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Natural Products Targeting Clinically Relevant Enzymes Advances in Animal Biotechnology Frontiers in Developmental Biology Mesophotic Coral Ecosystems Amphibian Conservation Approaches for Enhancing Abiotic Stress Tolerance in Plants Handbook of Emotion Regulation Neuroscience of Alcohol The Wiley Handbook of Evolutionary Neuroscience Comprehensive Toxicology Handbook of Lipid Membranes The Science of Subjectivity Development and Reproduction in Humans and Animal Model Species Freshwater Fisheries Ecology Postharvest Physiological Disorders in Fruits and Vegetables Brain Theory Kant and Animals Making Learning Job-Embedded Conservation Physiology for the Anthropocene - A Systems Approach Approximate Analytical Methods for Solving Ordinary Differential Equations Omics for Personalized Medicine Climate Change and Environmental Sustainability Case Studies in Immunology PAMP Signals in Plant Innate Immunity Cell Polarity and Morphogenesis Biogeology Advances in Cyanobacterial Biology Towards a Theory of Development MSC Communication in Physiological and Pathological Settings Marine Mussels Encyclopedia of Ocean Sciences Ecology of Lianas Yen & Jaffe's Reproductive Endocrinology Environmental Radiobiology New Developments in Biological and Chemical Terrorism Countermeasures Remediation of Uranium Mill Tailings Ecotourism Frankincense – Gum Olibanum Conservation Criminology Next-Generation Nanobiosensor Devices for Point-Of-Care Diagnostics

*Natural Products Targeting Clinically Relevant Enzymes* 2017-08-30 the past decade has seen the reappearance of natural products as a valuable source of potent therapeutics here experts on bioactive natural products cover the full spectrum of clinically relevant enzymes that are known to be targeted by natural products key enzymes include acetylcholine esterase angiotensin i converting enzyme cyclooxygenase dihydrofolate reductase phospholipase a2 respiratory complexes and many more by connecting the diversity of medicinal natural product sources with their potential clinical applications this volume serves as a companion for the medicinal chemist looking for innovative small molecule compounds as well as for pharmacologist interested in the clinical effects and mode of action of herbal and traditional medicines

*Advances in Animal Biotechnology* 2019-07-09 this book entitled advances in animal biotechnology is a compilation of state of the art in the field of animal biotechnology including fishery that are not sheltered in depth in earlier publications it offers an update on avant garde technologies and advances in key aspects of genetic engineering metagenomics assisted reproduction animal genomics biotechnology in veterinary health as well as the role of gut and marine microbial ecosystems in livestock and industrial development the book is divided broadly into five different sections viz gut microbiome and nutritional biotechnology assisted reproduction biotechnology livestock genomics health biotechnology and animal biotechnology in global perspective the book covers the syllabi of animal biotechnology courses in various universities academia and competitive examinations at various levels researchers continuing graduates and academicians research institutions and biotech companies will be benefited from this valuable compilation of research its broad spectrum makes this work a valuable resource for professionals researchers academics and students in the field of veterinary and animal production as well as the biotechnology industry

**Frontiers in Developmental Biology** 2019-03-20 this topical volume in the respected encyclopedia series is the first in many years to bring together all important aspects of developmental biology in one source from morphogenesis and organogenesis via epigenetic regulation of gene expression to evolutionary developmental biology the editor in chief has assembled an outstanding team of contributors to review these topics creating an authoritative work for many years to come the result is a unique top level reference in developmental biology for researchers students and professionals alike

**Mesophotic Coral Ecosystems** 2019-05-22 this book summarizes what is known about mesophotic coral ecosystems mces geographically and by major taxa mces are characterized by light dependent corals and associated communities typically found at depths ranging from 30 40 m and extending to over 150 m in tropical and subtropical ecosystems they are populated with organisms typically associated with shallow coral reefs such as macroalgae corals sponges and fishes as well as specialist species unique to mesophotic depths during the past decade there has been an increasing scientific and management interest in mces expressed by the exponential increase in the number of publications studying this unique environment despite their close proximity to well studied shallow reefs and the growing evidence of their importance our scientific knowledge of mces is still in its early stages the topics covered in the book

include regional variation in mces similarities and differences between mesophotic and shallow reef taxa biotic and abiotic conditions biodiversity ecology geomorphology and geology potential connectivity between mces and shallow reefs mce disturbances conservation and management challenges and new technologies key research questions knowledge gaps priorities and future directions in mce research

Amphibian Conservation 2014-05-16 amphibian conservation is the fourth in the series of synopses of conservation evidence linked to the online resource [conservationevidence.com](http://conservationevidence.com) this synopsis is part of the conservation evidence project and provides a useful resource for conservationists it forms part of a series designed to promote a more evidence based approach to biodiversity conservation others in the series include bee bird farmland and bat conservation and many others are in preparation approximately 32 of the 7 164 amphibian species are currently threatened with extinction and at least 43 of species are declining despite this until recently amphibians and their conservation had received little attention although work is now being carried out to conserve many species often it is not adequately documented this book brings together and summarises the available scientific evidence and experience relevant to the practical conservation of amphibians the authors consulted an international group of amphibian experts and conservationists to produce a thorough summary of what is known or not known about the effectiveness of amphibian conservation actions across the world the book is packed with literature summaries and citations a veritable information goldmine for graduate students and researchers it also admirably provides decision makers with a well researched resource of proven interventions that can be employed to stem reverse the decline of amphibian populations john g palis bulletin of the chicago herpetological society

*Approaches for Enhancing Abiotic Stress Tolerance in Plants* 2019-01-10 plants are frequently exposed to unfavorable and adverse environmental conditions known as abiotic stressors these factors can include salinity drought heat cold flooding heavy metals and uv radiation which pose serious threats to the sustainability of crop yields since abiotic stresses are major constraints for crop production finding the approaches to enhance stress tolerance is crucial to increase crop production and increase food security this book discusses approaches to enhance abiotic stress tolerance in crop plants on a global scale plants scientists and breeders will learn how to further mitigate plant responses and develop new crop varieties for the changing climate

Handbook of Emotion Regulation 2019-03-19 neuroscience of alcohol mechanisms and treatment presents the fundamental information necessary for a thorough understanding of the neurobiological underpinnings of alcohol addiction and its effects on the brain offering thorough coverage of all aspects of alcohol research treatment and prevention and containing contributions from internationally recognized experts the book provides students early career researchers and investigators at all levels with a fundamental introduction to all aspects of alcohol misuse alcohol is one of the world s most common addictive substances with about two billion individuals worldwide consuming it in one form or another and three million annual deaths that are associated with alcohol misuse alcohol alters a variety of neurological

processes from molecular biology to cognition moreover addiction to alcohol can lead to numerous other health concerns and damage virtually every organ system in the body making diagnosis and treatment of individuals addicted to alcohol of critical importance integrates cutting edge research on the pharmacological cellular and molecular aspects of alcohol use along with its effects on neurobiological function discusses alcohol use as a component of dual use and poly addictions outlines numerous screening and treatment strategies for alcohol misuse covers both the physical and psychological effects of alcohol use and withdrawals to provide a fully formed view of alcohol dependency and its effects

**Neuroscience of Alcohol** 2017-01-30 comprehensive and authoritative the wiley handbook of evolutionary neuroscience unifies the diverse strands of an interdisciplinary field exploring the evolution of brains and cognition a comprehensive reference that unifies the diverse interests and approaches associated with the neuroscientific study of brain evolution and the emergence of cognition tackles some of the biggest questions in neuroscience including what brains are for what factors constrain their biological development and how they evolve and interact provides a broad and balanced view of the subject reviewing both vertebrate and invertebrate anatomy and emphasizing their shared origins and mechanisms features contributions from highly respected scholars in their fields

**The Wiley Handbook of Evolutionary Neuroscience** 2017-12-01 comprehensive toxicology third edition fifteen volume set discusses chemical effects on biological systems with a focus on understanding the mechanisms by which chemicals induce adverse health effects organized by organ system this comprehensive reference work addresses the toxicological effects of chemicals on the immune system the hematopoietic system cardiovascular system respiratory system hepatic toxicology renal toxicology gastrointestinal toxicology reproductive and endocrine toxicology neuro and behavioral toxicology developmental toxicology and carcinogenesis also including critical sections that cover the general principles of toxicology cellular and molecular toxicology biotransformation and toxicology testing and evaluation each section is examined in state of the art chapters written by domain experts providing key information to support the investigations of researchers across the medical veterinary food environment and chemical research industries and national and international regulatory agencies thoroughly revised and expanded to 15 volumes that include the latest advances in research and uniquely organized by organ system for ease of reference and diagnosis this new edition is an essential reference for researchers of toxicology organized to cover both the fundamental principles of toxicology and unique aspects of major organ systems thoroughly revised to include the latest advances in the toxicological effects of chemicals on the immune system features additional coverage throughout and a new volume on toxicology of the hematopoietic system presents in depth comprehensive coverage from an international author base of domain experts

**Comprehensive Toxicology** 2021-09-14 this handbook provides a unique overview of lipid membrane fundamentals and applications the fascinating world of lipids that harbor and govern so many biological functionalities are discussed within the context of membrane structures interactions and shape evolution

beyond the fundamentals in lipid science this handbook focuses on how scientists are building bioinspired biomimetic systems for applications in medicine cosmetics and nanotechnology key features includes experimental and theoretical overviews on the role of lipids with or without associated biomolecules as structural components imparting distinct membrane shapes and intermembrane interactions covers the mechanisms of lipid membrane curvature by peptide and protein binding and the roles of signalling lipids and the cytoskeleton in plasma membrane shape evolution covers advanced x ray and force measurement techniques discusses applications in biomedicine cosmetics and nanotechnology including lipid vectors in nucleic acid drug delivery in dermal applications and lipid based sensors and artificial biointerfaces covers artificial membranes from block copolymers synthetic copolypeptides and recombinant proteins includes an exciting section that explores the role of lipids in the origin of life in hydrothermal conditions this book is a highly informative companion for professionals in biophysics biochemistry physical chemistry and material and pharmaceutical sciences and bioengineering

Handbook of Lipid Membranes 2015-04-02 can neuroscience help explain the first person perspective the science of subjectivity delves into the nature of experience arguing that unconscious subjectivity is a reality neisser identifies the biological roots of the first person showing how ancient systems of animal navigation enable creatures like us to cope with our worldly concerns

The Science of Subjectivity 2015-01-03 this book describes human development including sexual reproduction and stem cell research with the development of model organisms that are accessible to genetic and experimental analysis in readily understandable texts and 315 multi colored graphics the introductory account of model organisms selected from the entire animal kingdom presents general principles which are then outlined in subsequent chapters devoted to for example sexual development genes controlling development and their contemporary molecular analysis methods production of clones and transgenic animals development of the nervous and circulatory systems regenerative medicine and ageing finally the evolution of developmental toolkits and novelties is discussed including the genetic basis of the enlargement of the human forebrain separate boxes are devoted to controversial questions such as the benefits and problems of prenatal diagnostics or the construction of ancient body plans

Development and Reproduction in Humans and Animal Model Species 2015-09-11 inland fisheries are vital for the livelihoods and food resources of humans worldwide but their importance is underestimated probably because large numbers of small local operators are involved freshwater fisheries ecology defines what we have globally what we are going to lose and mitigate for and what given the right tools we can save to estimate potential production the dynamics of freshwater ecosystems rivers lakes and estuaries need to be understood these dynamics are diverse as are the earths freshwater fisheries resources from boreal to tropical regions and these influence how fisheries are both utilized and abused three main types of fisheries are illustrated within the book artisanal commercial and recreational and the tools which have evolved for fisheries governance and management including assessment methods are described the book also

covers in detail fisheries development providing information on improving fisheries through environmental and habitat evaluation enhancement and rehabilitation aquaculture genetically modified fishes and sustainability the book thoroughly reviews the negative impacts on fisheries including excessive harvesting climate change toxicology impoundments barriers and abstractions non native species and eutrophication finally key areas of future research are outlined freshwater fisheries ecology is truly a landmark publication containing contributions from over 100 leading experts and supported by the fisheries society of the british isles the global approach makes this book essential reading for fish biologists fisheries scientists and ecologists and upper level students in these disciplines libraries in all universities and research establishments where biological and fisheries sciences are studied and taught should have multiple copies of this hugely valuable resource about the editor john craig is editor in chief of the journal of fish biology and has an enormous range of expertise and a wealth of knowledge of freshwater fishes and their ecology having studied them around the globe including in asia north america africa the middle east and europe his particular interests have been in population dynamics and life history strategies he is a fellow of the linnean society of london and the royal society of biology

**Freshwater Fisheries Ecology** 2019-01-15 this book chock full of color illustrations addresses the main postharvest physiological disorders studied in fruits and vegetables for a wide variety of fruits and vegetables postharvest physiological disorders in fruits and vegetables describes visual symptoms triggering and inhibiting mechanisms and approaches to predict and control these disorders after harvest color photographs illustrate the disorders important factors physiology and management the book includes a detailed description of the visual symptoms triggering and inhibiting mechanisms and possible approaches to predict and control physiological disorders the mechanisms triggering and inhibiting the disorders are discussed in detail in each chapter based on recent studies which can help readers better understand the factors regulating each disorder the description of possible approaches to predict and control each disorder can help growers shippers wholesalers and retailers to determine the best management practices to reduce disorder incidence and crop losses features presents visual symptoms of postharvest physiological disorders that will help readers to precisely identify the disorders in fruits and vegetables details mechanisms triggering and inhibiting the postharvest disorders explains possible approaches to predict and control these disorders suggests the best postharvest management approaches for each crop although there are many scientific publications on postharvest physiological disorders there are no recent reviews or books putting together the most recent information about the mechanisms regulating as well as about the possible approaches to predict and control these disorders

**Postharvest Physiological Disorders in Fruits and Vegetables** 2014-05-13 philosophy has long puzzled over the relation between mind and brain this volume presents some of the state of the art reflections on philosophical efforts to make sense of neuroscience as regards issue including neuroaesthetics brain science and the law neurofeminism embodiment race memory and pain

**Brain Theory** 2020-04-23 this is the first edited collection devoted entirely to the question of the role of animals in the thought of immanuel kant though the topic is not one treated systematically in his work mentions of animals occur throughout his corpus in relation to many of his central concerns in this volume a team of leading scholars address issues ranging over kant s theoretical and practical philosophy including questions regarding the possibility of objective representation and intentionality in animals the role of animals in kant s scientific picture of nature the status of our moral responsibilities to animals welfare and more it also includes chapters concerning contemporary questions relating to animals and kantian ethics and metaethics making a use of kant s philosophy to help contend with one of the most crucial ethics issues facing us today

Kant and Animals 2018-05-03 making learning job embedded cases from the field of instructional leadership is a book for sitting principals aspiring principals and teacher leaders this edited volume includes studies that describe and detail findings from dissertation research conducted by scholar practitioners in prek 12 schools these studies examined job embedded professional learning how teachers learned from their work how they grew in their understandings of their work with students and how they could learn from their interactions with others each chapter examines very specific aspects of professional learning that school leaders need to have understanding about to be able to create systems that support teachers in the work they do to teach students interact with colleagues participate in team meetings and other aspects that constitute the work of being a teacher conclusions and recommendations are offered for school leaders to support an environment and culture that embraces job embedded learning as an integral part of the school s foundation for building capacity the messages across the chapters point to the primacy of teacher engagement and the value of job embedded learning

Making Learning Job-Embedded 2022-10-21 conservation physiology for the anthropocene a systems approach volume 39a in the fish physiology series is a comprehensive synthesis on the physiology of fish in the anthropocene this volume closes the knowledge gap by considering the many ways in which different physiological systems e g sensory physiology endocrine cardio respiratory bioenergetics water and ionic balance and homeostasis locomotion biomechanics gene function and physiological diversity are relevant to management and conservation as the world is changing with a dire need to identify solutions to the many environmental problems facing wild fish populations this book comprehensively covers conservation physiology and its future techniques conservation physiology reveals the many ways in which environmental change and human activities can negatively influence wild fish populations these tactics inform new management and conservation activities and help create the necessary conditions for fish to thrive presents authoritative contributions from an international board of authors each with extensive expertise in the conservation physiology of fish provides the most up to date information on the ways in which different physiological systems are relevant to the management and conservation of fish and fisheries identifies how anthropogenic stressors perturb physiological systems explores how different physiological



systems can be exploited to solve conservation problems

**Conservation Physiology for the Anthropocene - A Systems Approach** 2014-10-31 approximate analytical methods for solving ordinary differential equations odes is the first book to present all of the available approximate methods for solving odes eliminating the need to wade through multiple books and articles it covers both well established techniques and recently developed procedures including the classical series solution method diverse perturbation methods pioneering asymptotic methods and the latest homotopy methods the book is suitable not only for mathematicians and engineers but also for biologists physicists and economists it gives a complete description of the methods without going deep into rigorous mathematical aspects detailed examples illustrate the application of the methods to solve real world problems the authors introduce the classical power series method for solving differential equations before moving on to asymptotic methods they next show how perturbation methods are used to understand physical phenomena whose mathematical formulation involves a perturbation parameter and explain how the multiple scale technique solves problems whose solution cannot be completely described on a single timescale they then describe the Wentzel-Kramers and Brillouin-WKB method that helps solve both problems that oscillate rapidly and problems that have a sudden change in the behavior of the solution function at a point in the interval the book concludes with recent nonperturbation methods that provide solutions to a much wider class of problems and recent analytical methods based on the concept of homotopy of topology

**Approximate Analytical Methods for Solving Ordinary Differential Equations** 2013-10-14 omics for personalized medicine will give to its prospective readers the insight of both the current developments and the future potential of personalized medicine the book brings into light how the pharmacogenomics and omics technologies are bringing a revolution in transforming the medicine and the health care sector for the better students of biomedical research and medicine along with medical professionals will benefit tremendously from the book by gaining from the diverse fields of knowledge of new age personalized medicine presented in the highly detailed chapters of the book the book chapters are divided into two sections for convenient reading with the first section covering the general aspects of pharmacogenomic technology that includes latest research and development in omics technologies the first section also highlights the role of omics in modern clinical trials and even discusses the ethical consideration in pharmacogenomics the second section is focusing on the development of personalized medicine in several areas of human health the topics covered range from metabolic and neurological disorders to non-communicable as well as infectious diseases and even explores the role of pharmacogenomics in cell therapy and transplantation technology thirty four chapters of the book cover several aspects of pharmacogenomics and personalized medicine and have taken into consideration the varied interest of the readers from different fields of biomedical research and medicine advent of pharmacogenomics is the future of modern medicine which has resulted from culmination of decades of research and now is showing the way forward the book is an honest endeavour of researchers from all over the world to disseminate the latest knowledge and



knowhow in personalized medicine to the community health researchers in particular and the educated public in general

Omics for Personalized Medicine 2022-11-24 this book discusses the challenges related to climate change mitigation and adaptation it adds valuable strategies and insights into the development of new practices solving the identified social and economic problems related to ecosystem deterioration and anticipating other disasters related to climate change as the decarbonization of cities and communities became an issue of great interest to many researchers the book in hands will be of great importance to decision makers and energy stakeholders and others seeking a more resilient and sustainable future and developing innovative technologies to overcome environmental deterioration this book is a culmination of selected research papers from the first version of the international conference on climate change and environmental sustainability which was held in 2021 in collaboration with chongqing university china

**Climate Change and Environmental Sustainability** 2016-02-05 case studies in immunology seventh edition is intended for medical students and undergraduate and graduate students in immunology it presents major topics of immunology through a selection of clinical cases that reinforce and extend the basic science each case history is preceded by essential scientific facts about the immunological mechanisms o

**Case Studies in Immunology** 2013-10-30 plant innate immunity is a potential surveillance system of plants and is the first line of defense against invading pathogens the immune system is a sleeping system in unstressed healthy plants and is activated on perception of the pathogen associated molecular patterns pamp the pathogen s signature of invading pathogens the pamp alarm danger signals are perceived by plant pattern recognition receptors prrs the plant immune system uses several second messengers to encode information generated by the pamps and deliver the information downstream of prrs to proteins which decode interpret signals and initiate defense gene expression this book describes the most fascinating pamp prr signaling complex and signal transduction systems it also discusses the highly complex networks of signaling pathways involved in transmission of the signals to induce distinctly different defense related genes to mount offence against pathogens

PAMP Signals in Plant Innate Immunity 2017-03-01 cell polarity and morphogenesis the latest volume in the methods in cell biology series looks at cell polarity and morphogenesis edited by leaders in the field this volume provides proven state of art techniques along with relevant historical background and theory to aid researchers in efficient design and effective implementation of experimental methodologies covers sections on cell polarity morphogenesis and emerging studies written by experts in the field includes cutting edge materials

**Cell Polarity and Morphogenesis** 2019-07-02 this detailed exposition gives background and context to how modern biogeography has got to where it is now for biogeographers and other researchers interested in biodiversity and the evolution of life on islands biogeology evolution in a changing landscape provides an overview of a large swathe of the globe encompassing wallacea and the western pacific the book contains

the full text of the original article explored in each chapter presented as it appeared on publication key features holistic treatment collecting together a series of important biogeographical papers into a single volume authored by an expert who has spent nearly three decades actively involved in biogeography describes and interprets a region of exceptional biodiversity and extreme endemism the only book to provide an integrated treatment of wallacea melanesia new zealand the new zealand subantarctic islands and antarctica offers a critique of fashionable neo dispersalist arguments showing how these still suffer from the same weaknesses of the original darwinian formulation the chapters also include analysis of many major theoretical and philosophical issues of modern biogeographic theory so that those interested in a more philosophical approach will find the book stimulating and thought provoking

**Biogeology** 2020-02-15 advances in cyanobacterial biology presents the novel practical and theoretical aspects of cyanobacteria providing a better understanding of basic and advanced biotechnological application in the field of sustainable agriculture chapters have been designed to deal with the different aspects of cyanobacteria including their role in the evolution of life cyanobacterial diversity and classification isolation and characterization of cyanobacteria through biochemical and molecular approaches phylogeny and biogeography of cyanobacteria symbiosis cyanobacterial photosynthesis morphological and physiological adaptation to abiotic stresses stress tolerant cyanobacterium biological nitrogen fixation other topics include circadian rhythms genetics and molecular biology of abiotic stress responses application of cyanobacteria and cyanobacterial mats in wastewater treatments use as a source of novel stress responsive genes for development of stress tolerance and as a source of biofuels industrial application as biofertilizer cyanobacterial blooms use in nano technology and nanomedicines as well as potential applications this book will be important for academics and researchers working in cyanobacteria cyanobacterial environmental biology cyanobacterial agriculture and cyanobacterial molecular biologists summarizes the various aspects of cyanobacterial research from primary nitrogen fixation to advanced nano technology applications addresses both practical and theoretical aspects of the cyanobacterial application includes coverage of biochemical and molecular approaches for the identification use and management of cyanobacteria

Advances in Cyanobacterial Biology 2014-05-02 is it possible to explain and predict the development of living things what is development articulate answers to these seemingly innocuous questions are far from straightforward to date no systematic targeted effort has been made to construct a unifying theory of development this novel work offers a unique exploration of the foundations of ontogeny by asking how the development of living things should be understood it explores the key concepts of developmental biology asks whether general principles of development can be discovered and examines the role of models and theories the two editors one a biologist with long interest in the theoretical aspects of his discipline the other a philosopher of science who has mainly worked on biological systems have assembled a team of leading contributors who are representative of the scientific and philosophical community within which a

diversity of thoughts are growing and out of which a theory of development may eventually emerge they analyse a wealth of approaches to concepts models and theories of development such as gene regulatory networks accounts based on systems biology and on physics of soft matter the different articulations of evolution and development symbiont induced development as well as the widely discussed concepts of positional information and morphogenetic field the idea of a programme of development and its critiques and the long standing opposition between preformationist and epigenetic conceptions of development towards a theory of development is primarily aimed at students and researchers in the fields of evo devo developmental biology theoretical biology systems biology biophysics and the philosophy of science

*Towards a Theory of Development* 2022-08-22 dr bourin works in a biotechnology company that develops a production process of asc for clinical uses dr gimble is a co founder co owner and chief scientific officer at obatala sciences and lacell biotechnology companies focused on the clinical translation of adipose derived cells and tissues the other guest editors declare no competing interests with regard to the research topic subject

*MSC Communication in Physiological and Pathological Settings* 2021-12-01 a comprehensive volume providing broad and detailed coverage of marine mussels marine mussels ecology physiology genetics and culture provides readers with in depth fully up to date information on all major aspects of marine mussels written by an internationally renowned expert in the field this authoritative volume addresses morphology ecology feeding phylogeny and evolution reproduction and larval development settlement and recruitment genetics disease management of culture systems and more the book encompasses many different species of marine mussels genus mytilus other important commercial marine genera such as perna aulacomya and choromytilus and non commercial genera including modiolus geukensia brachidontes and hydrothermal vent bathymodiolus comprising twelve extensively cross referenced chapters the book discusses a diversity of integrated topics that range from fundamental physiology of marine mussels to new techniques being applied in their biology and ecology author elizabeth gosling reviews contemporary developments and issues in the field such as the use of dna genetic markers in detecting and diagnosing different strains of pathogenic bacteria the use of mussels as monitors of marine contaminants sophisticated modelling techniques that simulate disease and forecast outbreaks and the impacts of global warming ocean acidification and hypoxia on marine mussels presenting an inclusive highly detailed treatment of mussel biology physiology genetics and culture this invaluable resource contains thorough descriptions of external and internal anatomy global and local distribution patterns the impacts of mussels on marine ecosystems and the processes of circulation respiration excretion and osmoregulation reflects significant advances in mussel science and new areas of research in marine mussels describes the fundamentals of mussel aquaculture the types and levels of contaminants in the marine environment and new approaches for sustainable aquaculture development discusses the application of genetic methods population genetics global breeding programmes and the emerging area of bivalve genomics addresses the role of mussels in disease transmission to humans

including production and processing controls regulation of monitoring and quality control marine mussels ecology physiology genetics and culture is essential reading for biological scientists researchers instructors and advanced students in the fields of biology ecology aquaculture environmental science toxicology genetics pathology taxonomy and public health

**Marine Mussels** 2019-04-12 the oceans cover 70 of the earth s surface and are critical components of earth s climate system this new edition of encyclopedia of ocean sciences six volume set summarizes the breadth of knowledge about them providing revised up to date entries as well coverage of new topics in the field new and expanded sections include microbial ecology high latitude systems and the cryosphere climate and climate change hydrothermal and cold seep systems the structure of the work provides a modern presentation of the field reflecting the input and different perspective of chemical physical and biological oceanography the specialized area of expertise of each of the three editors in chief in this framework maximum attention has been devoted to making this an organic and unified reference represents a one stop organic information resource on the breadth of ocean science research reflects the input and different perspective of chemical physical and biological oceanography the specialized area of expertise of each of the three editors in chief new and expanded sections include microbial ecology high latitude systems and climate change provides scientifically reliable information at a foundational level making this work a resource for students as well as active researches

**Encyclopedia of Ocean Sciences** 2014-12-31 lianas are woody vines that were the focus of intense study by early ecologists such as darwin who devoted an entire book to the natural history of climbing plants over the past quarter century there has been a resurgence in the study of lianas and liana are again recognized as important components of many forests particularly in the tropics the increasing amount of research on lianas has resulted in a fundamentally deeper understanding of liana ecology evolution and life history as well as the myriad roles lianas play in forest dynamics and functioning this book provides insight into the ecology and evolution of lianas their anatomy physiology and natural history their global abundance and distribution and their wide ranging effects on the myriad organisms that inhabit tropical and temperate forests

**Ecology of Lianas** 2013-09-13 yen jaffe s reproductive endocrinology helps you successfully diagnose and manage the spectrum of female and male reproductive system diseases from impaired fertility infertility and recurrent pregnancy loss through problems of sexual development puberty menstrual disturbances fibroids endometriosis and reproductive aging this trusted endocrinology reference book is ideal for fellows endocrinologists or as a quick reference when making daily diagnostic and therapeutic decisions it is just the resource you need to offer your patients the best possible reproductive care this new edition helps the reader to stay on top of recent developments it is a must for subspecialists in reproductive medicine and a valuable source of information in the library of any department and clinical unit involved in reproductive medicine reviewed by acta obstetricia et gynecologica scandinavica february 2015 it is a

must for subspecialists in reproductive medicine and a valuable source of information in the library of any department and clinical unit involved in reproductive medicine reviewed by acta obstetricia et gynecologica scandinavica march 2015 get unmatched guidance you can trust such as fresh insights into today's field and future advances through the knowledge gleaned from worldwide fertility experts in reproductive medicine further your study of reproductive endocrinology with a list of suggested readings at the end of each chapter conveniently access the fully searchable text and view all of the images online at expert consult apply the latest reproductive endocrinology advances in basic and clinical science including molecular cellular and genetic concepts and grasp their relevance to pathophysiology diagnosis and therapy maximize fertility in women and men undergoing chemotherapy and other cancer treatments and counsel patients on environmental factors affecting reproduction stay on top of recent developments including the impact of obesity on fertility ovarian tissue banking cryopreservation pre implantation genetic diagnosis ovulation induction and risks and treatments for steroid hormone responsive cancers view basic anatomic structures endocrine processes and cell function and dysfunction with absolute clarity through full color illustrations and new images throughout confidently perform procedures through expanded coverage of reproductive and infertility surgery and online videos demonstrating key techniques

Yen & Jaffe's Reproductive Endocrinology 2023-10-17 this book focuses on the impacts of anthropogenic radiation on wildlife and ecosystems and provides an in depth look at the approaches and available tools we can use to gain information about biological effects of radiation in the environment the nuclear accidents in chornobyl in 1986 and fukushima in 2011 focussed the attention of the world on the vulnerability of ecosystems to radiation in chornobyl there still remains an exclusion zone where levels are considered to be too high for people and impacts on terrestrial and aquatic ecosystems can still be measured 35 years later in the area impacted by the fukushima disaster intense remediation is still under way at tremendous cost and causing widespread disruption to the environment that accident impacted the terrestrial and marine ecosystems in both accidents it became obvious that a radiation protection framework focussing on protection of humans a single species and using evacuation as a key strategy was not sufficient to protect the natural environment the complexity of ecosystems makes developing a protection framework very challenging but in order to even start the process it is vital to gather information about likely impacts of low dose exposures on wildlife and to develop monitoring tools to measure changes over time this book contains reviews and original research aimed at filling our knowledge gaps about these important areas environmental radiobiology will be a key resource for academics researchers and advanced students of radiobiology radioecology biology ecology biomedicine and research methods the chapters included in this book were originally published as a special issue of international journal of radiation biology

**Environmental Radiobiology** 2016-02-17 a science based text new developments in biological and chemical terrorism countermeasures presents research that addresses the growing threat of chemical and biological

terrorism as well as the need for improvements in the implementation of countermeasures this new textbook building upon advances in biological and chemical terrorism countermeasu

New Developments in Biological and Chemical Terrorism Countermeasures 2023-07-31 this book covers issues pertaining to uranium tailings with special reference to consolidation of radioactivity including systematic ecological strategy for consolidation of radionuclides in uranium tailings it discusses sustainable consolidation of radioactivity and checks the migration of unextracted uranium from tailing piles to plants and atmosphere supported by a case study from a uranium mine it provides simple ecological solutions for the remediation of radioactivity in mill tailings features provides insight into the application of applied ecology for bioremediation of radioactive wastes discusses species selection criteria for tailings radioactivity consolidation explains safe treatment of the tailings of radioactive ore processing plants illustrates the role of ethnobotany in the selection of the most appropriate species to effectively use in bioremediation focuses on experimental outcomes this book is aimed at researchers and professionals in mining engineering applied geology nuclear tailings and environmental protection

**Remediation of Uranium Mill Tailings** 2020-04-19 the new fifth edition of ecotourism focuses on an array of economic social and ecological inconsistencies that continue to plague ecotourism in theory and practice and examines the sector in reference to other related forms of tourism impacts conservation sustainability education and interpretation policy and governance and the ethical imperative of ecotourism as these apply to the world's greenest form of tourism building on the success of prior editions the text has been revised throughout to incorporate recent research including ecotourism taking place in under represented world regions it includes new case studies on important themes in research and practice as well as learning objectives in each chapter david fennell provides an authoritative and comprehensive review of the most important issues including climate change and un sustainable development goals ecotourism continues to be embraced as the antithesis of mass tourism because of its promise of achieving sustainability through conservation mindedness community development education and learning and the promotion of nature based activities that are sensitive to both ecological and social systems the book debates to what extent this promise has been realised an essential reference for those interested in ecotourism the book is accessible to students but retains the depth required for use by researchers and practitioners in the field this book will be of interest to students across a range of disciplines including geography economics business ethics biology and environmental studies

**Ecotourism** 2023-07-17 frankincense also called olibanum is an aromatic resin used since ancient times for incense perfume and aromatherapy it is readily available as an essential oil or as a supplement or extract and studies have shown that it may enhance heart health and liver health and soothe pain and inflammation this new volume is a comprehensive desktop reference book specifically gum olibanum frankincense it introduces the significance of the species and covers the botany phytochemistry propagation extraction and pharmacological uses it also discusses the species genetic diversity using molecular markers in vitro



propagation and biotechnological aspects of boswellia species the trade and commerce of frankincense and as well as its threats and conservation

**Frankincense – Gum Olibanum** 2017-03-14 this important new text introduces conservation criminology as the interdisciplinary study of environmental exploitation and risks at the intersection of human and natural systems taking an interdisciplinary approach the book enhances understanding of the various human and organizational behaviors that pose risks to the environment humans and drive conservation crime as human population growth global market economies climate change deforestation and illegal exploitation of natural resources continue to increase academic research from numerous disciplines is needed to address these challenges conservation criminology promotes thinking about how unsustainable natural resources exploitation is a cause and a consequence of social conflict case studies profiled in the book demonstrate this cause and effect type situation as well as innovative approaches for reducing risks to people and the environment this text encourages readers to consider how humans behave in response to environmental risks and the various mechanisms that constitute effective and ineffective approaches to enforcement of wildlife crimes including environmental and conservation policy case studies from the usa latin america africa and asia highlight corruption in conservation global trade in electronic waste illegal fishing illegal logging human wildlife conflict technology and space water insecurity wildlife disease and wildlife poaching taken together chapters expand the reader s perspective and employ tools to understand and address environmental crimes and risks and to provide novel empirical evidence for positive change with established contributors providing interdisciplinary and global perspectives this book establishes a foundation for the emerging field of conservation criminology

**Conservation Criminology** 2022-12-02 this book reviews the potential of next generation point of care diagnosis in healthcare it also discusses the printed chip based assay lab on a chip lab on a pcb for rapid inexpensive biomarkers detection the book presents the development of sensory systems based on the use of nanomaterials it examines different biosensors for medical diagnosis using surface modification strategies of transducers it presents electrochemical concepts based on different nanobiomaterials and nanocomposites for cancer theranostics notably the book examines the recent advances in wearable cost effective hemodynamic sensors to detect diseases at an early stage it further explores the combination of redox cycling and electrochemical detection to develop ultrasensitive and reproducible biosensors for point of care testing finally the book summarizes the significant challenges in the point of care diagnostics and its future opportunities in healthcare

**Next-Generation Nanobiosensor Devices for Point-Of-Care Diagnostics**



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