physiologic changes with hypothalamic alterations is illustrated in aging rodents by dampened pulsitile release of growth hormone (Meites) and by altered rhythms of hypothalamic serotonin levels in association with the loss of female cycles (Walker). Not included in the book are discussions of steroid-dependent age changes in the rodent hippocampus (via corticosterone) and hypothalamus (via estradiol).

In sum, the book illustrates for the general reader a dynamic subject that has recently left its phenomenologic past and entered a paradigmatic phase with rich experimental possibilities.

CALEB E. FINCH

Andrus Gerontology Center, University of Southern California, Los Angeles 90007

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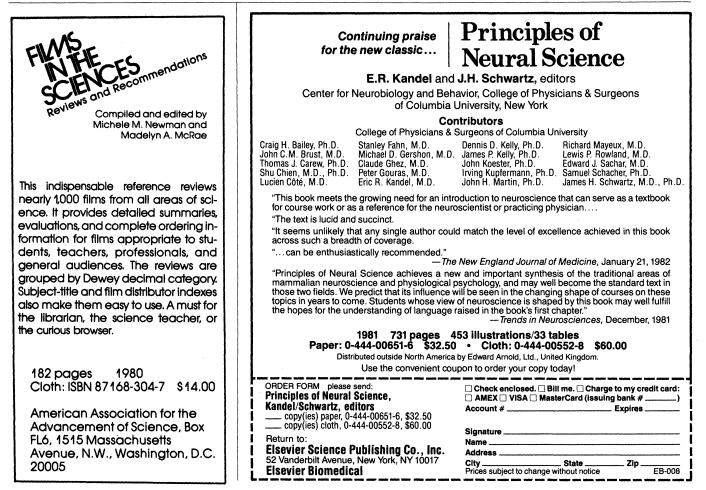
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## BIOCHEMISTRY/NEUROCHEMISTRY/ TOXICOLOGY

Applications are invited for a full-time, nontenure-track position of ASSISTANT PROFESSOR. The successful applicant will conduct research on cere-bral metabolism and blood brain transport and their responses to neurotoxicants with emphasis on cho-linesterase inhibitors. Strong background in bio-chemistry required and a Ph.D. in biochemistry preferred. Experience in neurochemistry and/or pharmacology as well as postdoctoral experience discipling desirable.

desirable. The research environment includes fully equipped, modern biochemical laboratories, animal surgery facilities, and analytical instrumentation (GC/MS, AA, HPLC). The position is available for up to 3 years, with opportunities to participate in faculty activities, including teaching. Salary is com-petitive and commensurate with experience and training. Send curriculum vitae, a description of present and future research interests, and names of three references by 3 May 1982 to: Search Commit-tee, c'o Dr. Lester R. Drewes, Department of Bio-chemistry, University of Minnesota, Duluth, Duluth, Minn. 55812. An Equal Opportunity/Affirmative Ac-tion Employer. tion Employer.

CANCER INVESTIGATOR. The University of Kansas College of Health Sciences is seeking a highly qualified scientist in the field of cancer research. qualified scientist in the field of cancer research. This position is an endowed faculty appointment titled the Distinguished Professorship for an Ad-vancement of Cancer Research. Candidate must have an M.D. or M.D./Ph.D. and be able to establish a productive program in basic or applied cancer research. A record of meritorious publications and ability to obtain extramural funding is requested. Space and some institutional funds will be available. Salary is competitive and commensurate with the Salary is competitive and commensurate with the experience of the individual. Applicants should sub-mit a letter describing interests and needs, copy of curriculum vitae, and names and addresses of three references to: Dr. Donald Svoboda, University of Kansas College of Health Sciences, 39th and Rainbow, Kansas City, Kansas 66103. Equal Opportunity/Af-firmative Action Employer.

#### CHAIR OF MICROBIOLOGY

Applications are being accepted for the position of chair of microbiology at the University of Kansas College of Health Sciences and Hospital. The de-Conge of Heath Sciences and Hospital. The de-partment has adequate research space and full-time faculty positions are available. Potential candidates should have a strong research record, demonstrated administrative skills, a commitment to teaching administrative skins, ar committent to examine medical students, graduate students, and continuing education to physicians, and a commitment to pro-viding aggressive leadership for continued scientific growth of the department.

Submit curriculum vitae and three references to:

Edward J. Walaszek Chairman, Search Committee Department of Pharmacology University of Kansas College of Health Sciences and Hospital Kansas City, Kansas 66103

Closing date: 1 May 1982. Kansas University is an Affirmative Action/Equal Opportunity Employer.

#### POSITIONS OPEN

NONTENURE-TRACK POSITION IN BIOLOGY at NONTENURE-TRACK POSITION IN BIOLOGY at Washburn University in Topeka, Kansas. This ap-pointment is for 9 months with possible renewal up to 4 years at an instructor level. Master's degree in biology or zoology required with some teaching experience at the college level. Persons with a Ph.D. will not be considered. This position is at instructor level only. Responsibilities will include undergradu-ate lecture and laboratory courses in general biolo-gy, a freshman cell biology course, and possible teaching in a non-laboratory buman anatomy course or human physiology laboratory. Salary commence or human physiology laboratory. Salary commensu-rate with qualifications and experience. Closing date for applications will be 16 April 1982. Send letter of application with résumé, three letters of recommenadion, and academic transcripts to: Don R. Boyer, Ph.D., Chairman, Department of Biology, Washburn University of Topeka, Topeka, Kansas 66621. Wash-burn University is an Equal Opportunity/Affirmative Action Employer

BIOLOGY INSTRUCTOR. Budgeted position start-BIOLOGY INSTRUCTOR. Budgeted position start-ing 15 September 1982. Teach introductory courses, including botany. Aquatic-pollution experience pre-ferred. Master's degree in biology, minimum. Salary negotiable. Send curriculum vitae, transcripts, and list of references by 1 June 1982 to: Dr. William Cooper, Department of Biology, Auburn University at Montgomery, Montgomery, Ala. 36193. An Equal Opportunity/Affirmative Action Employer.

#### BOTANIST/PLANT BIOLOGIST

Instructor or assistant professor. Ph.D. or A.B.D. To teach in life sciences program of undergraduate college. Broad background in plant biology, includ-ing strong and diverse laboratory experience, re-quired. Responsibilities include teaching introduc-tory biology, plant biology, horticulture, and ecolo-gy and management of the college greenhouse. A strong commitment to integrative, innovative teach-ing is required. Salary range for 1982-83 is approxi-mately \$15,000 to \$19,000, depending on training and experience. Application deadline: 16 April 1982. Apply to: Edgar C. Reckard, President, Centre Col-lege of Kentucky, Danville, Kentucky 40422.

## CELL BIOLOGIST—ELECTRON MICROSCOPIST

Haverford College has available a 1-year, nonten-ure-track position at the assistant professor level beginning September 1982. Teaching duties will in-clude participation in an introductory cell and mo-lecular biology course, a junior course which in-cludes a 6-week section on electron microscopy, and a capior level course. The senior level course in a senior-level course. The senior-level course in-volves directing research for a number of senior

majors. The department has a strong commitment to biochemistry and research in molecular and cell biology-biochemistry and has equipment to support research needs of the new faculty person. Send curriculum vitae and names of three refer-

ences to:

## Dr. Melvin Santer Biology Department Haverford College Haverford, Pa. 19041

We are an Equal Opportunity/Affirmative Action Employer.

## FACULTY POSITION IN EPIDEMIOLOGY (Occupational Health)

Applications invited for professor of epidemiology Department of Biomedical and Environmental Health Sciences, School of Public Health, Universi-ty of California, Berkeley, Responsibilities include development of courses and research program in epidemiology of occupationally related diseases and development of courses and research program in epidemiology of occupationally related diseases and participation in other aspects of epidemiology and occupational health teaching programs. These pro-grams are responsible for training professional M.P.H. and Dr.P.H. and academic M.S. and Ph.D. degree students. Incumbent will develop collabora-tive relationships on the University of California Medical Center campus in San Francisco through the Northern California Occupational Health Cen-ter. Applicants should possess M.D. or Ph.D. degree and have demonstrated research, teaching, and pro-fessional competence in epidemiology. Appointment is tenured and salary is negotiable. The University of California is an Equal Opportunity/Affirmative Ac-tion Employer. Submit curriculum vitae, letters of reference, and reprints of publications most relevant to the position to: Dr. S. Leonard Syme, School of Public Health, University of California, Berkeley, California 94720. Deadline for receipt of applications is 15 May 1982, although search will continue until suitable candidate is found.

#### POSITIONS OPEN

## CARTILAGE STRUCTURE AND DESTRUCTION

There are two vacancies for postdoctoral fellows and/ or graduate students (McGill University) to work on biochemical, immunochemical, and immunological problems relating to the structure of connective tissues and their degradation. Stipends are in ac-cordance with Canadian Medical Research Council scales. Student fees will be paid for Canadian and foreign students. Curriculum vitae with names of three referees should be sent to: three referees should be sent to:

Dr. A. R. Poole Director, Joint Diseases Laboratory Shriners Hospital 1529 Cedar Avenue Montreal, Quebec, Canada H3G 1A6

CELL BIOLOGIST to teach courses in cell biology and one or more of the following: cell physiology, bioenergetics, immunology, membrane biology, and microbiology. Submit letter, curriculum vitae, and names of three references to: Cell Biology Search Committee, c/o Joe Pelliccia, Department of Biology, Bates College, Lewiston, Maine 04240. A repre-sentative will be at the FASEB meetings in April. Affirmative Action/Equal Opportunity Employer.

CHAIRMAN, DIVISION OF RADIATION ONCOL-OGY. The City of Hope National Medical Center invites applications for the chairman of the Division of Radiation Oncology. The City of Hope provides tertiary medical care services on a 90-acre campus in the greater Los Angeles area. Clinical material is predominantly oncology and there is a major com-mitment to biomedical and clinical research. The Radiation Oncology Division has a floor space of about 12,000 square feet and is well staffed with radiation oncologists, physicists, radiobiologists, advant 12,000 square rect and is wen staffed with radiation oncologists, physicists, radiobiologists, and support personnel. Reply to: Lawrence D. Petz, M.D., Chairman, Search Committee for Radiation Oncology, City of Hope National Medical Center, 1500 East Duarte Road, Duarte, California 92010. Telephone: 213-359-8111

CLINICAL IMMUNOLOGIST. Rank of assistant/ associate professor; 12 months; tenure-track posi-tion. Salary open. Position available after 21 August 1982.

Duties include development and supervision of a clinical immunology service laboratory and instruc-tion/consultation with veterinary students and clinicians on immunologically related problems. In addi-tion, the candidate must have demonstrated research productivity in immunology. Research expe-rience in the area of immunological problems of domestic animals is preferred. Participation in con-tinuing education programs to veterinarians is also expected. Qualifications: D.V.M. with advanced training in immunology or Ph.D. in immunology.

Send letter of application, résumé, and three refer-ences to: Walter E. Hoffmann, D.V.M., Ph.D., Col-lege of Veterinary Medicine, Small Animal Clinic, 1108 West Hazelwood Drive, University of Illinois, Urbana, Illinois 61801; telephone: 217-333-5300.

Applications will be accepted until 1 May 1982 or until the position is filled.

The University of Illinois is an Affirmative Action/ Equal Opportunity Employer.

MICROBIOLOGY. Applications are invited for an assistant or associate professorship in the Depart-ment of Veterinary Pathobiology, University of Illi-nois at Urbana-Champaign. Applicants must have a Ph.D. degree in an area of biological sciences or both D.V.M. and Ph.D. degrees. The entry level will be determined by the qualifications and experience of the candidate. The successful applicant will be expected to develop a research and graduate pro-gram in microbiology with emphasis on host-parasite interactions, preferably at the molecular level, and including a strong immunologic component. Appli-cants should have demonstrated their potential or ability to conduct independent research. There will be opportunities to participate in teaching, both at MICROBIOLOGY. Applications are invited for an be opportunities to participate in teaching, both at the professional (veterinary curriculum) and the graduate level.

Applicants should submit their professional résumé and names and addresses of three referees to: Dlego Segre, Department of Veterinary Pathobiology, Uni-versity of Illinois, 1101 West Peabody Drive, Urbana, Illinois 61801.

In order to ensure full consideration, applications must be received by 1 June 1982. The position will be filled as soon as possible after the closing date. The University of Illinois is an Affirmative Action/ Equal Opportunity Employer.

### ASSISTANT PROFESSOR OF MICROBIOLOGY

Applications are invited for a ten year track position in the Department of Microbiology and Immunology, Kirksville College of Osteopathic Medicine.

Qualifications include the PhD or equivalent degree post-doctoral experience, ability to teach medical microbiology, and the ability and desire to develop a strong, independent research program and any subdiscipline of microbiology, molecular biology or immunology.

The position is available August 1, 1982. Interested applicants should submit letter describing research and academic interest, curriculum vitae and names of three references to Gerald J. Tritz, PhD, Professor and Chairman, Department of Microbiology and Immunology.

> **KIRKSVILLE COLLEGE OF OSTEOPATHIC MEDICINE One Osteopathy Avenue** Kirksville, MO 63501

An Equal Opportunity Affirmative Action Employer

## VICE PRESIDENT **GENERAL MANAGER**

Responsible for the successful growth of a well founded proprietary company engaged in the development and marketing of a variety of advanced BIOTECHNOLOGY products and processes.

Our client, a prominent NYSE corporation heavily involved in the health care industry, requires an individual with outstanding technical accomplishments, combined with astute business acumen, with ten to fifteen years of experience in the cell biology field, in both research and development and general management capacities. Education must include a Ph.D. in biology, with emphasis in molecular biology, biochemistry, or immunology.

Starting target base salary \$100,000, plus annual incentive opportunity, comprehensive perguisites, and an excellent executive benefits package

Please submit resume and salary requirements to:

Northern Consultants, Inc. P.O. Box 220 Western Avenue Hampden, ME 04444

Our client is an equal employment opportunity employer.

THE AUSTRALIAN NATIONAL UNIVERSITY invites applications for RESEARCH APPOINTMENTS in the RESEARCH SCHOOL OF EARTH SCIENCES (director, Professor A. E. Ringwood). The school consists of a number of semi-autonomous research groups working in strategic areas of geophysics and geochemistry: earth physics (Professor K. Lambeck), geophysical fluid dynamics (Professor J. S. Turner), petrophysics (Dr. M. S. Paterson), geomagnetism (Dr. M. W. McElhinny), petrochemistry (Professor A. E. Ringwood), geochronology and isotope geochemistry (Dr. W. Compston), trace element geochemistry (Dr. S. R. Taylor), and environmental geochemistry (Dr. W. Compston), trace element geochemistry (Dr. S. R. Taylor), and environmental geochemistry (Dr. W. Compston), trace element geochemistry (Dr. S. R. Taylor), and environmental seconce research fellow (PDF) and research fellow (RF) levels. In exceptional cases, appointments at senior research fellow (PDF) and research fellow (RF) levels. In exceptional cases, appointments at senior research fellow (SF) level will be considered. Applicants are invited to write directly to the group leaders designated above for further information. TECTONOPHYSICS (PDF, RF, SRF, F, SF)—A candidate is sought with interests in large-scale tectonophysics problems such as mantle convection, basin formation, subduction tectonics, and core formation. The successful candidate will be expected to interact closely with related research groups in the School and will initially be attached to the Earth Physics Group. EARTH PHYSICS (PDF, RF, SRF)—The role of double diffusive convention is of particular interest to this group. A candidate is sought with interests in one of the following fields: (i) laboratory and theoretical studies of mixing in the ocean, and (ii) laboratory studies of fluid dynamical processes in the interior of the earth, for example, layered magnatic intrusions, mantle convection. Applications from candidate is sought with interestis of a ustralian inland salt lakes and in the Great Barrier Reef. The gro An appropriate background in geology is necessary, combined with experience and/or interest in relevant fields such as mass spectrometry, experimental petrology, diffusion in minerals, and thermal modelling. Salary in accordance with qualifications and experience within the ranges: senior fellow, \$22,782 to \$38,210 per annum; senior research fellow, \$29,282 to \$34,928 per annum; fellow, \$24,437 to \$32,782 to \$32,739 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow normally up to 3 years with the possibility, in certain cases, of extension to 5 years; postdoctoral fellow up to 2 years with the possibility of extension to 3 years. Reasonable appointment expenses paid; superannuation; assistance with housing. The University reserves the right not to make an appointment or to make an appointment by invitation at any time. Applicants may obtain considered.

## **VICE PRESIDENT** for **RESEARCH PROGRAMS** THE UNIVERSITY OF CHICAGO The Vice President will be an officer of the University, reporting to the President, with major responsibility for coordinating policy and administrative relations with the Argonne National Laboratory, which is managed by The University of Chicago. The Vice President will be a member of the Board of Governors which is being established to oversee the Argonne National Laboratory, and the University's Council on Research.

Other functions will include oversight responsibility for the University's Office of Sponsored Programs, whose director will report to the Vice President, and for the University's patent policy, the work of the Committee on Human Subjects, the Committee on Bio-Hazards, and the University's Radiation Protection Service.

An outstanding scientist or engineer, with research and teaching experience at the university level and substantial experience with the federal government, is sought for this position.

The University of Chicago is a private research university with a small undergraduate college. It has nearly 8000 students, more than 1000 faculty members and 7200 non-academic staff.

Compensation will be commensurate with experience.

Candidates should submit a letter of application, curriculum vitae, and the names of 3 references to:

> Office of the President The University of Chicago 5801 South Ellis Avenue Chicago, Illinois 60637

An Affirmative Action Equal Opportunity Employer

CARDIOLOGISTS—The Division of Cardiovascu-lar Disease of the Department of Medicine at the University of Alabama has available two assistant professor and three instructor positions open to quali-fied individuals. The individuals must have experience in the management of patients with cardiovas-cular disease, in cardiac catheterization, and have a firm commitment to teaching. Finally, the individ-uals should have a research background and be able to carry out independent research. One of the assist-ant professors will also need to be knowledgeable in ant professors will also need to be knowledgeable in echocardiography and exercise physiology. Apply to: Division of Cardiovascular Disease, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama 35294, attention: Norma McSweeney; telephone 205-934-5615. An Equal Op-portunity/Affirmative Action Employer. Expiration date for receipt of applications: 31 May 1982.

CLINICAL PATHOLOGIST/ASSOCIATE DIREC-TOR OF CLINICAL LABORATORIES: University of California, Los Angeles (UCLA), Department of Pathology, is seeking an experienced, Board-certi-fied clinical pathologist for responsibilities as asso-ciate director of the Comprehensive University Hos-pital Laboratories and clinical pathology training pital Laboratories and clinical pathology training programs. Experience is required in teaching and clinical laboratory management. Expertise in data automation is desired. Appointment will be at the assistant-associate professor levels, depending on qualifications. Send curriculum vitae to: George S. Smith, M.D., Director, Clinical Laboratories, UCLA Center for Health Sciences, Los Angeles, Calif. 90024. UCLA is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are en-couraged to apply. couraged to apply.

DEAN, SCHOOL OF AGRICULTURE, ENVIRON-MENTAL SCIENCE AND HOME ECONOMICS. Applicants must have an earned Ph.D. in an agricul-tural discipline or related area; a minimum of 5 years of teaching, administrative, and research experi-ence; proven leadership and experience in Exten-sion (outreach) activities; a knowledge and apprecia-tion of the mission and operations of Land-Grant and 1890 schools; a knowledge of international activand 1890 schools; a knowledge of international activ-ities; and capability of interacting effectively with students. The dean is also responsible for develop-ing, submitting, and managing the state budget and supervising the federal and other budgets of the school, and coordinates research efforts with Au-burn University and Tuskegee Institute. Send letter of application, full curriculum vitae, and transcripts (including at least three professional references) and supporting materials to: Dr. Jeanette Jones, Chair-person, Search Committee—Dean, School of Agricul-ture, Environmental Science and Home Economics, P.O. Box 207, Alabama A & M University, Normal, Alabama 35762. Open until suitable candidate is Alabama 35762. Open until suitable candidate is found; the appointment date is 1 August 1982. An Equal Opportunity Employer.

FACULTY POSITION/RADIATION BIOLOGY, UNIVERSITY OF UTAH. The Department of Radi-ology has a research faculty position open. The applicant will be expected to develop an indepen-dent research program in some area of radiation biology and/or hyperthermia. The section will con-sider applicants interested in any aspects of radia-tion biology/hyperthermia; however, preference will be given to those whose interest complements and be given to those whose interest complements and strengthens the existing areas of research (that is, an strengtions the existing areas of research (that is, an interest in cellular aspects both in vivo and in vitro). Send résumé and three references to: Dr. J. L. Roti Roti, Section of Radiation and Tumor Biology, Department of Radiology, University of Utah, Salt Lake City, Utah 84132. Application deadline is 15 May 1982. An Equal Opportunity/Affirmative Action Emplover

FACULTY POSITIONS. The University of Iowa, Department of Internal Medicine, is seeking faculty for positions in all subspecialties of internal medi-cine. Qualifications include M.D. degree. Board-eligibility in internal medicine and its subspecialties preferred. Applicant should have demonstrated abil-ities and skills in research, teaching, and clinical medicine. Research activities will be commensurate with the interest and the demonstrated ability of the applicant. The applicant will be expected to partici-pate in teaching and clinical activities of the Depart-ment of Medicine. Salary is based on the academic level of entry and on the applicant's qualifications and responsibilities. Candidates should submit cur-riculum vitae to: Randall Jordison, Administrator, Department of Medicine, SE306 GH, The University of Iowa, Iowa City, Iowa 52242. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Employer.

#### **POSITIONS OPEN**

#### DEVELOPMENTAL BIOLOGIST

Rollins College is seeking a Ph.D. for a tenure-track Rollins College Is seeking a Ph.D. for a tenure-track position in the area of cellular and developmental biology. Teaching responsibilities may include a course in cellular and developmental biology, em-bryology, general biology for science majors, and course(s) for the nonmajor. Opportunities exist for course development in areas of the candidate's expertise A strong interacting to cohord expertise. A strong interest in teaching undergradu-ates should be demonstrated. Some faculty research effort is expected. Send letter indicating interest, curriculum vitae, copies of all transcripts, and three letters of recommendation to:

### Dr. Persis C. Coleman Chairperson, Department of Biology Rollins College Winter Park, Fla. 32789

Deadline for application is 1 May 1982. Rollins College is an Equal Opportunity/Affirmative Action College.

THE DEPARTMENT OF PATHOLOGY, UNIVER-SITY OF CALIFORNIA, SAN DIEGO (UCSD), seeks applications for a DIRECTOR OF EXPERI-MENTAL PATHOLOGY. In addition to establishing an active research program, the individual will be responsible for teaching experimental pathology at the graduate and postdoctoral levels. Approximately 5000 square feet are available for research labora-tory and office space. Candidates should have an M.D. or Ph.D. and currently be a director of a large, active research program with substantial extramural funding that can be transferred to UCSD. Rank and professorial series and salary dependent upon qualifunding that can be transferred to UCSD. Rank and professorial series and salary dependent upon quali-fications. Qualified applicants should submit curric-ulum vitae by 31 May to: Dr. Peter Lampert, Chair-man, Department of Pathology M-012, University of California, San Diego, La Jolla, Calif. 22093. The University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer.

The Department of Applied Science at New York University (NYU) will appoint TWO NEW FACUL-TY MEMBERS effective 1 September 1982. The TY MEMBERS effective 1 September 1982. The department offers graduate programs leading to the master's and Ph.D. degrees in energy science and atmospheric science. Accordingly, the department is heavily engaged in research in these two areas at their two research centers: (i) Westbury, Long Island, and (ii) Washington Square, Manhattan. Applications must show a strong background in research in one or more of the following disciplines.

Assistant professor: Fluid mechanics, heat transfer, two-phase flow, coal combustion, power generation, solar energy, renewable energy.

Associate professor: Climate modelling, atmospheric chemistry, boundary layer meteorology, air-sea interaction.

Letters of recommendation and applications should be sent to: Professor Victor Zakkay, Chairman, Department of Applied Science, New York University, 26-36 Stuyvesant Street, New York, N.Y. 10003. NYU is an Equal Opportunity/Affirmative Action Fundower Employer

## THE UNIVERSITY OF CHICAGO A FACULTY POSITION FOR AN IMMUNOLOGIST OR A SCIENTIST IN A COMPLEMENTARY DISCIPLINE

IN A COMPLEMENTARY DISCIPLINE We seek a faculty colleague who, with his/her graduate students, would enjoy and benefit from working in immediate proximity to five immunolo-gists and their graduate students. The La Rabida Institute is located in Jackson Park on Lake Michi-gan. 2 miles from the University of Chicago Cam-pus. Primary appointment will be in an appropriate University of Chicago department such as Patholo-gy, Microbiology, Biochemistry, Pediatrics, or oth-er. Collectively we are responsible for the stimulat-ing and pleasant task of teaching portions of cell biology-immunology to undergraduates in the Col-lege and graduate and medical students in the Divi-sion of Biological Sciences. We have exceptional opportunities for interaction and collaboration with the clinical and basic science faculty at the Universithe clinical and basic science faculty at the Universi-ty and at La Rabida Children's Hospital.

Please direct inquiries to: The Search Committee, D. A. Rowley, D. J. Levitt, M. R. Loken, J. Quintáns, H. Schreiber, F. W. Fitch, T. L. Steck, and B. S. Strauss

#### La Rabida-University of Chicago Institute East 65th Street at Lake Michigan Chicago, Ill. 60649

The University of Chicago is an Equal Opportuni-ty/Affirmative Action Employer.

#### **POSITIONS OPEN**

#### EUV DETECTOR INSTRUMENTATION

The Space Sciences Laboratory of the University of California (UC) at Berkeley has an opening for an assistant research physicist or astronomer for a period of 1 year beginning April 1982 with a possible extension of 1 year, depending on NASA funding. The responsibilities of the position will include de-velopment of EUV detector instrumentation.

Applicants should have a Ph.D. in physics or astronomy with experience in high energy space instrumentation. Experience with microchannel-plate detectors and EUV instrumentation is required.

quirea. Send résumé and three letters of recommendation by 30 April 1982 to: Professor C. S. Bowyer, Space Sciences Laboratory, UC Berkeley, Berkeley, Calif. 94720. The University of California is an Equal Opportunity/Affirmative Action Employer.

## EXECUTIVE DIRECTOR OF THE AMERICAN CHEMICAL SOCIETY

A scientific society of 125,000 plus mem-bers and a staff of approximately 1,500 seeks nominations and applications for an executive director. This person will report directly to the Society's Board of Directors which has overall financial and programmatic re-

The executive director should have dem-onstrated strong leadership ability and have a record of excellence in administration. In addition, the executive director will be ex-pected not only to maintain and strengthen a strong public relations and public affairs program but also will be expected to have a program our also will be expected to have a personal involvement in these programs. Membership or eligibility for membership in the Society is required. The salary is open. Nominations and applications should be sent to: Eileen Reilley, Secretary, Search Commit-tee, American Chemical Society, 1155 16th Street, NW, Washington, D.C. 20036.

## FACULTY OPENING IN CHEMISTRY/ PHYSICS, 1982–1983

Physicist/chemist with deep commitment to under-graduate interdisciplinary team-teaching sought for prossible 1-year, nonrenewable visiting sought tof possible 1-year, nonrenewable visiting 1982–1983 appointment. Position dependent upon legislative funding. Successful applicant will be assigned to team including a biologist and a historian of science to teach coordinated introductory science program emphasizing study of science in historical and philo-sophical context sophical context.

Candidate must be capable of teaching nonmajors chemistry and nonmajors physics in an integrated fashion and should have demonstrable excellence in teaching as evidenced by letters of recommendation from students and colleagues. Master's degree re-quired; Ph.D. preferred.

Evergreen is an accredited, public liberal arts col-lege; no departments, no faculty ranks. Salary schedule based on experience.

Completed applications must be received by 3 May 1982. Send résumé, two letters of reconvendation from students and two from colleagues, and essay on educational philosophy. Send all materials to: Bar-bara Smith, Academic Dean, The Evergreen State College, Olympia, Washington 98505.

An Affirmative Action/Equal Opportunity Employer. Applications from minority candidates are strongly encouraged

#### FACULTY POSITION-BIOCHEMISTRY

The Department of Biological Chemistry, Hahne-mann Medical College, invites applications for a full-time position at the assistant professor level involv-ing teaching and research responsibilities. Candidate should have a Ph.D. or M.D., postdoctoral experi-ence in biochemistry, a record of research accom-plishments, and evidence of ability to secure exter-ted research support. Conditionary models and the dedicate nal research support. Candidate must be dedicated to excellence in research and in teaching of medical and graduate students. Research field of interest is open. Applicant should submit curriculum vitae, a open. Applicant should submit curriculum vitae, a bibliography, a brief outline of research objectives, copies of two recent publications, and names of three references to: Thomas M. Devlin, Ph.D., Chairman, Department of Biological Chemistry, Hah-nemann Medical College, Philadelphia, Pa. 19102. The Hahnemann Medical College and Hospital is an Equal Opportunity/Affirmative Action Employer and underse condition from unsure and markers of welcomes applications from women and members of minority groups.

IMMUNOPHARMACOLOGIST sought for Department of Internal Medicine, University of South Florida College of Medicine, Tampa.

Qualifications: Board-certified or -qualified internist with international class qualifications as an experimental immunopharmacologist. Full professorship qualifica-tions in terms of teaching experience and publications in a quality reviewed scientific journal. At least 10 years of experience leading an independent research program specializing in molecular mechanisms of lymphocyte and macrophage activities, lymphokine and thymic hormone action, and in the development of immunotherapeutic agents and strategies. Inquiries to: R. H. Behnke, Professor and Chairman, Department of Internal Medicine, 12901 North 30 Street, Box 19, Tampa, Florida 33612.

The University of South Florida is an Affirmative Action Institution and is in accordance with Florida's "Sunshine Amendment" to the State Constitution. Dossiers are a matter of public record and available upon request to its residents.



The International Atomic Energy Agency seeks Safeguards Inspectors to participate in the execution of the Agency's safeguards programme. Required university degree in nuclear chemistry, nuclear chemical engineering, or nuclear electronics/instrumentation. Experience in engineering, or nuclear electronics/ instrumentation. Experience in the processing of nuclear materials, preferably in plant operation or in the instrumental measurements of quantities of nuclear material advantageous. Fixed-term contract for two years with the possibility of further extension if service satisfactory. Tax-free emoluments depending on qualifications and experience approx. US\$ 39,000 per annum. Send curriculum vitae, indicating your nationality and referring to Vacancy Notice No. 18/82 to the Division of Personnel, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.



## **PROCESS BIOCHEMIST**

Continuing expansion of IMC's research program in biotechnology has created the need for an experienced protein chemist who has the ability to design and direct both basic and applied research projects. This highly visible position requires a strong background in industrial scale fermentation processes, enzyme technology, and the scale-up of biochemical separation processes.

In addition to significant industrial experience in process design and problem solving, the successful candidate must have thorough knowledge in the area of protein isolation and purification. Experience in radioimmuno assay technique is highly desirable. An advanced degree in biochemistry is required.

International Minerals & Chemical Corporation is a leading supplier to agricultural markets worldwide and offers an outstanding salary commensurate with experience. Relocation assistance is included in the company's excellent fringe benefit package. For confidential consideration, forward your resume with salary history to James E. Moore, Manager, Recruiting and Placement at the following address:

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

421 East Hawley St., Mundelein, IL 60060 An Equal Opportunity/Affirmative Action Employer



2 APRIL 1982

### FACULTY POSITION DEPARTMENT OF NATURAL SCIENCES

Opening 1 September. Assistant professor, undergraduate medical technology program. Ph.D. research and teaching background in one of: immunology/immunohematology, mi-crobiology, histology, and parasitology. Con-sideration given to M.S. or M.T. with certifica-tion (ASCP) in clinical specialty and research and taeabling expressions. and teaching experience. Should establish independent research program. Teaching in one or more of above areas. Salary and rank commensurate with experience. An Equal Opportunity/Affirmative Action Employer. Résumé and three references by 30 June 1982 to:

Dr. Michael Chenouda Dr. Michael Chenouda Coordinator Medical Technology Program Department of Natural Sciences York College City University of New York Jamaica, New York 11451

#### FACULTY POSITION IN PHYSIOLOGY

Full-time faculty position is available in the Depart-ment of Physiology beginning September 1982. Ap-plicants should have ability to conduct lectures and laboratories in any of the disciplines related to human physiology. Applicants must hold the Ph.D. or master's degree and have a strong commitment to teaching. Send curriculum vitae and names of three references by 15 May 1982 to: Director of Basic Sciences, Cleveland Chiropractic College, 6401 Rock-hill Road, Kansas City, Missouri 64131.

FACULTY POSITION IN PLANT ECOLOGY. A tenure-track position is available in the Botany Department at the University of Massachusetts/Amherst. Candidates should have a strong background and research interest in some area of physiological ecology, for example, stress physiology, nitrogen fixation in plants, and so forth. The successful applicant will be expected to maintain an active research program, participate in undergraduate and graduate teaching in ecology, and develop an ad-vanced course in own area of specialization. The position will be filled at a level commensurate with position will be filled at a level commensurate with experience. Starting date may be 1 September 1982, 1 February 1983, or 1 September 1983. Send curricu-lum vitae with a brief statement of present and future research, copies of recent publications, and three letters of recommendation to: Ecology Search Com-mittee, Department of Botany, University of Massa-chusetts, Amherst, Mass. 01003. Closing date for applications is 1 May 1982. An Affirmative Action/ Equal Opportunity Employer.

#### **GROSS ANATOMISTS**

Applications are invited for two tenure-track posi-Applications are invited for two for the feedback posi-tions at the level of assistant professor in the Depart-ment of Anatomy at St. Louis University beginning 1 July 1982. Applicants should hold the Ph.D. or M.D. degree and preference will be given to those with postdoctoral training. Candidates should be strongly committed to teaching in medical gross originate and the present in neurobickay or cell strongly committed to teaching in medical gross anatomy and to research in neurobiology or cell biology. Send curriculum vitae and names of three references by 1 May 1982 to: Chairman, Search Committee, Department of Anatomy, St. Louis University School of Medicine, 1402 South Grand Boule-vard, St. Louis, Mo. 63104. St. Louis University is an Equal Opportunity/Affirmative Action Employer.

MARINE CHEMIST/CHEMICAL OCEANOGRA-MARINE CHEMISI/CHEMICAL OCEANOGRA-PHER. Search extended for assistant/associate pro-fessor, tenure-track appointment at 4-year under-graduate campus beginning August 1982. Applicant should hold earned Ph.D. in marine chemistry and oceanography and will be expected to teach lectures and laboratories in marine chemistry, introductory marine science, and general chemistry, and to develname science, and general chemistry, and to devel-op advanced courses in marine or environmental chemistry. Send résumé with names of three refer-ences to: Dr. R. H. Moore, Dean, School of Sciences, Coastal Carolina College, University of South Caroli-na, Conway, S.C. 29526. An Equal Opportunity/ Affirmative Action Employer: minorities and women are encouraged to apply.

#### POSITIONS OPEN

## CENTER FOR FLUORESCENCE RESEARCH IN BIOLOGY

Applications are invited for tenure-track FACUL. TY POSITIONS at the junior and senior professional levels. Candidates should be interested in developing strong and independent research within a recent-ity established Center for the Application of Fluores-cence to Biology. This area is broadly defined so as to include outstanding scientists from diverse disciplines who share a focus in the solution of important biological problems by means of fluorescence, image analysis, spectroscopic, and other biophysical approaches. Teaching will be at the undergraduate and graduate levels in an expanding biological sciences department. Curriculum vitae, brief statement of present and future research interests, and three letters of recommendation should be sent to:

#### Dr. Chien Ho Department of Biological Sciences Carnegie-Mellon University 4400 Fifth Avenue Pittsburgh, Pa. 15213

Carnegie-Mellon University is an Equal Opportunity/Affirmative Action Employer. Review of appli-cations will begin on 15 April 1982.

#### GEORGIA INSTITUTE OF TECHNOLOGY Geophysicist/Tectonophysicis

The School of Geophysical Sciences at the Georgia Institute of Technology, a unit of the University System of Georgia, invites applications for a tenuretrack position in the general field of geophysics or tectonophysics. Rank and salary are open and will depend on the experience and qualifications of the successful applicant; we are looking for an outstanding individual rather than a particular area of special-ization. The School of Geophysical Sciences is a growing department with 20 full-time faculty, four of whom are geophysicists. An active program of re-search encompasses theoretical and observational seismology, gravity interpretation, tectonophysics, heat flow, and electrical methods. Other areas of heat flow, and electrical methods. Other areas of specialization in the school are geochemistry and the atmospheric sciences. The M.S. and Ph.D. de-grees are offered as well as an undergraduate certifi-cate. Interested individuals should send a résumé to:

## Dr. Anton M. Dainty Dr. Anton M. Danty Chairman, Search Committee School of Geophysical Sciences Georgia Institute of Technology Atlanta, Ga. 30332

The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

#### HEAD, DEPARTMENT OF ENTOMOLOGY University of Idaho

Responsibilities for administration of entomological teaching, research, and extension. Candidates must have a Ph.D. in entomology or related field. Preference will be given to candidates showing dem-onstrated excellence in at least two areas of teachonstrated excellence in at least two areas of teach-ing, research, or extension; evidence of leadership; ability to attract extramural funding; and compe-tence in written and oral communication. Appoint-ment to be effective on or after 1 September 1982. Closing date for application: 15 June 1982, or until suitable candidate applies. Send letter of applica-tion, curriculum vitae, and at least three letters of reference to: Dr. Loren D. Koller, Chairman, Search Committee, Department of Entomology, University of Idaho, Moscow, Idaho 83843; telephone: 208-885-6595. 6595

Equal Opportunity/Affirmative Action Employer

#### MICROBIOLOGIST

Tenure-track assistant professorship starting Sep-tember 1982 in a department offering seven underremore 1982 in a department orering seven under-graduate programs, including biological sciences, microbiology, biochemistry, and environmental sci-ence. An initial appointment as associate professor is possible contingent upon the degree of one's experience and state funding. Teaching duties will include courses in microbial physiology and general microbiology and participation in introductory biolo-use a contract of science areas and applicants. microbiology and participation in introductory biolo-gy or environmental science program. Applicants must demonstrate a strong interest in undergraduate teaching and an ability to initiate and carry out a productive research program. Ph.D. required, post-doctoral experience preferred. Submit curriculum vitae, three letters of recommendation, and tran-scripts to: Microbiology Faculty Search Secretary, Department of Natural Sciences, University of Michi gan-Dearborn, Dearborn, Mich. 48128. Review of applications will begin 1 May 1982. A nondiscrim-inatory, Affirmative Action Employer.

#### POSITIONS OPEN

#### TRUDEAU INSTITUTE, INC.

A position exists for an IMMUNOBIOLO-GIST at the ASSOCIATE PROFESSOR level to develop an independent research program related to immunity to cancer and infectious diseases. Applicants should have at least 8 years of postdoctoral experience and provide evidence that they possess the capacity for a productive scientific career. The Tru-deau Institute is a not-for-profit, pure re-search institute situated on the shore of Saranae Lake, 10 miles from Lake Placid, N.Y. Send résumé and names of three references to:

Dr. R. J. North, Director Trudeau Institute, Inc. P.O. Box 59 Saranac Lake, N.Y. 12983

#### IMMUNOLOGY/PARASITOLOGY

The West Virginia School of Osteopathic Medicine (WVSOM), Department of Microbiology, has an opening for a tenure-track, 12-month position as an opening for a tendre-track, re-inorth periodi a sasistant professor in immunology/parasitology starting 1 July 1982. The applicant should be an effective teacher, be able to teach immunology and parasitology to medical students, and be able to continue with or develop an independent research

continue with of develop an an approgram. Send curriculum vitae, three letters of recommen-dation, and a statement of research interests no later than 15 April 1982 to: Dr. Elizabeth Blatt, Associate Dean/Basic Sciences, West Virginia School of Osteo-pathic Medicine, 400 North Lee Street, Lewisburg, West Virginia 24901. WVSOM is an Equal Opportunity/Affirmative Ac-tion Employer.

#### MEDICAL ONCOLOGIST

Opportunity for medical oncologist at professor or associate professor level. Research, teaching, and clinical activities and senior administrative responsi-bility in the Medical Oncology Unit and the Vermont Regional Cancer Center. Candidate must have recregional Cancer Center, Candudate Index nave rec-ord of leadership as demonstrated by publications and funding support. Applications, including curric-ulum vitae and supporting documents, should be sent to: Irwin H. Krakoff, M.D., Director, Vermont Regional Cancer Center, University of Vermont, 1 South Prospect Street, Burlington, Vermont 05401.

An Affirmative Action Employer

#### MICROBIOLOGY-AQUATICS

Two postdoctoral positions are available in the area of aquatic microbiology. The candidates should have a broad background in microbiology with an empha-sis in one or more of the following areas: physiology, molecular biology, taxonomy, or chemistry. Particu-lar importance is placed on the applicant's ability to integrate several fundamental areas of microbiology with environmental chemistry. Research will focus on besterial particul essentiations and mechanisms of with environmental chemistry. Research will focus on bacterial particle associations and mechanisms of metal resistance in bacterial population. Send résu-mé and three references to: Dr. Betty H. Olson, Environmental Analysis, Program in Social Ecology, University of California, Irvine, California 92717, by 15 May 1982. Women and minorities are encouraged to apply. The University of California is an Affirma-tive Action/Equal Opportunity Employer.

FULL-TIME ACADEMIC POSITION available for a NEUROLOGIST with primary responsibility in clini-cal neurophysiology. (Board-eligible in EEG.) Avail-able facilities include video-EEG monitoring, OR and ICU monitoring as well as routine EEG and evoked potential equipment. Send curriculum vitae to: James N. Hayward, M.D., Chair, Department of Neurology, University of North Carolina School of Medicine, Chapel Hill, N.C. 27514. An Equal Oppor-tunity/Affirmative Action Employer.

NEUROSCIENCE POSTDOCTORAL POSITION available for research on brainstem-spinal cord in-teraction. Techniques being utilized include extra-and intracellular recording, microiontophoresis, mi-metimulation rules to record course in the theorem. crostimulation, spike triggered averaging, tissue slice, and fluorescence microscopy. Applicants should have experience in at least one of the methods. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Charles D. Barnes, Department of Physiology, Texas Tech University Health Sciences Center, Lub-bock, Texas 79430. An Equal Opportunity/Affirma-tive Action Employer.



The International Atomic Energy Agency seeks Head of the International Laboratory of Marine Radioactivity in Monaco. He should be a Senior Scientist (15 years' experience) with knowledge of oceans, particularly radioactivity. Duties include administration of the Laboratory and responsibility for scientific programme. Emoluments approx. US\$ 47,600 per annum, tax-free. Additional allowances for dependents. Travel and removal expenses paid. Six weeks annual leave. Initial contract two years. Send curriculum vitae referring to Vacancy Notice No. 19/ 82 to IAEA. Division of Personnel, P.O. Box 100, A-1400 Vienna. Austria.

#### RESEARCH MICROBIOLOGIST — Ph.D.

The Lilly Research Laboratories, a world leader in pharmaceutical and agricultural research, seeks a Research Microbiologist, Ph.D., for its Microbiological and Fermentation Products Research Division. Applicants must have a strong background in microbial physiology and biochemistry. Postdoctoral studies or employment experience that includes fermentation and mutation techniques would be a definite asset. The successful applicant will participate in research programs designed to study the regulation of antibiotic biosynthesis and elucidate biosynthetic pathways. Eli Lilly and Company offers an excellent compensation program and opportunities for professional growth. Qualified individuals should send their resume in confidence to:

Mr. Mark J. Tumey, Personnel Eli Lilly and Company 307 East McCarty Street Indianapolis, IN 46285

Eli Lilly and Company is an equal opportunity employer.

## ZOOLOGICAL INSTITUTE UNIVERSITY OF BASEL SWITZERLAND

Assistant in Cell Biology, starting April 1st 1982, or as soon as possible thereafter. Qualifications: doctorate, research interest in cell biology and biochemistry. Ability to teach in German. Main duties: cooperation with a voung research group which investigates problems of cell to cell interactions and transdifferentiation processes, contribution to courses with practical laboratory on the senior undergraduate level. Appointment initially for 3 years, extendable to 5 years. Salary (75 percent): approximately SFr. 50'000. Applications to:

> Erziehungsdepartement Personalabteilung I Münsterplatz 2 CH 4051 Basel

## FULL PROFESSOR OF ZOOLOGY

Applications are invited for the post of Full Professor (Ordinariat) in Population and Community Biology. (Acceptable areas include Evolutionary Biology, Behavioural Ecology, Population Genetics, as well as aspects of Population and Community Ecology).

The successful candidate has to participate in teaching basic zoology, to cooperate in the teaching program with the existing staff, and to build up a program of research in his (her) special area of interest. The language of instruction is German.

Further information about the Zoologisches Institut is obtainable from

#### Prof. H. Rowell, Zoologisches Institut, Rheinsprung 9, CH-4051 Basel, Switzerland.

Applications, including curriculum vitae, list of publications (with the most significant ones indicated), courses taught, outline of long-term research plans and the addresses of referees should be directed before May 15, 1982 to the

> Dekanat der Philosophisch— Naturwissenschaftlichen Fakultät, Klingelbergstrasse 70, CH-4056 Basel, Switzerland.

## **HOFFMANN-LA ROCHE**

## ASSISTANT SCIENTISTS Recombinant DNA

Hoffmann-La Roche, one of the leaders in the expanding field of biotechnology has three additional career opportunities in its Molecular Genetics Department due to continued growth.

**Responsibility:** Assist in the planning and execution of experiments involving the cloning and expression of bioactive substances utilizing recombinant DNA technology.

**Qualifications:** Only applicants with a BS or MS degree plus **experience** with nucleic acids and/or recombinant DNA technology will be considered. Experience in protein purification and bacterial genetic desirable.

Salary: Minimum of \$17,240 or \$19,720 depending upon education and years of experience. Plus attractive bonus.

Roche offers outstanding fringe benefits and an environment that encourages professional growth. Please send resumes to: Mrs. Eleanor M. Malone, Profesional Employment Staffing Specialist.



HOFFMANN-LA ROCHE INC. Nutley, NJ 07110

An Equal Opportunity Employer

Products that matter from people who care

Position available with the School of Public and Environmental Affairs, Indiana University, Bloomington Campus, for academic year 1982–1983.

LAND USE PLANNER/APPLIED EARTH SCI-ENTIST. Emphasis in land use analysis, site selection, environmental impact analysis. Physical environmental focus in surficial geology, soils, hydrology, or engineering required. Background in legal and administrative aspects of land use management, zoning, and facility siting highly desirable. Interest and experience in multidisciplinary applied science and policy research activities also desirable. Background in earth sciences, environmental sciences, or engineering areas with planning certification necessary.

All applicants should have a Ph.D. and/or demonstration of equivalent research/creative activities. Teaching at graduate and undergraduate levels will be expected.

Interested applicants should send curriculum vitae to the address listed below no later than 15 May 1982.

Dr. Roy Jumper, Associate Dean School of Public and Environmental Affairs Indiana University 400 East 7 Street Bloomington, Ind. 47405

An Equal Opportunity/Affirmative Action Educator, Employer, and Contractor, M/F.

#### NEUROBIOLOGIST AND BIOCHEMIST

Two tenure-track positions are available starting September 1982 at the assistant or associate professor rank, depending on qualifications. A Ph.D., demonstrated research ability, and a commitment to excellence in teaching are required. The positions entail undergraduate and graduate teaching, the establishment of a research laboratory, and the direction of graduate student research. (i) Neurobiologist to teach neuroanatomy and neurobiology; research interests preferably in developmental neurobiology or neuroendocrinology. (ii) Biochemist to participate in teaching biochemistry, with preferred research interests in membrane enzymology or molecular biology. Strong candidates with other appropriate research interests will be considered. Send curriculum vitae, a summary of research interests, and the ames of three references to: Dr. Herndon Dowling, Chair, Recruitment Committee, Department of Biology, 952 Brown, Washington Square, New York University, New York, N.Y. 10003. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL FELLOW/BIOCHEMIST**. Research on the role of multiple forms of cytochrome P-450 in the metabolism of organospecificity of *N*-nitrosamines. Please send curriculum vitae to:

Stephen S. Hecht Naylor Dana Institute for Disease Prevention American Health Foundation Valhalla, N.Y. 10595

THE AUSTRALIAN NATIONAL UNIVERSITY invites applications for POSTDOCTORAL FELLOW OR RESEARCH FELLOW in VISION RESEARCH, RESEARCH SCHOOLS OF BIOLOGICAL AND PHYSICAL SCIENCES. The successful candidate will join a multidisciplinary team working on the principles of neural coding in the retinas of insects and lower vertebrates. The appointee will work in the Department of Neurobiology, Research School of Biological Sciences, in close collaboration with Professor A. W. Snyder and Dr. S. B, Laughlin. Experience with physiological or behavioural techniques is essential and a background in physics or electrical engineering would be an added advantage. Enquiries may be made to: Professor A. W. Snyder, Department of Applied Mathematics, telephone: 062 49 2626. Salary in accordance with qualifications and experience within the ranges: research fellow, grade 2, \$20,963 to \$27,539 per annum; postdoctoral fellow grade 1, \$18,068 to \$20,699 per annum. Current exchange rate A\$1 = U.S.S.1.06 = U.K.S&p. Appointment will be: research fellow up to 3 years with the possibility of extension, after review, to 5 years; postdoctoral fellow up to 2 years with the possibility of extension to 3 years. Reasonable appointment expenses are paid; superannuation; assistance with housing. The University reserves the right not to make an appointment or to make an appointment by invitation at any time. Applicants may obtain further particulars from: The Registrar, The Australian National University, P.O. Box 4, Canberca, ACT 2600, Australia, with whom applications close on 31 May 1982.

#### POSITIONS OPEN

PERINATAL PHYSIOLOGIST. As a principal investigator, organize and conduct basic (nonclinical) research dealing with diabetic insults using a sheep model; serve as co-investigator of basic research dealing with mechanisms of hypertension in animal pregnancy using a sheep model; and, using animal models, conduct other basic research such as studies of steroid production and metabolism during pregnancy, and development of new techniques in ultrasonography. Some related teaching activities are also included. Requirements: Ph.D. or M.D. degree in physiology or medicine plus 2 years of postdoctoral or fellowship training which included perinatal physiology. Must be able to successfully chronically instrument sheep fetus, and have a solid knowledge of endocrinology as it relates to animal pregnancy. Medical license is not necessary. Pay and hours: \$27,500 to \$35,000 per year, depending on education and experience; 40 hours per week; 8 a.m. to 5 p.m. To apply, send résumé to: Ohio Job Service, Job Order Number **520581**, 1916 Central Parkway, Cincinnati, Ohio **45214**.

**POSTDOCTORAL NEUROPHYSIOLOGIST** to conduct evoked potential and motor control research in human and nonhuman primates. Emphasis on developing clinical measures. Large universityaffiliated neuroscience group. Salary: \$15,000 to \$20,000 plus fringes. Funded for at least 3 years starting July 1982. Send curriculum vitae and three references to: Jonathan R. Wolpaw, M.D., Center for Laboratories and Research, Empire State Plaza, Albany, New York 12201.

POSTDOCTORAL PLANT PHYSIOLOGY POSI-TION (RESEARCH ASSOCIATE). Available 1 June 1982 at the U.S. Department of Agriculture (USDA) Metabolism and Radiation Research Laboratory, Fargo, N.D. To study herbicide translocation in leafy spurge (*E. esula* L.). Emphasis will be placed on environmental and/or chemical modification of translocation patterns. A Ph.D. in plant physiology with experience in radiotracer technology is desirable. One-year temporary appointment, with possibility of a 1-year extension. Salary: S23,566. U.S. citizenship required. For further information, interested candidates should write or call: Barbara Lamm, Personnel Branch, U.S. Department of Agriculture, S & E-ARS-NCR-(FA-009), 2000 West Pioneer Parkway, Peoria, Ill. 61615. Telephone: 309-671-7129. USDA is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available July 1982. Areas of research presently investigated are the following: mechanism of integration, excision and amplification of polyoma virus DNA in transformed cells; viral and host control of gene expression in DNA tumor viruses, polyoma, and SV40; use of polyoma virus as an eukaryotic vector for gene amplification; transcription of specific cellular genes in the cell cycle. Background in molecular biology, virology, or cell genetics desirable. Salary open. Send curriculum vitae and names of references to: Dr. Claudio Basilico, Department of Pathology, New York University School of Medicine, 550 First Avenue, New York, N.Y. 10016. An Equal Opportunity/ Affirmative Action Employer.

A POSTDOCTORAL POSITION is available in neuroscience beginning 1 June 1982. Individual will participate in studies on the organization of several somatosensory pathways and the effects of sensory deprivation. Research method will involve computer aided quantitation of synaptic arrangements. Application of synaptic arrangements. Application subscription is experience in EM of nervous tissue, preferably in development and synaptogenesis. Experience in computer science helpful. Technical assistance in both LM and EM is available. Position salaried at \$15,000 and supported for 1 year. Applications must be received by 15 May 1982. Submit curriculum vitae, a description of research experience and interests, and two letters of reference to: Bruce C. Albright, Ph.D., Department of Anatomy, Medical Science Building, Room 107, University of North Dakota 58202. The University of North Dakota 58202. The University of North Dakota is an Equal Opportunity/Affirmative Action Employer and invites applications from all qualified persons.

**POSTDOCTORAL POSITION** available immediately for research on the preparation and physical properties of novel thermoelectric and ferroelectric materials. Experience in crystal growth and/or experimental solid-state physics required. Send résumé to:

Dr. D. Elwell Center for Materials Research McCullough 105 Stanford, Calif. 94305

#### POSITIONS OPEN

**POSTDOCTORAL POSITION** available September 1982. Those with experience in protein biochemistry who wish to pursue studies on neuroactive neuroendocrine peptide factors in *Aplysia* send curriculum vitae and letters of reference to: Dr. James E. Blankenship, Marine Biomedical Institute, 200 University Boulevard, Galveston, Texas 77550. University of Texas Medical Branch is an Equal Opportunity/ Affirmative Action Employer.

Postdoctoral Position in NIH Clinical Nutrition Training Program; 2 to 4 years starting 1 July 1982 for Ph.D. Background in biochemistry to work in folate metabolism. Focus of study: mechanisms of intestinal absorption of folates and role of intestinal folate conjugase. Experience required in enzymology and protein purification. Send curriculum vitae and three references to: Dr. C. H. Halsted, University of California, Division of Gastroenterology, TB-192, Davis, Calif. 95616. An Equal Opportunity Employer.

**POSTDOCTORAL POSITION** for research in molecular genetics: to study structure and regulation of genes involved in DNA repair in the yeast *Saccharomyces cerevisiae* and to characterize their protein products. Background in biochemistry and recombinant DNA technology preferred. Position available 1 June 1982. Send curriculum vitae and three letters of reference to: Dr. Louise Prakash, Department of Radiation Biology and Biophysics, University of Rochester School of Medicine, Rochester, NY, 14642. An Equal Opportunity/Affirmative Action Employer.

**POSTDOCTORAL POSITION** (molecular virologist) available immediately to study aspects of latency in herpes simplex virus. Recent Ph.D. with background in in situ hybridization preferred. Send curriculum vitae and names of two references to: Dr. H. Openshaw, Department of Neurology, University of California, Davis, California 95616.

The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available in the area of mechanism of action of gonadotropin releasing hormone. Strong background in one or more of the following areas required: hormone mechanism of action, hormone chemistry, radioimmunoassay/bioassay, reproductive biology, or calcium action. Highly qualified individuals should send curriculum vitae and the names of three references to: Dr. P. Michael Conn, Department of Pharmacology, Box 3813, Duke University Medical Center, Durham, N.C. 27710. Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL RESEARCH ASSOCIATE** position available in summer 1982 for studies of: (i) steroid hormone receptor biochemistry, (ii) hormone- and antagonist-receptor binding kinetics, and (iii) receptor-chromatin interactions (*PNAS* 78, 4926, 1981). Send curriculum vitae and names of three references to: Dr. A. C. Notides, Department of Radiation Biology and Biophysics, University of Rochester School of Medicine and Dentistry, 601 Elmwood Avenue, Rochester, New York 14642. The University of Rochester is an Equal Opportunity Employer.

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION available immediately to study schistosome reproductive biochemistry. Requires experience with isotopic tracers, autoradiography, 1- and 2-D PAGE and related techniques, and knowledge of parasitology. Remuneration and title based on relevant experience. Send résumé, reprints, and names of three references to: Dr. Paul Basch, FCPM, Stanford University School of Medicine, Stanford, Calif. 94305. An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE, BIOCHEMISTRY. Postdoctoral or adjunct instructor. One-year appointment (may be renewable). Challenging opportunity to work with energetic team of biochemists to do research on enzymes involved in the processing of procollagen to collagen. Successful candidate must possess a Ph.D. degree in biochemistry; preference will be given to applicants with 2 to 4 years of work in appropriate areas in biochemistry such as the enzymology of proteinases. Salary range as of 1 July 1982: \$19,182 to \$26,311, depending on qualifications. Excellent benefits. Please send curriculum vitae and names of three individuals who may be contacted for references to: Personnel Department (Department of Biochemistry), UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY-Rutgers Medical School, P.O. Box 101, Piscataway, New Jersey 08854. An Equal Opportunity/Affirmative Action Employer, M/F.

## BIOLOGICAL OCEANOGRAPHER

The Department of Biology seeks a Biological Oceanographer with expertise and an expressed general interest in the area of microplankton dynamics. Major focus should be on the nutrient and food chain interactions of very small autotrophs and heterotrophs in oligotrophic waters. Interest in developing a field orientated research program is a prerequisite for consideration. The successful candidate will be expected to generate his/her own research funds although initial seed money will be available. Appointments will be at the Assistant or Associate Scientist level depending on the candidate's qualifications. Applications should include curriculum vitae, references, transcript, list of publications. Interested candidates should apply to:

> Personnel Manager Box 54P



OCEANOGRAPHIC INSTITUTION

WOODS HOLE

Woods Hole, MA 02543 Deadline for applications is June 1, 1982 An equal opportunity employer M/F/H

## DIRECTOR OF ACADEMIC COMPUTING

Cornell University seeks a qualified person who wants to have a significant impact on the development of academic computing at this major institution.

The Director of Academic Computing reports to the Vice Provost for Computing, participates in planning and policy decisions, and heads a staff of more than 30 professionals. The person selected will also be responsible for developing and organizing new computing service capabilities in support of education and research, including computer literacy efforts, selection of appropriate strategies to meet the growing computer needs of a diverse faculty, and promotion of regional and national sharing of computing services. Areas of responsibility include user support, publications, statistical computing, academic software support and operation of campus terminal facilities.

Candidates should have a thorough understanding of computing needs of faculty and a record of accomplishment in administering research and development or academic computing facilities. The candidate needs academic credentials, a strong factionological background, and demonstrated management, interpersonal, and communication skills.

Located on Cayuga Lake in the Finger Lakes Region of Central New York, Cornell has a faculty of 1,500, an undergraduate enrollment of more than 12,000 with 4,500 candidates for professional and graduate degrees, research funding exceeding \$130,000,000 and a commitment to excellence in computing.

Cornell University offers an excellent benefits package which includes an employee degree program and tuition assistance. The Ithaca area has outstanding cultural and recreational opportunities and is an excellent setting for personal enrichment and professional growth.



Call or write: 607-256-7445 Kenneth M. King Vice Provost for Computing **Cornell University** 223 Day Hall Ithaca, New York 14853

Cornell University is an equal opportunity employer.

#### UNIVERSITY OF OKLAHOMA COLLEGE OF MEDICINE

Applicants are solicited for FACULTY POSITIONS in the following departments:

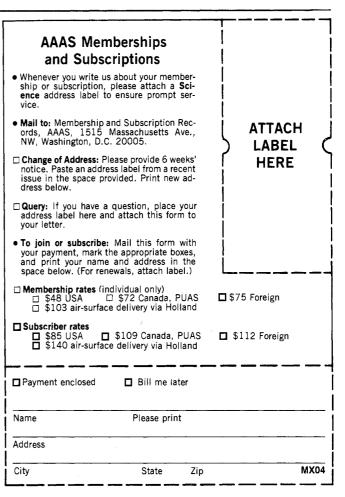
**BIOCHEMISTRY AND MOLECULAR BIOLOGY** (Number 308), Assistant professor—Seeking an individual whose interests and training are in molecular and cellular aspects of genetic regulation. Applicants must hold the Ph.D. degree and have two or more years of postdoctoral experience. Candidates should have demonstrated the ability to conduct independent, vigorous research of high quality, and have a commitment to excellence in teaching graduate students and students in the health professions. Interested persons should send curriculum vitae, names of three references, and a description of research interests and plans. (Deadline for applications extended to 30 April.)

GYNECOLOGY/OBSTETRICS (Number 363), Professor and chairman—Desiring an individual with outstanding credentials and commitment to academic excellence. Should be of national reputation with broad experience and accomplishments in clinical investigation and medical education. Will direct the clinical, research, and educational programs of an established department. Resident and fellowship programs are well-established and of high quality.

MICROBIOLOGY AND IMMUNOLOGY (Number 371), Professor and head—an M.D., Ph.D., or equivalent advanced degree is required, as well as demonstrated excellence in teaching and research. The department currently has 12 faculty members. Deadline for application is 1 May 1982.

ADMINISTRATION/DEAN'S OFFICE (Number 390), Deputy dean-Number two administrative official in the College of Medicine. Reports directly to the dean and in his absence acts for the dean. Provides the necessary liaison and assistance from the Dean's Office to the College and other areas. Depending upon personal qualifications, faculty status within the College of Medicine may be granted. Must have M.D. and/or Ph.D. with minimum of 5 years of administrative experience in highlevel position in a College of Medicine or Health Sciences Center. (Number 391), Associate dean-academic affairs-Incumbent reports directly to the Dean, College of Medicine, and serves in a staff role to assist and support departments in all academic affairs. Assures that dean is kept cognizant of and provided necessary information on which to base timely decisions relating to such matters as curriculum, student advisory systems, educational programs, and other specific areas as determined by the dean. Candidate should hold doctorate degree in medical or related discipline with at least 5 years of demonstrated highlevel administrative experience in a medical academic environment.

Applicants should send curriculum vitae, *identifying vacancy number* for which they are applying, to: O. C. Coleman, Assistant Dean, College of Medicine, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Okla. 73190. We are an Equal Opportunity Employer.



#### NATIONAL SCIENCE FOUNDATION (NSF)

NSF, Division of Physiology, Cellular, and Molecu-lar Biology, Molecular and Genetic Biosciences Section, is recruiting Intergovernmental Personnel Act Assignees for a 1- to 2-year assignment as **PROGRAM ASSISTANT/ASSOCIATE**. Applicants should have a minimum of 6 years of research experience beyond the Ph.D., experience in the structure and function of macromolecules, and a strong background in biophysics. The successful applicant will work closely with the program direc-tor for biophysics to strengthen the scientific coverage of the program.

Interested applicants should submit curriculum vitae to: National Science Foundation, Dr. Robert New-burgh, Section Head, Molecular and Genetic Biosci-ences, Division of Physiology, Cellular, and Molecular Biology, Washington, D.C. 20550. For further infor-mation, telephone: 202-357-7904. NSF is an Equal Construction Foundation Science S **Opportunity** Employer

**PROJECT ASSOCIATE.** The Experimental High Energy Physics Group invites applications for a full-time (40 hours per week) project associate position. The person filling the position will collaborate with members of the experimental high energy physics group on the study of weak and electromagnetic interactions. The person will be responsible for interactions. The person will be responsible for designing, constructing, operating, and maintaining particle detection apparatus; supervise installation, and perform data analyses. Applicants must hold a Ph.D. in experimental high energy physics. Annual salary: \$24,500. Send résumé to: Sath Menon, Job Service Wisconsin, 206 North Broom Street, Madison, Wis. 53703. Telephone: 608-266-2341. The State of Wisconsin is an Equal Opportunity/ Affirmative Action Employer. This ad not paid for by Job Service funds.

Job Service funds.

#### **RESEARCH ASSOCIATE**

Ph.D., M.D., or equivalent with training in skeletal muscle physiology and biochemistry to work on research related to malignant hyperthermia. Postdoctoral position available immediately. Salary range: \$16,000 to \$19,000, depending on training and experience. Send curriculum vitae and two letters of reference to:

### Personnel/Manpower Personnel/Manpower Sheila M. Muldoon, M.D. Department of Anesthesiology/Physiology Uniformed Services University of the Health Sciences 4301 Jones Bridge Road Bethesda, Md. 20814

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**RESEARCH ASSOCIATE**, M.D.-Applicant must RESEARCH ASSOCIATE, M.D.—Applicant must have demonstrated ability to work with disorders of porphyrin metabolism and photoimmunology. Also must have proven ability to plan, execute, interpret, and present (orally and in writing) results of a research protocol involving humans. Publications and lecturing experience desirable. Send résumé to: Box 26, College of Physicians & Surgeons of Columbia University, 630 West 168 Street, New York, N.Y. 10032. An Equal Opportunity/Affirmative Action Employer.

## SENIOR RESEARCH BIOLOGISTS (Canada)

A leading Canadian pharmaceutical company with modern research facilities located at Kirkland, Quebec, a suburban community 15 permanent posts available for research biol-ogists. Candidates should have a Ph.D. in pharmacology, biochemistry, or a related biological science, and should also possess biological science, and should also possess at least 1 or 2 years of postdoctoral research experience in one of the following areas: (i) pulmonary pharmacology, (ii) smooth muscle pharmacology, (iii) biological studies on leu-kotrienes or prostaglandins, (iv) biological studies on platelets, leucocytes, or macro-phages, and (v) basic studies in dermatology or animal models of skin diseases. Reply, in optidance, providing autointy without or animal models of skin diseases. Reply, in confidence, providing curriculum vitae and list of publications, to: Employment Manag-er, Merck Frosst Canada Inc., P.O. Box 1005, Pointe Claire/Dorval, Quebec, Cana-da H9R 4P8.

#### POSITIONS OPEN

RESEARCH ASSOCIATE POSITIONS IN ION CHANNEL AND RECEPTOR MECHANISMS. Re-search associate positions available for energetic scientists with an interest in basic biochemical mechanisms with an emphasis on calcium channels or neurotransmitter receptors. Candidates should have a background in pharmacology, biochemistry, or cell culture techniques. Salary competitive and negotiable. Send curriculum vitae, three references, and one copy of two remrints to: and one copy of two reprints to:

W. R. Roeske or H. I. Yamamura Arizona Health Sciences Center University of Arizona 1501 North Campbell Road Tucson, Arizona 85724 Telephone: 602-626-6223 or 7381

Interviews will be arranged for FASEB, New Or-leans (19 to 23 April 1982); National AFCR, Wash-ington (6 to 10 May 1982), France, 23 to 27 May 1982, or Italy, 10 to 30 June 1982.

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**RESEARCH BIOLOGIST.** Research biologist at postdoctoral level for designing experiments, super-vising personnel, writing reports, and preparing ma-terials for presentation and publication. Academic rank of instructor. Send résumé to: Dr. Helene Z. Hill, Cancer Biology, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Room E577, 100 Bergen Street, Newark, N.J. 07103. Affirmative Action/Equal Opportunity Employer.

SUPERVISORY SOIL SCIENTIST, U.S. Depart-ment of Agriculture, Sidney, Montana. Research leader position available for individual with: knowl-edge of soil and crop management methods, procedures, and techniques; protection techniques of rangelands, cultivated drylands, and irrigated lands; and resource management. Equal Opportunity/Affir-mative Action Employer. Contact: Wesley Shima-mura, 1333 Broadway, Suite 400, Oakland, Califor-nia 94612; telephone: 415-273-4281.

# VICE PRESIDENT—AGRICULTURAL ADMINISTRATION AND EXECUTIVE DEAN OF AGRICULTURE HOME ECONOMICS AND NATURAL RESOURCES THE OHIO STATE UNIVERSITY

THE OHIO STATE UNIVERSITY The Ohio State University is seeking applications and nominations for Vice President—Agricultural Administration and Executive Dean of Agriculture, Home Economics, and Natural Resources. Major responsibilities include serving as academic dean of agriculture and having administrative responsibility for programs in agriculture, home economics, natu-ral resources, the Ohio Agricultural Research and Development Center, the Cooperative Extension Service, and the Agricultural Technical Institute. Candidates should have an earned doctorate, broad academic experience in a discipline within the sci-ence of agriculture, and a demonstrated record of administrative/leadership ability, generally consoadministrative/leadership ability, generally conso-nant with the complexity of a large land-grant university.

Nominations and letters of interest with pertinent supporting materials must be received by 1 May 1982 and should be addressed to: Dr. Francille Firebaugh, Chairperson of the Search Committee, 235B Campbell Hall, 1787 Neil Avenue, The Ohio State University, Columbus, Ohio 43210.

The Ohio State University is an Equal Opportunity/Affirmative Action Employer

#### VIROLOGIST

The Departments of Microbiology and Immunolo-gy, and Neurology, and the Rocky Mountain Multi-ple Sclerosis (MS) Center at the University of Colo-rado School of Medicine are soliciting applications for a faculty member with a strong research interest and background in latent viral infections, molecular virology technology, and pathogenesis of viral infec-tions in animals. The applicant must be interested in developing an independent research program inves-tigating demyelination mechanisms with coronavirus research currently ongoing. Academic rank and sala-ry commensurate with applicant's credentials. Out-standing applicants should submit curriculum vitae, explanation of current research interests, list of standing applicants should submit curriculum vitae, explanation of current research interests, list of publications, and names of references to: Dr. Jack S. Burks, Executive Director, Rocky Mountain MS Cen-ter, University of Colorado Health Sciences Center, Box B 181, 4200 East Ninth Avenue, Denver, Colora-do 80262. The University of Colorado is an Equal Opportunity/Affirmative Action Employer.

#### POSITIONS OPEN

**RESEARCH ASSOCIATE** position available for bio-physical studies on iron-sulfur proteins. Applicant should have demonstrated expertise in Mössbauer spectroscopy of spin-coupled clusters and is expect-ed to conduct independent research under the super-vision of Dr. E. Münck. Ph.D. in physics and postdoctoral experience required. Appointment is annually renewable (up to 3 years); salary negotia-ble. Send résumé, research proposal, and two refer-ences by 30 April 1982 to: Professor E. Münck, Gray Freshwater Biological Institute, P.O. Box 100, Na-varre, Minn. 55392. The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications specifically invites and encourages applications from women and minorities.

#### **TRAVEL GRANTS**

#### TRAVEL GRANTS

Faculty members in colleges in Florida, Kentucky, Louisiana, North Carolina, South Carolina, and Tennessee may apply for supplemental small grant assistance (about \$400) for travel to use facilities and equipment not available locally and needed in re-search. Write: Small Grants Program, Southern Re-gional Education Board, 1340 Spring Street, NW, Atlanta, Georgia 30309.

#### PROGRAM

#### PHYSIOLOGY AND BIOPHYSICS GRADUATE PROGRAM

Graduate study leading to the Ph.D. degree is available to highly qualified students. Research in-terests of the 25 faculty members include molecular biophysics, cell biology, neurosciences, integrative physiology, and control systems. All students admit-ted to the program receive financial support at a pationally competitive level. Applications and furnationally competitive level. Applications and fur-ther information may be obtained from Dr. J. D. Neill, Department of Physiology and Biophysics, Uni-versity of Alabama in Birmingham, Birmingham, Ala, 35294.

#### **FELLOWSHIP**

POSTDOCTORAL FELLOWSHIP available 1 August 1982 in cardiovascular physiology (coronary gust 1982 in cardiovascular physicology (coronary circulation). Emphasis on physical measurements, instrumentation, modeling, and computers. Medical student teaching experience available if desired. Send curriculum vitae and references to: Dr. Francis L. Abel, University of South Carolina School of Medicine, Department of Physiology, Columbia, S.C. 29208. An Affirmative Action/Equal Opportunity Fundowski and Science Sc Employer.

#### ASSISTANTSHIPS

TEACHING ASSISTANTSHIPS for September 1982, Graduate study in Biology Department leading 1982. Graduate study in Biology Department leading to M.S. or Ph.D. with concentration in biochemis-try, botany, zoology, microbiology, physiology, ecology, cell biology, and marine biology. Anticipat-ed stipends: \$4500 or more for 9 months and tuition waiver which includes 1982 summer courses at our marine station at Nahant. For information, write: Cynthla Pilkington, Department of Biology, North-eastern University, Boston, Mass. 02115. An Affirma-tive Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSISTANTSHIPS (two). First position will be responsible for purifying and characterizing certain cell-surface antigens of human keratinocytes; studying their role in the pathogenesis of pemphigus and bullous pemphigoid, and in cell-cell adhesion. Position available immediately; \$17,000 to \$20,000 per year. Second position involves studies of specific immunotherapy of estabinvolves studies of specific immunotherapy of estab-lished murine melanoma with purified tumor anti-gens. Experience in protein purification, immunoas-says, tissue culture, and work with animal tumors desired, \$17,000 to \$20,000 per year. Send résumé, indicating position of interest, to: Jean-Claude Bys-tryn, M.D., Department of Dermatology, New York University School of Medicine, 550 First Avenue, New York, N.Y. 10016. Telephone: 212-340-5243. An Equal Opportunity/Affirmative Action Employer.

## **Repli**Gen

## Research Assistants Biotechnology

Repligen Corporation, a rapidly growing biotechnology company involved in the development of a variety of innovative peptide and protein products, seeks qualified candidates (B.S./M.S. level) in the following areas:

Nucleic acid chemistry-Experience should include chemistry of oligonucleotides, nucleic acid sequencing and high pressure liquid chromatography. Recombinant DNA technology-Exper-ience should include nucleic acid chemistry, recombinant DNA techniques

and expression of recombinant mole-cules in prokaryote and eukaryote sustems.

Successful candidates will be highly motivated individuals who can take ad-vantage of the outstanding growth opportunities at Repligen, Repligen offers competitive salary, excellent benefits and equity participation. Submit resume including references to: Director of Personnel, Repligen Corporation, 101 Binney St., Cambridge, MA 02142.

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No fee is required. Simply complete a registration form describing your interests in terms of grade level (GS 12-15; salary range \$28,245-\$60,689\*), occupation, specialty and functional qualifications, and geographic availability. When a position for which you appear minimally gualified is available, a vacancy announcement will be mailed directly to your home.

If currently employed by the Dept. of the Army, you will receive DADS registration information from your Civilian Personnel Office. All others may receive a registration package by calling (800) 368-3311 (in Virginia, call (800) 572-5500), or by writing to:

#### Commander **U.S. Army Material Development and Readiness** Command ATTN: DRCLD **5001 Elsenhower Avenue** Alexandria, VA 22333

\* Maximum pay currently limited by congressionally imposed ceiling to \$57,500.

## DIRECTOR, NATIONAL INSTITUTE OF ARTHRITIS, DIABETES, AND DIGESTIVE AND KIDNEY DISEASES

The National Institutes of Health invites nominations and applications for the position of Director, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK). This Institute conducts, fosters, and supports research and research training on the prevention, management, and cure of arthritis and related bone and skin diseases; diabetes and related endocrine and metabolic diseases; kidney, urologic and blood diseases; and digestive diseases. Programs encompass intramural labora tory research and extramural (grants and contracts) activities in fundamental arthritis, diabetes, and digestive and kidney disorders.

This is a Civil Service position in the Senior Executive Service (SES), with an authorized salary range from \$54,755 to \$61,300 per annum (pay ment currently limited to \$58,500) depending on qualifications. Candidates may be eligible for Physicians Comparability Allowance up to \$10,000 per year. Alternately, candidates may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service. The SES individual selected, if not presently in the SES, must serve a one-year probationary period

The mandatory qualifications are: (1) meet the minimum educational requirements for Medical Officer, GS-602, or Health Scientist, GS-601 (or equivalent combination of experience and training), as defined in the U.S. Office of Personnel Handbook X-118, Qualification Standards for positions under the General Schedule, which is available in Federal Job Information Centers and Federal Personnel Offices; and (2) have research experience and knowledge of research programs in one or more areas related to arthritis, diabetes, digestive and kidney diseases and other metabolic disorders. In addition, candidates must meet the following managerial executive qualifications: demonstrated competence to assume leadership

responsibilities in: (1) assuring that key national and agency goals, priorities, and values are considered in making program decisions; (2) establishing effective external communications by being a representative spokesperson for the organization, and maintaining working relationships within the organization and with outside key individuals and groups; (3) developing policy, directing and guiding programs and projects, including establishing long-term and short-term goals and priorities, and the structure and processes necessary to carry them out; (4) obtaining and allocating the fiscal and material resources necessary to support program or policy implementa-tion; (5) developing processes and overseeing activities to assure that people are appropriately employed, effectively and efficiently utilized, and dealt with in a fair and equitable manner; and (6) developing activities and procedures to assure that program and policy are being executed, adjusted as necessary, and that the appropriate results are being achieved

Candidates who meet the mandatory requirements will be further evaluated by the Search Committee on the following factors: communications and interpersonal skills; education; honors and awards; and the degree to which they exceed the minimally qualified level of the mandatory man-agerial/executive qualifications. Information on any of the above requirements may be obtained by calling Mrs. Helen Stafford at (301) 496-4197.

Applications (Personal Qualifications Statement, SF-171) are to be sent to Helen C. Stafford, Executive Secretary, Search Committee for Director, NIADDK, National Institutes of Health, Building 1, Room 19, Bethesda, Maryland 20205. A current curriculum vitae and bibliography must accompany all applications. Applications of women and/or minority group members are especially solicited



National Institutes of Health Public Health Service Department of Health and Human Services

OPENING DATE: April 1, 1982 CLOSING DATE: April 30, 1982

(All applications must be postmarked before closing date) NIH is an Equal Opportunity Employer

## ARE THE MEDIA FAIR TO SCIENCE? IS SCIENCE FAIR TO THE MEDIA?

Read *Reflections on Science and the Media,* a provocative new book by June Goodfield, author of *An Imagined World,* and decide for yourself.

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In Reflections on Science and the Media, June Goodfield examines four recent, highly publicized science stories - Rorvik's clone, thalidomide, lab standards for recombinant DNA research, and the case of the painted lab mice. She finds that members of both professions have failed the public. Scientists are sometimes uncommunicative or may purposely exaggerate research findings. Reporters are selective and tend to write about alarming "news" or amazing "dis-coveries" as opposed to reporting in depth. And publishers may blur the distinction between fact and fiction for profit's sake.

Dr. Goodfield shows that these failures spring in part from the differing constraints under which the two professions operate: Scientists are often reluctant to talk about their research openly because they fear the complexities will be ignored or oversimplified; journalists tend to seek out that which is easily told and easily understood. The author also shows that both professions must come to some agreement about their mutual obligations to the public which supports them. *Reflections on Science and the Media* is a strong plea for such an understanding.

128 pp. 1981 ISBN: 0-87168-252-4 Paper, \$9.00/AAAS member price, \$8.00

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## REFLECTIONS ON SCIENCE AND THE MEDIA

