崔洋 郭青 李建春 编

最新

美国 加拿大
名校教授信息手册
生命科学分册

海洋出版社

最新美国、加拿大名校教授信息手册

生命科学分册

崔　洋　郭　青　李建春　编

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前　言

随着国际互联网在我国的迅速发展，使得我们与世界各个国家的交流变得日益快捷方便起来，然而当今网络世界的信息资源浩如烟海，在网上浏览同类信息需要大量时间和费用，因此我们归纳整理美国、加拿大教授研究方向资料，方便读者通过E-Mail直接与教授联系。过去一封发往海外的信函，收到回信往往需要一个多月的周期，自从有了E-Mail(电子邮箱)，发信过程只需几秒钟，而且费用只为普通信函的十分之一，这对于经常与国外有联系的科技人员、外贸工作者和有志于到海外留学的青年学子来说是一个很好的工具。

本套手册选择了美国和加拿大百余所著名大学的热门院系及相关专业教授姓名、研究方向和课题情况，以及大部分教授的E-Mail地址(电子邮箱)，这尤其适用于欲到美国、加拿大留学的人员，因为美国和加拿大的学校奖学金的给予权很大一部分都掌握在教授手中，直接与教授联系，可以很快地知道奖学金的分配，这已经成为获得全奖的一条切实可行的路线。本书同时也适用于争取与美、加教授合作的高校及科研院所的科技工作者，出国进修的访问学者等。本书资料内容详细，时效性强，对于从事外事、科研、信息情报收集人员跟踪世界最新科技动态同样具有参考价值。

本套手册按学科分为四个分册。生命科学分册包括生物化学、微生物学、生理学、农学、分子生物学、植物学、生物学等学科。数理化、环境、材料科学分册包括数学、物理、天文学、化学、环境、材料、化工等学科。信息科学分册包括计算机科学、电子工程等学科。经济管理科学分册包括MBA、管理、会计、审计等学科。读者可以根据自己的需要选择。

本书按美国、加拿大百余所著名大学的字母顺序排列，同时给出大学及相关系的WWW及E-Mail地址，有条件的读者也可以上网查询。本书附美国大学综合实力前五十的排名，读者可以根据自己的情况选择学校。

本书的作者同时也是本书的使用者，在清华大学攻读博士、硕士期间收集的美、加教授资源信息深受同学喜爱，萌生整理成册之念，以便与大家共享。参加编写的还有施桦、胡晓辉、冯刚、汤青、涂光忠、王炜、戴剑彬、董晓静、王楠等同志。感谢张志诚、陈永丽、王居硕在本书编辑过程中给予的大力支持与帮助。

作者1998年于清华园

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Department of Biology

Programs of Study

The Department of Biology provides basic training in the life sciences, emphasizing modern advances in areas of molecular genetics, embryology and development, and evolutionary biology. Faculty members are involved conducting research in developmental biology, evolutionary biology, neurobiology, microbiology, ecology, oceanography, immunology, and molecular biology. Students are encouraged to participate in research projects at all levels.

The department offers programs leading to the B. S. as well as graduate programs leading to the M. A. and M. S. degrees. Besides training for a career of graduate study in biology, bachelor students are prepared for medical, dental, and veterinary schools. The Department of Biology offers courses that combine traditional education with training necessary in today professional marketplace. Curricula are designed to allow maximum individual choice of course selection after departmental requirements are met.

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Department of Botany & Microbiology

Programs of Study

The Department of Botany & Microbiology at Auburn University seeks to fill 2 tenure track positions at the Assistant Professor level. The successful candidate for the Microbiology position will have responsibility for courses in microbial physiology as well as general microbiology or general biology. Candidates with a record of research in some area of microbial physiology, yeast genetics, and/or signal transduction are preferred. The successful candidate for the Plant Systematics position will teach Plant Taxonomy/Systematics and in the General Biology Program.

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Department of Physiology and Pharmacology

Programs of Study

The Department offers a program of formal courses, seminars and research leading to the M.S. degree in Physiology and Pharmacology and the Ph.D. degree in Biomedical Sciences. Research areas include: cardiovascular physiology, neurophysiology, respiratory physiology, metabolic regulation, nutrition, intracellular regulatory processes, cell biology, molecular endocrinology, basic and clinical pharmacology and toxicology. Interdepartmental programs are encouraged and exist inphysiology and biochemistry and cell and molecular biology.

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Department of Biology

Programs of Study

The Graduate Programs of the Biology Department endeavor to provide an academic atmosphere in which graduate students and faculty can work together as a community of scholars. Through the free exchange of information, it is hoped that each student will broaden his/her intellectual perspectives, prepare for a productive vocation, and realize his/her potential as a scientist and as a responsible and informed member of society. Before embarking on graduate-level study, it is essential that the student has an understanding of the basic concepts in biology. With such, he/she then can: (1) develop expertise in a specialized field of biology through independent study and research, supported by a well-planned program of cognate courses, (2) learn the methods employed in biological investigation and proceed toward making his/her own contribution to the scientific community, and (3) participate in the dissemination of the biological knowledge.

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Department of Biology

Programs of Study

The Department of Biology provides graduate research and training in microbe, animal and plant biology, from the molecular to the organismic level, placing emphasis on the Ph.D. in biology with specializations in molecular and cellular biology, physiology, endocrinology and neuroscience, ecology, behavior, and evolution. In addition, a number of graduate students studying with Biology Department faculty members are enrolled in the Interdepartmental Graduate Program, in Molecular Biology, Cell Biology and Biochemistry.

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Department of Biophysics

Programs of Study

The lineage of the Department of Biophysics can be traced directly to the Biophysics Institute, which was founded in 1974. Early research in the Biophysics Institute focused on lipid physical chemistry, lipid metabolism and lipid-related diseases such as atherosclerosis and gallstone formation. In recent years, the research areas of in the Department of Biophysics have broadened considerably and now encompass many facets of protein and glycoprotein function, cell biology and structural biology. The Department is committed to continued growth in the 1990's and is expanding both its instrumentation facilities and laboratory space. In this exciting period, new faculty are being added to expand existing areas of expertise and the Department has moved into a new research building —the Center for Advanced Biomedical Research.

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Academic excellence has always characterized Brandeis, the youngest private research university in the country. It combines the breadth and scope of a world-class research institution with the intimacy and faculty contact of a small liberal arts college.

The school supports an innovative and exciting program of learning that emphasizes an interdisciplinary approach to knowledge and the solution of real-life problems. Brandeis is the only nonsectarian Jewish-sponsored college or university in the country. A culturally diverse student body of 3020 undergraduates and 1199 graduate students enjoys unsurpassed access to an involved faculty of nationally and internationa lly acclaimed scholars.

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Molecular and Cell Biology

Introduction

The Brandeis Ph. D. program in Molecular and Cell Biology offers excellent training in an broad range of biological study. The research interests of our faculty can be roughly grouped into three major areas: Molecular Biology, Genetics and Development; Structural and Cell Biology; and Neurobiology. In keeping with the interdisiplinary nature of our program, many of our faculty also participate in other Brandeis Ph. D. degree programs in Biochemistry, Biophysics and Neurobiology. The fauclty of this program are interested in areas such as genetics and neurogenetics; cancer; behavior, sensory transduction and learning; DNA replication and repair; RNA processing and transport; motility; immunology; nutrition.

WWW: www. bio. brandeis. edu/pages/faculty/MolCellBioFaculty. html

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Department of Biochemistry

Introduction

Graduate Program in Biochemistry

The Graduate Program in Biochemistry focuses on structure, function, and mechanism of biological molecules. The program provides students with training in basic chemical principles operating in a biological context. For example, enzyme active sites are viewed as specialized catalysts in which the principles of physical organic chemistry are used to carry out remarkable, but understandable, molecular transformations. Likewise, control of gene expression may be understood in terms of the thermodynamics of specific interactions of proteins with nucleic acids. The driving dictum of the Biochemistry Program is that mastery of a relatively few basic chemical principles allows understanding of an otherwise bewildering variety of phenomena encountered in the biological world.

The program combines formal course work, laboratory rotations, and individual research. In the first year, all students take a two-semester course in Advanced Biochemistry and two one-semester courses: Molecular Biology and Physical Chemistry of Macromolecules. In addition, during the first academic year, students carry out six laboratory rotations of six weeks each. At the end of the first year, each student chooses a laboratory in which to pursue guided research towards the Ph. D. degree. Other requirements include defense of research propositions, a comprehensive examination, and two semesters of teaching experience. All students are financially supported by a stipend, a tuition waiver, and a contribution to health insurance. The faculty listed below are participants in the Biochemistry program. Students may work in any of the participating research—groups, regardless of departmental affiliation.

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Michael Rosbash—U1 snRNP (small ribonucleoprotein particle) and its role in the early steps of spliceosome assembly, which probably include pre-mRNA commitment to splicing.
E-Mail: rosbash@brandeis. edu
Pieter C. Wensink—Mechanisms regulating developmentally specific transcription in higher organisms.
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Brigham Young University
杨伯翰大学

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Department of Botany and Range Science

Programs of Study

Plants play a crucial role in the maintenance of life on this planet. Graduate students in the Department of Botany and Range Science pursue research in the general areas of plant classification (primarily seed plants, algae, and lichens), genetics (molecular emphasis), physiology, ecology, wildlife biology, biological education, and wildland management. Directed by seventeen faculty members, graduate programs are focused on the biota of the Intermountain West.

Students are expected to become familiar with modern theory, tools, and procedures to understand, manage, and conserve the earth's natural resources.

Correspondence and Information

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The Faculty & their Research

Jack D. Brotherson—Community ecology; range

management.
E-Mail: jack-brotherson@byu.edu
Rex G. Cates—Plant/Herbivore Interactions; Ecological Chemistry.
E-Mail: rex-cates@byu.edu
Paul Alan Cox—Plant evolutionary ecology; tropical ecology.
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Jerran T. Flinders — Wildlife behavior; wildlife habitat.
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Wilford M. Hess—Ultrastructure; plant pathology.
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Bruce A. Roundy—Revegetation; restoration ecology.
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Samuel R. Rushforth—Aquatic ecology; environmental policy.
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Larry Lee St. Clair—Lichen ecology.
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Bruce N. Smith—Plant physiology; photosynthesis.
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William D. Tidwell—Paleobotany; anatomy.
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Darrell Jack Weber—Plant biochemistry; pathology.
E-Mail: darrell-weber@byu.edu
Stanley L. Welsh—Plant systematics.
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Department of Animal Science

Programs of Study

The Animal Science Graduate Program is designed to train students in the following areas: breeding and genetics, meat and muscle biology, molecular biology, reproduction, monogastric and ruminant nutrition, management, and international production.

The master of science (MS) degree in animal science is designed to prepare a student to pursue a PhD degree or provide the student with additional technical skills beyond the BS degree to be successful as a livestock operation manager or as a scientist involved with technical support or international livestock production.

Correspondence and Information

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The Faculty & their Research

N. Paul Johnston—Nutrition, poultry and small animal; reproduction and light interaction poultry.
Richard O. Kellems—Ruminant nutrition; alternative feedstuff development and evaluation; nutrient utilization.
John E. Knowles — Animal health; reproductive physiology and equine medicine.
Leon E. Orme — Growth and body composition; livestock evaluation.
Robert L. Park — Animal breeding and genetics; molecular genetics; swine and livestock production.
Beverly L. Roeder — Anatomy; physiology; medicine and surgery; animal health; prevention and diagnoses of metabolic disorders.
Roy W. Silcox—Reproductive physiology; management; regulation of ovulation; superovulation; embryonic development.
Max V. Wallentine—Meat science; sheep and livestock production.

Department of Agronomy and Horticulture

Correspondence and Information

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The Faculty & their Research

Phil S. Allen—Seed physiology; ornamental horticulture, seed physiology.
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D. Delos Ellsworth — Real estate appraisal and analysis.
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R. Dwain Horrocks—Crop physiology; ecological modeling; forage production and utilization.
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Larry S. Jeffery—Physiology of weed growth and competition.

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Von D. Jolley — Mineral nutrition; chemistry of iron uptake in plants.

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Sheldon D. Nelson — Soil physics; irrigation management; herbicide degradation in soils.

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Laren R. Robison — Plant genetics; DNA analysis of new crop species; agriculture development.

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Richard E. Terry — Soil microbiology; soil nitrogen and carbon transformations, bioremediation, interactions of nitrogen fixation and plant iron nutrition.

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C. Frank Williams — Plant propagation; turf management; organic materials recycling; water quality.

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Department of Biological Science

Correspondence and Information

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Program of Study

The Biological or Life Sciences range from molecular biology and biophysics to ecology and behaviour. Biology is the study of life. Its two great themes are: evolution and ecology — the patterns of life in time and space; and development and function — the mechanisms by which living things are formed and maintain themselves.

Faculty and their Research

John E. Black — Studies of the forces and movements of atoms on metal surfaces.

E-Mail: black@phonon.physics.brocku.ca

Bill Cade — Field and laboratory studies on the evolution of insect mating systems.

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Yousef Haj-Ahmad — The development of bovine adenovirus type 2 and type 3 into helper—independent viral vector(s) for applications in gene therapy and recombinant vaccine.

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A. Joffre Mercier — Investigate the mechanisms of such synaptic plasticity using neuromuscular systems of crayfish.

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Ralph Morris — Parental care behaviour of colonial nesting seabirds.

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R. Peter Rand — Osmotic Stress and osmotic pressure measurements.

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Peter Nicholls — Oxidative enzymes and the bioenergetics of membrane systems.

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Biology and Medicine

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Program of Study

Program in Artificial Organs, Biomaterials and Cellular Technology Fields of Study. Biomaterials; biomechanics; artificial organs and related areas of bioengineering. Program in Ecology and Evolutionary Biology Fields of Study. Evolutionary biology; population and community ecology of marine plants and animals; population genetics; evolution of genetic system; ecological genetics; mitochondrial genetics; plant-animal interactions; mammalian paleobiology; ungulate evolution; foraging ecology; pollination biology; dispersal of plants and animals; animal behavior; sexual selection; insect re-

productive behavior. Program in Epidemiology and Gerontology Fields of Study. Academic gerontology and chronic disease epidemiology. Program in Molecular Biology, Cell Biology and Biochemistry Fields of Study. Interdisciplinary, drawing on molecular biology, cell biology, biochemistry, developmental biology, genetics, immunology, microbiology and virology; areas of emphasis include nucleic acids; RNA splicing and structure; ribosomal function; HIV and retroviruses; environmental mutagenesis; cellreceptors; cell division cycles; cell differentiation; site-specific recombination; biochemical and developmental genetics; gene expression; oncogenes; cell and organelle ultrastructure; schistosome antigens; photosynthesis; cell biology of algae; research seminar in first semester; research rotations in different laboratories leading to potential thesis project. Program in Molecular Pharmacology and Physiology Fields of Study. Molecular and structural pharmacology; neuropharmacology; cellular, comparative and organ systems physiology; neurophysiology and euroanatomy; programs of study and research developed individually in consultation with student advisor and advisory committee designed to ensure expertise in student principal field. Program in Neuroscience Fields of Study. Interdisciplinary, devoted to neurophysiology, neuropharmacology and neuroanatomy.

Faculty and their Research

Kailash C. Agarwal—Antithrombotic and cardiovascular drugs from medicinal plants, marine organisms, and synthetic sources.

E-Mail: kagarwal@brownvm.brown.edu

Samuel I. Beale—Biosynthesis of photosynthetic pigments, regulation of chloroplast development, and adaptational responses of the photosynthetic apparatus to environmental variables.

Elaine Bearer—Cell movements.

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David A. Bereiter—The anatomical and physiological mechanisms within the central nervous system that underlie the autonomic aspects of injury such as the control of the hypothalamic—pituitary-adrenal axis and of cardiovascular function.

David M. Berson—A class of ganglion cells which accounts for half of the retinal output yet remains almost completely mysterious.

Mark D. Bertness—The organization and dynamics of natural populations and communities utilizing experimental methods in natural populations.

Christine A. Biron—Natural killer (NK) and T cell responses elicited during acute viral infections.

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Kim Boekelheide—Use techniques in biochemistry, molecular, and cell biology to investigate an interdisciplinary toxicologic problem.

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Lundy Braun—Understand the basic biology of cervical cancer; current interests center on studying the role of human papillomaviruses (HPV) in the development of this genital tract malignancy.

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David E. Cane—Chemistry, enzymology and molecular genetics of natural products biosynthesis.

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Kent M. Chapman—Problems concerning the Na-K pump which provides the immediate source of electrical energy for neuronal function, and on how the functions of certain invertebrate neurons depend on the way structure determines the flow of ionic currents.

Chih-Hsi Chu—Chemical synthesis of purine and pyrimidine analogues.

Barry W. Connors—The basic physiology of its neurons, synapses and transmitters, and the patterns of its connections.

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Division of Biology

Research Programs

A major focus of research in the biology division is the understanding in molecular terms of how the complex structures within a cell function to carry out the complex, highly integrated set of processes by which each cell plays its role in the functioning of the entire organism. This leads to the study of the central problem of developmental biology—that is, understanding how the genetic information