach combines the study of anatomy and physiology into one well-organized and illustrated text. It teaches students about the purposes of organ systems, as well as their interconnections. It educates readers about interactions between systems and how disruption to a single system can impact overall function. The book provides detailed information on the topics covered in the traditional, two-course sequence of college-level anatomy and physiology but avoids overwhelming readers with inessential information. Rather, the material focuses on primary concepts and how to apply them. Linked learning strategies, section-specific references, and short summaries throughout each chapter emphasize and reiterate material, enhancing learning and retention. Anatomically accurate, vibrant, realistic artwork helps readers visualize anatomical and physiological principles. Written as an integrative text, Anatomy and Physiology provides a consistent, balanced discussion of both anatomy and physiology within and across chapters. The book is suitable for courses on anatomy, physiology, and human biology, particularly those designed for programs in health care professions.

Integrative Wildlife Nutrition Mar 26 2020 Nutrition spans a wide range of mechanisms from acquisition of food to digestion, absorption and retention of energy substrates, water and other nutrients. Nutritional principles have been applied to improving individual health, athletic performance and longevity of humans and of their companion animals, and to maximizing agricultural efficiency by manipulating reproduction or growth of tissues such as muscle, hair or milk in livestock. Comparative nutrition borrows from these traditional approaches by applying similar techniques to studies of ecology and physiology of wildlife. Comparative approaches to nutrition integrate several levels of organization because the acquisition and flow of energy and nutrients connect individuals to populations, populations to communities, and communities to ecosystems. Integrative Wildlife Nutrition connects behavioral, morphological and biochemical traits of animals to the life history of species and thus the dynamics of populations. An integrated approach to nutrition provides a practical framework for understanding the interactions between food resources and wildlife populations and for managing the harvest of abundant species and the conservation of threatened populations. This book is for students and professionals in animal physiology and ecology, conservation biology and wildlife management. It is based on our lectures, demo sessions and practical classes taught in the USA, Canada and Australia over the last three decades. Instructors can use Integrative Wildlife Nutrition as a text in wildlife and conservation biology programs, and as a reference source for related courses in wildlife ecology.

Angiogenesis Aug 12 2021 Proceedings of the 5th Biannual International Meeting on Angiogenesis: From the Molecular to Integrative Pharmacology, held July 1-7, 1999, in Crete, Greece. Angiogenesis, as a vastly complex biological process, has challenged researchers from all basic scientific disciplines, including pharmacology, biochemistry, physiology, embryology and anatomy. The significance of this phenomenon for the study of disease states has also motivated clinicians from a number of specialist fields. This multidisciplinary work reflects the growth of awareness of concepts such as angiogenesis based therapy, the enormous therapeutic and commercial potential of which has attracted major research and investment in recent years. This volume, which aims to bridge the gap between basic and clinical methodology and understanding, presents the most up-to-date developments in this field.

Anatomy and Physiology Jan 29 2023 McKinley/O'Loughlin/Bidle: Anatomy & Physiology: An Integrative Approach, 3e brings multiple elements of the study of A&P together in ways that maximize understanding. Text discussions provide structural details in the context of their functional significance to integrate coverage of anatomy and physiology in each chapter. Chapters emphasize the interdependence of body systems by weaving prior coverage of one system into textual explanations of how other systems work. These system relationships are also covered in "Integrate: Concept Connection" boxes. All figures are carefully designed to support the text narrative, and carry brief textual explanations to make figures self-contained study tools. Special "Concept Overview" figures in each chapter tie together multi-faceted concepts in 1- or 2-page visual summaries. Applications are presented in "Integrate: Clinical View" boxes to apply chapter content using clinical examples that show students what can go wrong in the body, to help crystallize understanding of the "norm." Critical Thinking questions in "What Do You Think?" engage students in application or analysis to encourage students to think more globally about the content; "What Did You Learn?" are mini self-tests at the end of each section that assess whether students have a sufficient grasp of the content before moving on. End-of-chapter "Challenge Yourself" assessments include "Do You Know the Basics?", "Can You Apply What You've Learned?", and "Can You Synthesize What You've Learned?" question sets. Career opportunities pursued by students studying A&P are highlighted at the
beginning of each chapter. Everyday analogies and practical advice for remembering material are presented in “Integrate: Learning Strategy” boxes. Chapters end with a summary of media tools available to help learn each chapter's content.

**Integrative Approaches to the Molecular Physiology of Inflammation** Jun 09 2021 "Integrative Approaches to the Molecular Physiology of Inflammation” presents contributions from the many different fields and approaches to the physiology and the molecular origins of inflammation; particularly those that may be involved in the development and evolution of diseased phenotypes. We selected among the wide scope and multiple views used to probe into the molecular origins of complex inflammatory phenotypes. This book consists of an Introductory Editorial and 6 thematic chapters encompassing 24 articles: 17 original research contributions and 7 review articles (5 reviews, 1 systematic review, and 1 minireview). Both, the research papers and the reviews provide varied and insightful approaches to different facets of inflammation with approaches ranging from general inflammation and signaling depictions deeply rooted on functional biology and physiology, to computational systems biology analyses, translational medicine, and pharmacological explorations. Model systems are also quite diverse: human subjects, mice and other mammal models, cell cultures and in silico, complex networks and database studies.

**Integrative Human Biochemistry** Jan 17 2022 This book covers in detail the mechanisms for how energy is managed in the human body. The basic principles that elucidate the reactivity and physical interactions of matter are addressed and quantified with simple approaches. Three-dimensional representations of molecules are presented throughout the book so molecules can be viewed as unique entities in their shape and function. The book is focused on the molecular mechanisms of cellular processes in the context of human physiological situations such as fasting, feeding and physical exercise, in which metabolic regulation is highlighted. Furthermore the book uses key historical experiments that opened up new concepts in Biochemistry to further illustrate how the human body functions at molecular level, helping students to appreciate how scientific knowledge emerges. This book also: Elucidates the foundations of the molecular events of life Uses key historical experiments that opened up new concepts in Biochemistry to further illustrate how the human body functions at molecular level, helping students to appreciate how scientific knowledge emerges Provides realistic representations of molecules throughout the book Advance Praise for Integrative Human Biochemistry “This textbook provides a modern and integrative perspective of human biochemistry and will be a faithful companion to health science students following curricula in which this discipline is addressed. This textbook will be a most useful tool for the teaching community.” –Joan Guinovart Director of the Institute for Research in Biomedicine, Barcelona, Spain President-elect of the International Union of Biochemistry and Molecular Biology, IUBMB

**The Tribute of Physiology for the Understanding of COVID-19 Disease** Oct 14 2021

Loose Leaf for Anatomy & Physiology: An Integrative Approach Apr 19 2022 Perfect for introductory level students, Hole's Human Anatomy and Physiology assumes no prior science knowledge by focusing on the fundamentals. This new edition updates a great A&P classic, while offering greater efficiencies to the user including the tried and true Learn, Practice, Assess method throughout the text. The 16th edition focuses on helping students master core theme in anatomy and physiology, which are distilled down into key concepts and underlying mechanisms. A new author team who is active in the classroom brings career relevance and more concise language, while updated and enhanced figures provide clarity.

**Anatomy & Physiology: An Integrative Approach** Mar 31 2023 The McKinley/O'Loughlin/Bidle: Anatomy & Physiology: An Integrative Approach text brings multiple elements of the study of A&P together in ways that maximize understanding. Text discussions provide structural details in the context of their functional significance to integrate coverage of anatomy and physiology in each chapter. Chapters emphasize the interdependence of body systems by weaving prior coverage of one system into textual explanations of how other systems work. These system relationships are also covered in “Integrate: Concept Connection” boxes. All figures are carefully designed to support the text narrative, and carry brief textual explanations to make figures self-contained study tools. Special “Concept Overview” figures in each chapter tie together multi-faceted concepts in 1- or 2-page visual summaries. Applications are presented in “Integrate: Clinical View” boxes to apply chapter content using clinical examples that show students what can go wrong in the body, to help crystallize understanding of the “norm;” clinical scenarios are also used in “What Do You Think?”, “Can You Apply What You’ve Learned?”, and “Can You Synthesize What You’ve Learned?” question sets; and career opportunities pursued by students studying A&P are highlighted at the beginning of each chapter. Everyday analogies and practical advice for remembering material are presented in “Integrate: Learning Strategy” boxes. Chapters end with a summary of media tools available to help learn each chapter's content. Users who purchase Connect receive access to the full online eBook version of the textbook.

**GEN CMB A&P; CNCT May 09 2021**

Exercise Physiology Nov 26 2022 There is no doubt that if the field of exercise physiology is to make further advancements, the various specialized areas must work together in solving the unique and difficult problems of understanding how exercise is initiated, maintained and regulated at many functional levels, and what causes us to quit. Exercise is perhaps the most complex of physiological functions, requiring the coordinated, integrated activation of essentially every cell, tissue and organ in the body. Such activation is known to take place at all levels - from molecular to systemic. Focusing on important issues addressed at cellular and systemic levels, this handbook presents state-of-the-art research in the field of exercise physiology. Each chapter serves as a comprehensive resource that will stimulate and challenge discussion in advanced students, researchers, physiologists, medical doctors and practitioners. Authored by respected exercise physiologists from nineteen countries, each chapter has been significantly updated to provide up-to-date coverage of the topics and to offer complete descriptions of the many facets of the most physiological responses from a cellular to an integrative approach within individual body systems in normal and disease states and includes some chapters that are rarely addressed in exercise physiology books, such as the influence of exercise on endothelium, vasomotor control mechanisms, coagulation, immune function and rheological properties of blood, and their influence on hemodynamics. This book represents the first iteration to provide such a work. Normal exercise responses divided into muscle function, bioenergetics, and respiratory, cardiac and blood/vascular function; Fitness, training, exercise testing and limits to exercise; Exercise responses in different environments; Beneficial effects of exercise rehabilitation on ageing and in the prevention and treatment of disease states; Rarely addressed issues such as the influence of exercise on endothelium, vasomotor control mechanisms, coagulation, immune function and rheological properties of blood and their influence on hemodynamics. IOS Press is an international science, technical and medical publisher of high-quality books for academics, scientists, and professionals in all fields. Some of the areas we publish in: -Biomedicine -Oncology -Artificial intelligence -Databases and information systems -Maritime engineering -Nanotechnology -Geoengineering -All aspects of physics -E-government -E-commerce -The knowledge economy -Urban studies -Arms control -Understanding and responding to terrorism -Medical informatics -Computer Sciences

**Anatomy & Physiology: An Integrative Approach** Jun 21 2022 McKinley/O'Loughlin/Bidle: Anatomy & Physiology: An Integrative Approach, 2e brings multiple elements of the study of A&P together in ways that maximize understanding. Text discussions provide structural details in the context of their functional significance to integrate coverage of anatomy and physiology in each chapter. Chapters emphasize the interdependence of body systems by weaving prior coverage of one system into textual explanations of how other systems work. These system relationships are also covered in “Integrate: Concept Connection”
physiologists, aquaculturists and biomedical researchers employing fish as model organisms for mammalian physiology. Includes chapters dedicated to anatomical and functional features of the gastro-intestinal tract of fish as well as integrative aspects of gut organ function. Includes in depth coverage of recently recognized implications of feeding on salt homeostasis and acid-base balance. Provides syntheses of implications of gut function for homeostasis. Essential text for those interested in the wide diversity of functions performed by the gut.

Fundamentals of Complementary and Alternative Medicine - E-Book Nov 14 2021 Focusing on emerging therapies and those best supported by clinical trials and scientific evidence, Fundamentals of Complementary and Alternative Medicine describes some of the most prevalent and the fastest-growing CAM therapies in use today. Prominent author Dr. Marc Micozzi provides a complete overview of CAM, creating a solid foundation and context for therapies in current practice. Coverage of systems and therapies includes mind, body, and spirit; traditional Western healing; and traditional ethnomedical systems from around the world. Discussions include homeopathy, massage and manual therapies, chiropractic, a revised chapter on osteopathy, herbal medicine, aromatherapy, naturopathic medicine, and nutrition and hydration. With its wide range of topics, this is the ideal CAM reference for both students and practitioners! An evidence-based approach focuses on treatments best supported by clinical trials and scientific evidence. Coverage of CAM therapies and systems includes those most commonly encountered or growing in popularity, so you carefully evaluate each treatment. Global coverage includes discussions of traditional healing arts from Europe, Asia, Africa, and the Americas. Longevity in the market makes this a classic, trusted text. Expert contributors include well-known writers such as Kevin Ergil, Patch Adams, Joseph Pizzorno, Victor Sierpina, and Marc Micozzi himself. Suggested readings and references in each chapter list the best resources for further research and study. New, expanded organization covers the foundations of CAM, traditional Western healing, and traditional ethnomedical systems from Asia, Africa, and the Americas, putting CAM in perspective and making it easier to understand CAM origins and contexts. NEW content includes legal and operational issues in integrative medicine, creative and expressive arts therapies, ecological pharmacology, hydration, mind-body thought and practice in America, osteopathy, reflexology, South American healing, traditional medicines of India, and Unani medicine. Revised and updated chapters include aromatherapy, classical acupuncture, energy medicine, biophysical devices (electricity, light, and magnetism), massage and touch therapies, traditional osteopathy, reflexology, vitalism, and yoga. New research studies explain how and why CAM therapies work, and also demonstrate that they do work, in areas such as acupuncture, energy healing, and mind-body therapies. Expanded content on basic sciences includes biophysics, ecology, ethnomedicine, neurobiology, and psychoneuroimmunology, providing the scientific background needed to learn and practice CAM and integrative medicine. Expanded coverage of nutrition and hydration includes practical information on Vitamin D and healthy hydration with fluid and electrolytes.