POSITIONS OPEN

ANATOMY/NEUROMUSCULAR PHYSIOLOGY

The Department of Anatomy at Indiana University School of Medicine is seeking applications for a tenure-track faculty position to be filled at any level by 1 July 1990. Candidates should have a minimum of 2 years of postdoctoral research experience, with a strong current or planned active research program with emphasis on skeletal muscle fatigue, physiology of the neuromuscular junction, or electromyography. The candidate should be willing to collaborate with an existing program in skeletal biology. Teaching experience in gross anatomy or histology is required. Submit curriculum vitae and names of three referees to: Committee (Skeletal Biology), Department of Anatomy, Indiana University School of Medicine, 635 Barnhill Drive, M.S. 258, Indianapolis, IN 46223. Please use Position Number 2206 in correspondence. Application deadline is 1 March 1990. Affirmative Action/Equal Opportunity Employer, M/F.

ANIMAL NUTRITION AND HEALTH

The National Research Council (NRC) is seeking a PROGRAM OFFICER to support the Committee on Animal Nutrition. This Committee has a 50-year history in preparing authoritative reports on nutritional requirements of agriculturally important species. Will organize committee activities and arrange preparation and publication of reports in the animal nutrition requirement series. Also, opportunity exists to establish project on science and policy related to nutrition and health. Ph.D. or equivalent, experience in animal nutrition, and demonstrated background in other areas of animal science required. Salary commensurate with experience. Please send letter of application, curriculum vitae, and names of three references in confidence to: NRC/BA (HA 394-JT), 2101 Constitution Avenue, N.W., Washington, DC 20418, Equal Opportunity Employer.

ASSISTANT/ASSOCIATE/FULL COOPERATIVE EXTENSION SPECIALIST AND VEGETABLE CROPPING SYSTEMS HORTICULTURIST. An 11-month, career-track extension/experiment station position (76% research, 24% teaching) will develop and implement an extension and applied research program with integrated approaches to pest, soil, water, and nutrient management to evaluate relevant production practices and develop innovative crop management systems for warm-season vegetables that optimize resource use and minimize adverse environmental impact. Appointee will provide leadership in the extension activities of the department, including statewide program development, and interact with educational organizations, industry groups, governmental agencies, and cooperative extension personnel. Farm advisor training and advising is expected. Appointee will have the opportunity to participate in teaching and in directing undergraduate and graduate research. Affirmative Action responsibilities include the development of programs that encourage participation of minorities, women, and other underrepresented clientele. A Ph.D. in horticulture, agronomy, crop ecology, or related plant science discipline is required as is experience commensurate with the appointment level. Send curriculum vitae, extension and research interest, representative documentation of extension research and teaching, official transcripts, and names and addresses of at least three references by 31 March 1990 to: Dr. V. E. Rubatzky, Search Committee Chair, Department of Vegetable Crops, 1254 Hard Hall, University of California, Davis, CA 95616. Telephone: 916-752-0516, The University of California is an Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF BIOLOGY ASSISTANT PROFESSOR POSITION

The Department of Biology, University of Wisconsin Center System, invites applications for a full-time, tenure-track position at the ASSISTANT PROFESSOR level on the Rock County Campus, Janesville, beginning fall 1990. The appointment is tenure-track. Applicants must have a strong background in genes and botany and ability to teach introductory microbiology, botany, and genetics. Salary commensurate with experience. Send three letters of reference to: Dr. Koby Crabtree, Chair, Department of Biology, University of Wisconsin-Madison, South 7th Avenue, Madison, WI 54401, by 1 March 1990. The University of Wisconsin is an Affirmative Action/Equal Opportunity Institution.

POSITIONS OPEN

ASSISTANT PROFESSORS. Two tenure-track positions open for fall 1990: (1) ANATOMIST, to teach anatomy and physiology and to direct or teach one or more courses such as comparative anatomy, neurobiology, or biology of human aging; (2) EVOLUTIONARY ZOOLOGIST, to teach a variety of introductory courses for majors and nonmajors. Successful candidates will be expected to develop a high-quality teaching program and to work with research undergraduates in a research. Preference given to candidates with a strong background in statistics or science and society. Send curriculum vitae, a statement of teaching and research interests, and three letters of recommendation to: W. A. Newman, Chair, Department of Biological Sciences, State University of New York (SUNY) at Cortland, NY 13045, by 15 March 1990. An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF MICROBIOLOGY

Applications are invited for a 12-month tenure-track position at the rank of assistant professor in the Department of Microbiology at the University of Pennsylvania. The appointment will be made in the Laboratory of Microbiology, Division of Pathobiology, starting in July 1990. The successful candidate will be expected to develop an active program in basic research in the area of the molecular and/or cellular basis of bacterial pathogenesis. Teaching responsibilities include the conduct of a laboratory course for veterinary students. In addition, the candidate will have the opportunity to participate in a joint graduate education program sponsored by the School of Veterinary Medicine and the biomedical faculty of the University of Pennsylvania. Applicants must have a Ph.D., M.D., or M.D. degree and should have a demonstrated record of research productivity as well as a strong potential to develop an externally funded research program. Applications will be reviewed as of 1 March 1990 and thereafter until the position is filled. Please send curriculum vitae, a statement of research interests, and names, addresses, and telephone numbers of two referees to: Dr. Leonard J. Cohick, Microbiology Committee, Department of Pathobiology, University of Pennsylvania, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, PA 19104. An Equal Opportunity, Affirmative Action Employer.

ASSISTANT PROFESSOR. Medical technology, tenure track; academic year to begin September 1990. Ph.D. preferred; strong master's candidate considered. MT (ASCP) and/or CLS certification and experience in medical technology education required. Responsibilities include: teaching mycology and parasitology, coordinate course in laboratory management, advise student research, and administer the clinical laboratory. Must be able to actively participate in research and service activities, communicate with and assist adjunct faculty teaching in clinical and laboratory courses. Ph.D. degree or Ph.D. equivalent in microbiology. Send cover letter and résumé (noncitizens must include current visa status) by 15 February 1990 to: K. A. Bever, Chair, MT (ASCP) or CLS, Beloit, Wisc., 53511. Excellent benefits. EEO/AA.

The Department of Pathology is seeking applications for a tenure-track position, preferably at the rank of ASSISTANT OR ASSOCIATE PROFESSOR. We are looking for a person who will develop a high-quality, independent research program applying morphological, biochemical, and molecular approaches to the study of specific disease processes. The position also entails a strong commitment to graduate education in cellular and molecular pathology and shared responsibility for D.V.M. and resident teaching. Successful candidates will have both D.V.M. and Ph.D. degrees (or equivalent degrees) and certification by the American Board of Veterinary Pathology. This position is desirable but not essential. Applications should include curriculum vitae, description of career goals and future research interests, a list of the candidate's publications and other publica-
tions, and the names of at least three individuals willing to write letters of recommendation. Application material should be sent to: Dr. Donald J. Schlafman, Chairman, Pathology Search Committee, Room 2E05, Schurrman Hall, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-5440.

Carnell University is an Equal Opportunity/Affirmative Action Employer/Educator.
Assistant Professor, Ph.D. or M.D. to participate in a multifaceted research program on heart failure with emphasis on structure and function of cardiac connective tissue. Expertise in both cardiovascular physiology and electron microscopy required. Experience in coronary circulation and myocardial ischemia desirable. No patient care involved. Salary: $30,000 to $35,000 per year. Send curriculum vitae and three references to: Dr. Edmund Sonnenblick, Chief, Cardiology Division, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461.

Assistant/Associate Professor of Biology

Applications are invited for a tenure-track position at the level of Assistant/Associate Professor in the Department of Biology at Carthage College to begin in the fall 1990. Teaching responsibilities will include a combination of physiology/anatomy, general biology, and supervision of student research projects. The successful applicant will have a strong commitment to teaching and involvement of students in research projects. Applicants should send curriculum vitae and transcripts, and have three letters of recommendation sent by 1 February 1990, to:

Dr. Thomas A. Brawner
Department of Biology
Carthage College
Kenosha, WI 53141

Assistant Professor of Biology

Tenure-track position, to teach introductory physiology and a senior-level research program in neurochemistry or molecular neurobiology. Ph.D. required, post-doctoral experience preferred. Research specialty must be compatible with existing Ph.D. programs in molecular biology and neurobiology. Appointment effective September 1990 or January 1991. Send application, curricu- lum vitae, transcripts, and names, addresses, and telephone numbers of at least three references to: Dr. Fritz Schwalm, Department of Biology, Texas Woman's University, F.O. Box 23971, Denton, TX 76204. Screening of applications will begin 15 February 1990 and continue until position is filled.

Texas Woman's University is a state-supported university and is an Equal Opportunity Employer.

New Cancer Research Group in Molecular Mechanisms of Growth Control

University of Alberta, Edmonton

Applications are invited for four faculty positions at the Assistant/Associate Professor level in the Faculty of Medicine to join a new group devoted to the study of eukaryotic growth control. Applicants should have a strong background in eukaryotic molecular biology and will be expected to develop a research program that will complement and contribute to the overall research efforts of the group. The research focus of the new group will be a multidisciplinary approach to eukaryotic cell replication, polypeptide growth factors and their receptors, intracellular signaling mechanisms, transcriptional regulation during mitogenesis, and onco- genes of tumor interest. The new group will be housed in the McEachern Cancer Research facility, which includes over 10,000 square feet of developed research space. Appointees will be eligible for tenure and the positions will be initially funded by a Terry Fox Team Development award from the National Cancer Institute of Canada. Applicants should forward curriculum vitae, list of publications, and the names of three references before 1 March 1990 to: Dr. Grant McFadden, Chair, Search and Selection Committee, Department of Biochemistry, University of Alberta, Edmonton, Alberta, Canada, T6G 2H7.

The University of Alberta is committed to the principle of Equity in Employment.

Visiting Assistant Professor

The Department of Biomedical Engineering at The University of Akron has an immediate opening for a visiting assistant professor in the fields of image and neurophysiological signal processing. Ability to both teach and work on a research team in the above fields and perform administrative assignments are required. The deadline for receipt of applications is 5 February 1990. Send resume to: Dr. K. Mudry, Head, Department of Biomedical Engineering, The University of Akron, Akron, OH 44325. FAX: 216-374-8834. The University of Akron is an Equal Education and Employment Institution.

Positions Open

Schering

Senior Research Scientists

If pioneering drug development through biotechnology is what you have in mind, come to Schering-Plough Research.

Internationally renowned as a top research-intensive force in the healthcare industry, Schering-Plough is expanding its Biotechnology department to maintain its lead. If you have the technical expertise and the communication abilities necessary to direct the research of others, then we invite you to explore one of these highly visible career challenges.

We have recently created these positions in the physical biochemistry group to define the three-dimensional structure of various cytokines, lymphokines and their receptors and for using that structural information to design novel therapeutic agents. All positions require a Ph.D in Biochemistry coupled with 0-3 years of relevant post-doctoral training.

Synthetic Peptide Biochemist

To qualify, you must have hands-on experience with automated solid phase peptide synthesis and HPLC isolation/characterization techniques. In addition, knowledge of molecular modeling methods and physical techniques such as circular dichroism, mass spectrometry, or NMR is desirable.

Biochemist

The successful candidate will have experience with HPLC and a working knowledge of automated protein sequencing and amino acid analysis. Candidates with limited experience and a desire to master these technologies are encouraged to apply. A background in the generation and isolation of peptide fragments would be a definite plus.

Biochemist

This position requires a background working with mass spectrometry techniques for the structural analysis of oligosaccharides on glycoproteins and glycopeptides. A background in the use of glycosidases and NMR methods to define oligosaccharide structures would prove useful.

As a diversified Fortune 200 leader, we are able to offer an excellent salary/benefits package and an environment conducive to professional growth. For prompt consideration, please send your resume, indicating position of interest to: Mr. R. Blackburn, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

What you have in mind, we put in action.

Schering-Plough
POSITIONS OPEN

AQUATIC ECOLOGIST, ASSISTANT PROFESSOR to teach courses in aquatic biology and applied ecology for majors in general biology and ecological principles for nonmajors. Tenure-track position to begin Sep
tember 1990. Ph.D. required. Send a letter of application and curriculum vitae and the names of three references to: Dr.
Anne Selby, Biology Search Committee, Augustana College, Rock Island, IL 61201 by 1 March 1990. Women and minorities encouraged to apply.

THE CLARE BOOTE LUCE FACULTY OF THE SCIENCES AT CREIGHTON UNIVERSITY

In keeping with Creighton University's Equal Opportunity/Affirmative Action plan, the university invites applications from outstanding women candidates for appointment to the Clare Boote Luce Faculty Chair in the Sciences, possibly in the Department of Biology.

Candidates are expected to be excellent scholar/teacher candidates who will serve as mentors and role models for undergraduate women interested in careers in scientific research. Candidates are expected to be interdisciplinary in approach, and committed to a productive research program. The successful candidate will be expected to teach in both the undergraduate and graduate program in her area of specialization, and to develop an active research program with undergraduate and graduate students. This tenure-track appointment, at the ASSISTANT PROFESSOR level, is renewable annually up to a total of 5 years. The candidate must have the qualifications and experience of an outstanding scholar/teacher.

The Biology Department currently has eight faculty members, with existing strengths in the areas of cell molecular biology and ecology/behavior. Interested women should send a letter of intent, curriculum vitae, a statement of current research interests and achievements, and a teaching effectiveness and success, and arrange to have sent official transcripts and three letters of reference. Materials should be mailed to: Dr. Maria Darlington, Chair, Search Committee, Creighton University, Nebraska City, NE 68312. Women and minorities are encouraged to apply.

DIRECTOR OF ACADEMIC COMPUTING

The University of Texas Health Science Center at Houston (UTHSC) is seeking a director to provide leadership in the development of academic computing within the six schools of the Health Science Center. The director will be responsible for undergraduate students and faculty in the use of computers, the introduction and support of computer applications in the classroom and laboratory, and the coordination of the UTHSC academic computing network.

We are especially interested in people with a background in computing and experience in teaching and developing curriculum in computing and experience in providing computer services to academic users. Send résumés to: Dr. Paul E. Darlington, Chair, Search Committee, UTHSC, P.O. Box 20554, Houston, TX 77225. UTHSC is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

MARKEY DEVELOPMENT BIOLOGY PROGRAM

Applications are solicited for the DIRECTOR of the newly established Markey Developmental Biology Program at Northwestern University Medical School. The successful candidate should be an internationally recognized developmental biologist who can provide scientific leadership for the program. Candidates must qualify for a senior faculty appointment with tenure in the university.

Core laboratories for the Markey Developmental Biology Program will be housed in the newly constructed Tarry Research and Education Building on the Chicago campus. Generous funds and additional junior faculty positions are available. Review of applications will begin after 1 March 1990. Send résumé to: Dr. James Albrecht-Buehler, Ph.D., Chairman of Search Commit
tee, Morton 4-655, 303 East Chicago Avenue, Chicago, IL 60611–3006. Northwestern University is an Equal Opportunity/Affirmative Action Employer and Employer. Employment verification required upon hire.

THE UNIVERSITY OF MICHIGAN, CHAIR OF PHARMACOLOGY

The University of Michigan Medical School is seeking a director to direct the research, teaching, and service programs of its De
dpartment of Pharmacology. Qualifications include: a Ph.D. (or M.D.), or both, with an emphasis on a related research field, national stature as a researcher in an area of pharmacology, commitment to teaching, and administrative ability. The position includes an instructional tenure
track faculty appointment. Please submit a letter by 15 Febru
ary 1990 to: Anne B. Young, M.D., Ph.D., Chair, Pharmacology Search Committee, c/o Susan E. Blumberg, Medical Administration Assistant, The University of Michigan, M7325A Medical Science 1 Building, Ann Arbor, MI 48109–0264. The University of Michigan is a nondiscriminatory Affirmative Action Employer.

DEAN, SCHOOL OF NATURAL SCIENCE AND MATHEMATICS \CALIFORNIA STATE UNIVERSITY FULLERTON (CSUF)

The dean is the chief academic officer of the school and reports directly to the Vice President for Academic Affairs. CSUF provides intellectual leadership, represents the school, and interacts with the community. Qualifications include: a Ph.D., academic credentials, administrative experience. Administration of a professor in one of the departments, 5 years of successful collegiate teaching, a record of scholarly/creative activity, and three years or more administrative experience involving responsibility for a major organizational unit. A proven record of success in securing private and governmental support is required. Strong interpersonal communication skills are required. A demonstrated commitment to Affirmative Action is essential. The dean is expected to promote excellence in teaching and research, and foster ongoing outreach programs in science and mathematics education and in-service training programs for K-12 science and mathematics teachers.

Comprised of the Departments of Biological Chemistry and Biochemistry, Mathematics, Sciences, Molecular Biology, and Physics and the Science Education Program, the school has approximately 120 faculty and enrolls some 12500 undergraduate and 1500 graduate students. The current science facility will be expanded by a $23-million addition. CSUF has 25,000 students and seven schools. The effective date of the appointment is preferably 25 June 1990, but not later than 1 August 1990. Excellent salary and benefits.

Deadline for applications and nominations is 1 March 1990, or until the position is filled. Letters of interest with statements of qualifications, résumés, and names, addresses, and telephone numbers of five references should be sent to: Dr. Morton Philips, Search Committee for: the Dean of the School of Natural Science and Mathematics, Office of the Vice President, Aca
demic Affairs, CSUF, University of California, Fullerton, P.O. Box 43048, Fullerton, CA 92634–9480. CSUF is an Affirmative Action/Equal Opportunity/Title IX Employer.

DIRECTOR

MAGNETIC RESONANCE RESEARCH (MR)

The University of Pittsburgh Department of Radiology is seeking a director of MR research. The candidate must have substantial experience in MR imaging and/or MR spectroscopy with a record of successfully funded research; administrative experience is desirable. The di
tector will supervise and coordinate MR research activi
ties centered on a variety of high-field imaging and spectroscopy units, and will be an integral part of a large multidisciplinary research effort. The director will be responsible for the MR research program with an active clinical and research laboratory. The candidate is expected to be at the ASSOCIA
tATE OR FULL PROFESSOR level according to qualifications, salary and fringe benefits. Curriculum vitae should be sent to: Michael P. Federle, M.D., Department of Diagnostic Radiology, Presbyterian-University Hospital, DeSoto at O'Hara Streets, Pittsburgh, PA 15213. University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer.

SCIENCE, VOL. 247
DEAN
COLLEGE OF GRADUATE STUDIES

The Medical University of South Carolina, an expanding health science campus, invites applications and nominations for the position of Dean of the College of Graduate Studies.

The Dean will report to the Vice President for Academic Affairs and will be responsible for the quality and development of all aspects of graduate degree programs involving research training. Responsibilities include:

- Developing creative recruitment programs for augmenting the quality and number of graduate students.
- Participating in the university-wide recruitment of 70 new investigators.
- Providing leadership for the development of new research training programs.
- Coordinating graduate research training programs with the activities and goals of the five other colleges and centers at the Medical University.
- Maximizing financial resources for predoctoral and postdoctoral training and providing leadership in the use of these resources for the advancement of academic excellence on campus.
- Candidates for the position must have a Ph.D. or equivalent doctoral degree, a strong background in research and graduate education, and a commitment to academic excellence.

Nominations and applications, including a curriculum vitae, should be sent by March 15, 1990 to:

Jim D. Karam, Ph.D., Chairman
Search Committee for Dean of the
College of Graduate Studies
Department of Biochemistry and Molecular Biology
Medical University of South Carolina
171 Ashley Avenue
Charleston, South Carolina 29425

The Medical University of South Carolina is an equal opportunity, affirmative action employer.

Forsyth Dental Center
DIRECTOR

Nominations and applications are invited for the position of Director of Forsyth Dental Center. The Director is the chief executive officer with responsibility for managing all aspects of the Center, and reports to the Board of Trustees. The position may include a tenured appointment in an appropriate basic science or clinical department.

Forsyth is an internationally recognized non-profit center of dental research and dental hygiene education located in Boston. The major divisions are the Research Institute, devoted to biomedical research related to diseases of the oral cavity, the School of Dental Hygiene, and the Clinical Division encompassing patient care and other activities in support of research endeavors. Forsyth has an annual operating budget of over $9 million and an endowment of more than $25 million.

Forsyth seeks a Director with a long-range vision for the scientific and educational future of the field of oral health. The Director must have a history of dynamic and innovative leadership and be committed to developing the human and capital resources of Forsyth. The Director should possess an understanding of scientific research, preferably obtained through experience. Knowledge of the dental research community is also highly desirable.

Nominations and expressions of interest with a curriculum vitae should be sent by 15 March 1990 to: Mr. Stephen E. Moore, Search Committee Chair, Forsyth Dental Center, 140 The Fenway, Boston, Massachusetts, 02115 U.S.A.

The Search Committee anticipates reaching a decision in early Summer, 1990.

Forsyth is an equal opportunity employer and encourages applications from minority and women candidates.

The GSF is a national research center with 1700 employees, funded by the Federal Republic of Germany and the State of Bavaria. Its activities concentrate on the protection of man and his environment from hazardous effects, and on the improvement of health care.

An internationally recognized scientist is invited to apply for the position of

Director of the
Institute of Epidemiology

The institute shall continue the previous epidemiological work of the Institute for Medical Informatics and Health Services Research (medis), in close cooperation with the clinical and experimental research groups of the GSF, and it shall start new especially environment-oriented activities. A joint appointment with the medical school of Technical University of Munich on the level of full professor is envisaged.

The payment corresponds to salary class C4 (equivalent to that of a full professor in the Federal Republic of Germany).

Applicants should send their documents (curriculum vitae, certificates, list of publications) not later than February 28, 1990, to the Scientific Director, Prof. Dr. H.W. Levi.

Gesellschaft für
Strahlen- und
Umweltforschung mbH
München
Ingolstädter Landstraße 1
D-8042 Neuherberg
POSITIONS OPEN

DIRECTOR OF THE DEVELOPMENTAL BIOLOGISTS PROGRAM
INSTITUTE OF HUMAN GENETICS
DEPARTMENT OF PEDIATRICS

The University of Minnesota is seeking a nationally recognized molecular biologist for the director of the developmental biologist program. This joint appointment includes laboratory facilities and resources in the institute and the opportunity to participate in an active interdisciplinary genetics graduate program. The candidate must have a doctoral degree and demonstrated professional distinctiveness in research and writing, and have an ongoing research program with national and external funding. Person must also have demonstrated effective teaching and advising.

The University of Minnesota is an Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.

CLINICAL EPIDEMIOLOGIST

The Department of Family and Community Medicine, University of Illinois College of Medicine at Rockford, is extending its search for a clinical epidemiologist. Appointments will be at the Assistant or Associate Professor level, depending upon qualifications and experience. Candidates should have a master's or doctoral degree in public health. Experience in protocol development and an interest in longitudinal studies, geriatrics, and morbidity and mortality is highly desirable. For fullest consideration, submit applications prior to 1 May 1990. Applications should be submitted to: Chairman, Search Committee, University of Illinois College of Medicine at Rockford, 1601 Parkview Avenue, Rockford, IL 61107.

The university is an Affirmative Action/Equal Opportunity Employer.

CRYSTALLOGRAPHER

TENURE-TRACK FACULTY POSITION IN CHEMISTRY
UNIVERSITY OF NORTH CAROLINA
AT CHAPEL HILL

The Department of Biochemistry invites applications from macromolecular X-ray crystallographers. Appointment rank to be determined by experience. Equipment available includes an area detector system as well as access to supercomputing and computer graphics. Generous start-up funds are available. Suitable applicants will be expected to develop an active research program in structural molecular biology and to participate in departmental teaching. Interested crystallographers should send a resume with statements of research goals, names of at least three references, and two reprints to: Dr. Mary Ellen Jones, Search Chair, Department of Biochemistry, School of Medicine and Dentistry, University of North Carolina, Chapel Hill, NC 27599-7260. Review of applications will start on 15 February 1990. Minority and female scientists are especially encouraged to apply. Equal Opportunity/Affirmative Action Employer.

ECOLOGY AND ENVIRONMENTAL SCIENCE

SUMMER TEACHING POSITIONS: Bard College Graduate Studies, Annandale-on-Hudson, NY 12504. Bard College offers a semester-long interdisciplinary curriculum during the summer months, extending its year-round program in the arts and sciences. For the summer session 1990, the college announces the following positions: College Biology, Environmental Studies, Environmental Policy.

The University of Minnesota is an Equal Opportunity Employer and specifically invites and encourages applications from women and minorities.

ENVIRONMENTAL HEALTH ASSISTANT PROFESSORSHIP

East Carolina University, Greenville, NC 27834, is seeking applications for a tenure-track position in Environmental Health. Candidates are invited from junior as well as established investigators. Applicants should submit curriculum vitae, a summary of research activities and plans, and three letters of recommendation. All materials should be addressed to: Dr. Joan Massell, Chairman, Box 135, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021.

Equal Opportunity/Affirmative Action Employer.

MICROBIOLOGY FACULTY POSITION AVAILABLE

The Philadelphia College of Pharmacy and Science invites applications for a tenure-track position at the Assistant or Associate Professor level. The position is effective 15 August 1990.

The successful candidate will be expected to teach introductory microbiology, advanced microbiology, and biological chemistry and to pursue an active research program. The college encourages applications from women and minorities.

Applicants should submit the following: (i) a letter of application addressing the above criteria, (ii) a complete resume including a current transcript, and (iii) names, addresses, and telephone numbers of three references. Applications should be submitted as soon as possible to: Dr. Gilbert L. Zink, Chairman, Department of Biochemistry and Microbiology, Philadelphia College of Pharmacy and Science, Woodland Avenue at 43rd Street, Philadelphia, PA 19104. An Equal Opportunity/Affirmative Action Employer.

INSTRUCTOR/ASSISTANT PROFESSOR. Position open immediately for instructor/assistant professor in the Department of Radiology at The University of Texas Southwestern Medical Center at Dallas. Position includes research in NMR microscopy (both imaging and spectroscopy) of experimental and human tumors. Qualifications include an M.D. or Ph.D. degree and experience in the investigation of the biological effects of radiation and in clinical cancer research. The successful candidate should have an extensive background in pathology valued at $30,000 to $35,000. Equal Opportunity/Affirmative Action Institution.
FACULTY POSITION

MOLECULAR BIOLOGY IN CARDIOVASCULAR MEDICINE. The Department of Internal Medicine and the Division of Cardiology of the University of Texas Medical School at Houston wish to recruit a full-time faculty member on the tenure track with the task to develop a basic research laboratory in molecular biology as it applies to the cardiovascular system. Specific interest, training, and expertise in the areas of growth factors, intracellular signals, G-proteins, and/or the regulation of gene expression are expected. The position provides an excellent opportunity for an investigator to develop independence as a leader and scientist in a lively and supportive academic environment.

Please send information, including curriculum vitae, research interests, and the names of three references, to James T. Willerson, M.D., Chairman, Department of Internal Medicine, University of Texas Medical School at Houston, 6431 Fannin Street, Houston, TX 77030. The University of Texas is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSITIONS OPEN

INSTITUTE FOR HORMONE AND FERTILITY RESEARCH, HAMBURG

OVARIAN PHYSIOLOGIST

A full-time research position in mammalian reproduction, at GROUP LEADER level, is available from spring 1990. At least 6 years of experience is required in studies on ovarian physiology, of which a minimum of 2 years should be at postdoctoral level. The candidate will be expected to evolve an independent research program and to be able to attract grant support. Experience in cell biology and morphology will be of added advantage. Besides an attractive salary, laboratory facilities and a starting contingency grant will be provided. Apply before 15 February 1990, enclosing curriculum vitae, list of publications, reprints of the most relevant papers, and the names and addresses of two referees to: Professor E. A. Leidenberger, Institute for Hormone and Fertility Research, Grandweg 64, D-200 Hamburg 54, West Germany. For interim inquiries, contact: Dr. A. Mukhopadhyay at the above address. Telephone: 49-40 56 19 08-64.

POSITIONS OPEN

FACULTY POSITION

MOLECULAR BIOLOGY IN CARDIOVASCULAR MEDICINE. The Department of Internal Medicine and the Division of Cardiology of the University of Texas Medical School at Houston wish to recruit a full-time faculty member on the tenure track with the task to develop a basic research laboratory in molecular biology as it applies to the cardiovascular system. Specific interest, training, and expertise in the areas of growth factors, intracellular signals, G-proteins, and/or the regulation of gene expression are expected. The position provides an excellent opportunity for an investigator to develop independence as a leader and scientist in a lively and supportive academic environment.

Please send information, including curriculum vitae, research interests, and the names of three references, to James T. Willerson, M.D., Chairman, Department of Internal Medicine, University of Texas Medical School at Houston, 6431 Fannin Street, Houston, TX 77030. The University of Texas is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.
POSTDOCTORAL POSITIONS

NATIONAL INSTITUTES OF HEALTH
PHOENIX, ARIZONA

Positions are available now and in spring or fall of a 1990 for recent Ph.D. or M.D.s to participate in studies of the molecular biology and genetics of insulin resistance in a diabetes-prone human population. These molecular studies focus on several PROTEIN KINASES and PROTEIN PHOSPHATASES that are regulated abnormally by insulin in skeletal muscle of insulin-resistant subjects. Expertise in cDNA library construction and screening, oligonucleotide probe design, polymerase chain reaction, restriction mapping and DNA sequencing is essential.

Curriculum vitae, letter of application, and names, addresses, and telephone numbers of three references should be sent to:

Dr. Clifton Bogardus
or
Dr. James Sommecorn
National Institutes of Health
4212 North 16th Street
Room 541
Phoenix, Arizona
85016

U.S. citizenship is required
NIH IS AN EQUAL OPPORTUNITY EMPLOYER

positions open

FACULTY POSITION IN UROLOGY AT ASSISTANT PROFESSOR level available April 1990. Candidate must be Board-certified/eligible urologist with fellowship or special training in erectile dysfunction, prostatics, lower urinary tract dysfunction, reconstruction. Position requires some teaching commitment, and capability to carry on basic research in erectile physiology/pharmacology. Please send curriculum vitae, list of publications, and names of three referees. Position is subject to approval of research mentor: Alan J. Wein, M.D., Professor and Chairman, Division of Urology, Hospital of the University of Pennsylvania, 3400 Spruce St., Philadelphia, PA 19104. An Equal Opportunity/Affirmative Action Employer.

HEALTH SCIENCES POLICY, PROGRAM OFFICER: The Institute of Medicine of the National Academy of Sciences is seeking a program officer. Assist the study director of a congressionally mandated study of the co-administration of certain service/research programs of the National Institutes of Health and the Alcohol, Drug Abuse, and Mental Health Administration. Will prepare and obtain background materials for committee and panels, analyze and synthesize materials, and assist in data collection, policy analysis, and preparation of final report. Ph.D. preferred, M.S. or equivalent with four or more years of experience will be considered. Knowledge of health care delivery or behavioral health services, highly desired; basic research experience necessary. Must have demonstrated research, technical, and/or policy analysis capability and excellent written and oral communication skills. Demonstrated abilities in management or project planning and budget management are also necessary. Must have ability to do literature searches and retrieve information. Please contact: D.O., Room 2133-325 (RB), 2101 Constitution Ave., N.W., Washington, DC 20418. Equal Opportunity Employer.

MOLECULAR BIOLOGIST/INFORMATION SPECIALIST: The National Library of Medicine (NLM), National Institutes of Health, Public Health Service, has a full-time permanent opening for a technical information specialist to analyze published gene sequence data from genomic and cDNA sources to become part of its indexing operation. Qualifications at GS-9 (starting at $24,705): graduate degree in a biomedical science (molecular biology preferred), or B.S. degree plus 2 years of professional experience. Qualifications at GS-11 (starting at $29,891): graduate degree in molecular biology and 1 year of professional experience, or B.S. degree plus 3 years of professional experience in scientific information. Reading knowledge of at least one foreign language is desirable. U.S. citizenship required. For application, contact: Ms. Apolito, NLM, Building 38, Room 2N17, 8600 Rockville Pike, Bethesda, MD 20894. Telephone: 301-496-4943. NLM is an Equal Opportunity Employer.

PHYSIOLOGIST: The Program in Ecology, Evolution, and Behavior of the Biology Department at Princeton University invites applications for a position in animal physiology, rank open. The current faculty in the program are: Daniel Geleske, John Croze, and Henry Horn. Send applications to: Dr. Henry Horn, Search Committee, Program in Evolution, ecology, and Behavior, Guyot Hall, Princeton University, Princeton, N.J. 08544-1003. Princeton University is an Equal Opportunity/Affirmative Action Employer.

PSYCHOPHARMACOLOGIST

The Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism, Public Health Service, invites applications for one psychopharmacologist to carry out studies on laboratory animals and humans investigating the brain mechanisms underlying the behavioral effects of alcohol. This position is offered, depending on availability of funds, at a salary range of $28,000 to $45,334. Applicants must have a Ph.D. or M.D. Submit curriculum vitae and names of three references to: F. E. E. Martini, Laboratory of Clinical Studies, NIAAA, NIH, Building 10, Room 3C1012, 9000 Rockville Pike, Bethesda, MD 20892.

The position is available now and the deadline for receipt of materials is February 1990. NIH is an Equal Opportunity Employer.

POSITIONS OPEN

NEUROBIOLOGIST. The Department of Neurobiology, Behavior of the State University of New York (SUNY) Stony Brook invites applications for an assistant professor position which is tenure track and state-funded beginning academic year 1990 to 1991. Two years of faculty rank experience. Preference will be given to candidates with demonstrated ability in teaching animal physiology, neurobiology, and the use of computer- based teaching methods. The successful candidate is expected to teach one-semester laboratory course in physiology and to develop a neurobiology laboratory course for major and minor students. The successful candidate will be expected to develop an independent research program which will integrate well within the major research thrust of the department. Applicants should submit curriculum vitae, statement of research interests and addresses of three references, some of whom can comment on teaching ability, to: Dr. Albert D. Carlson, Chair, Department of Neurobiology and Behavior, SUNY Stony Brook, Stony Brook, NY 11794-5230. SUNY Stony Brook is an Affirmative Action/Equal Opportunity Educator and Employer. AK2.

NEUROBIOLOGY OF AGING AND ALZHEIMER’S DISEASE POSITIONS for M.D.’s and Ph.D.’s. Several positions, supported by the National Institute on Aging, will be available in 1990 for postresidency and postdoctoral fellows in the neurobiology of aging and Alzheimer’s disease. Positions available as POSTDOCTORAL FELLOWS, RESEARCH ASSOCIATES, and JUNIOR FACULTY. We encourage applicants with diverse backgrounds who wish to apply their past training to problems of the aging CNS. We are particularly interested in persons with prior training in molecular biology, cell culture, protein chemistry, neuro-pathology, immunocytochemistry, or neurology. The training program offers an intense research apprenticeship in fundamental research, contact with a variety of laboratories, seminars, and clinical activities. Twenty potential preceptors are in the Departments of Neurology, Neurosciences, Virology, Pharmacology, Medicine, Biochemistry, and Psychology. The University of Rochester is notable for its absence of barriers among laboratories, facilities, and departments, so work in facilities outside the formal preceptor list is also possible. There are over 70 laboratories devoted to the study of the nervous system. Molecular biology is another area of strength at the University of Rochester. U.S. citizens or permanent U.S. residents only. Apply to: Dr. Paul D. Coleman, Department of Neurobiology and Anatomy, University of Rochester Medical Center, Rochester, NY 14642.

ORNITHOLOGIST

The Department of Systematics and Ecology and the Museum of Natural History, University of Kansas, invites applications for a tenure-track position as ASSISTANT PROFESSOR AND CURATOR OF ORNITHOLOGY. Januay 1991. Applicants must have a Ph.D. in avian systematic and evolutionary biology, graduate education, teaching in specialty and undergraduate biology, curration of ornithological collections. Salary: $35,000 per year. Required: Ph.D. in appropriate field, evidence of research productivity (viz., publications, grants, fieldwork), curatorial experience, commitment to teaching. Applicants should request position description. Send letter of application; statement of professional goals, research, and teaching interests; curriculum vitae; references; and three letters of recommendation to: Ornithology Search, Museum of Natural History, 602 Dyche Hall, University of Kansas, Lawrence, KS 66045-2464. Telephone: 913-864-6450. Application deadline: 28 February 1990 (postmarked). Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL OR RESEARCH ASSOCIATE to study DNA variation of Pacific salmon. Training in molecular genetics and laboratory techniques. Experience in application of molecular (DNA) techniques to population genetics desired. Position is term-funded. Send application, résumé, and names of three referees to: Dr. A. J. Garrettt, University of Alaska, 11120 Glacier Highway, Juneau, AK 99801. The University is an Affirmative Action/Equal Opportunity Employer and Education Institution.

SCIENCE, VOL. 247
POSIIONS OPEN

POSTDOCTORAL POSITION in Departments of Surgery and Biochemistry is available 1 April 1990 to study the interactions between hyaluronic, von Willebrand factor, and other plasma proteins. Techniques will include CD, fluorescence polarization, peptide synthesis, and protein degradation and purification. Experience in carbohydrate chemistry also valuable. Send curriculum vitae and names of three references to: Dr. Michael Sobel, Medical College of Virginia, Box 108, MCV Station, Richmond, VA 23298.

POSTDOCTORAL POSITIONS HARVARD UNIVERSITY

Two postdoctoral positions are available to study the response of prokaryotic and eukaryotic cells to DNA alkylation damage. Our aim is to understand mechanisms of mutagenesis and toxicity and to understand how the expression of DNA repair genes is regulated. Our approaches combine cell and molecular biology, genetics, and biochemistry. To apply, send curriculum vitae, the names of three references, and a statement of research interests to: Dr. Leon Samson, Laboratory of Toxicology, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION to examine either:
(i) mechanisms and effects of herbivore-induced chemical responses in cucurbits, experience with natural products chemistry or plant physiology required (contact: Dr. W. Tallamy); or (ii) cellular immune response of insects to infectious stages of fungal pathogens and determinants of pathogen host range, familiarity with techniques of insect physiology, biochemistry, or pathology (contact: C. B. Kell). Available immediately; position ends 30 June 1991. Send curriculum vitae, statement of research interests, and three letters of reference to: Department of Entomology and Applied Ecology, University of Delaware, Newark, DE 19717–1803. Telephone: 302-431-8526. Screening of applicants will begin 8 February 1990 and will continue until position filled. An Equal Opportunity/Affirmative Action Employer. We especially invite women and minorities to apply.

POSTDOCTORAL POSITIONS IN FLUORESCENCE IMAGING

The Section on Neuronal Secretory Systems has postdoctoral opportunities in the areas of neuronal secretion and its regulation. The section is involved in exciting studies on fluorescence video microscopic imaging to measure intracellular ion transients in neuronal and glial cells, and studies on the mechanism of secretion and its modulation in isolated nerve terminal systems. The position is offered depending on the experience of the applicants. Candidates should have interest in either quantitative fluorescence microscopy and real-time image processing or cell biology of neuronal secretion. Send curriculum vitae and names of three references to:

James T. Russell
Laboratory of Developmental Neurobiology
NICHHD, NIH, Building 26, Room B-316
9000 Rockville Pike
Bethesda, MD 20892

U.S. citizenship is not required.
NICHHD is an Equal Opportunity Employer.

CAREER CHANGE OPPORTUNITY

The School of Oceanography of the University of Washington is proud to announce, through the generosity of the Office of Naval Research's Ocean Science Educator Program, the immediate availability of a 3-year POSTDOCTORAL PROGRAM for a STATISTICI-AN interested in applying his or her skills to oceanography on a long-term basis. Specialists in other non-oceanographic disciplines (e.g., physics or applied mathematics) may also be considered. Funding includes both salary ($52,000 per year) and research support ($25,000 per year). Topics of particular interest include, but are not limited to, intelligent use of sparse and gappy data sets, objective mapping, non-stationary Kriging, multi-variate spatial statistics, and Lagrangian statistics. Please forward a statement of interest, curriculum vitae, selected reprints, and a list of three or more references to: Peter A. Jamars, School of Oceanography, WB–10, University of Washington, Seattle, WA 98195. All applications received before 1 April 1990 will be considered, but the position may remain open longer for particularly promising candidates.

RESEARCH SCIENTISTS
PROTEIN CHEMISTRY

Amgen is a recognized leader in the discovery and development of human therapeutic products through applied biotechnology. We are expanding our program on the interactions of protein ligands with cell surface receptors with emphasis on the role of carbohydrate structure in these interactions. As a result, we have opportunities available for Ph.D. scientists to contribute to the development of this program.

Qualified candidates for this program must have an unique background covering a variety of disciplines including a general knowledge of protein and glycoprotein purification and structure/function relationships. Experience in characterization of membrane-associated receptors which bind protein ligands is highly desirable. A Ph.D. in Biochemistry or a related field and a minimum of two years' postdoctoral experience are required.

Amgen offers an excellent compensation and benefits package and the unique opportunity to contribute to significant research programs on the leading edge of biotechnology. If you have the necessary skills and qualifications and would like to be a part of a company that places a high priority on its human resources, please send a complete C.V., in confidence, to:

AMGEN, INC.
Recruitment, Dept. #502
Amgen Center
Thousand Oaks
CA 91320-1789

Landscape Ecologist
$44,500 – $54,100 (Cdn.)

Pursue this opportunity with the Ontario Ministry of Natural Resources, forest resources group. As part of a dynamic, applied science and technology team, you will originate and participate in programs emphasizing an ecosystem approach to forest-resource management, including: long-term forest productivity relationships; ecological modelling; ecosystem response to disturbance and nutrient dynamics; topical issues in integrated resource planning and policy. Location: Sault Ste. Marie.

Qualifications: Undergraduate, M.Sc. and/or PhD training in forestry, ecology or related biological field; proven forestry/ecology experience, with emphasis on ecosystem analysis and forest-ecosystem research and education; solid background in statistics, modelling and computer applications; excellent organization and communication skills; ability to conduct field work.

Application/resume must be received by Feb. 28, 1990. Quoting file NR-2085/89, send to: Human Resources Section, Ministry of Natural Resources, P.O. Box 310, 747 Queen Street East, Sault Ste. Marie, Ontario, Canada, P6A 5L8.
A POSTDOCTORAL POSITION IN CELLULAR DEVELOPMENTAL NEUROBIOLOGY is available for study in the molecular genetics, development, and plasticity of the neuromuscular junction, with emphasis on the active zone and the extracellular matrix. Applicants with strong interests in imaging, freeze-fracture microscopy, single-molecule chemistry, and/or biochemistry are desirable. Please send curriculum vitae and three references to: Dr. C. P. Ko, Neurochemistry, Department of Biological Sciences, University of Southern California, Los Angeles, CA 90089-2520.

MOLECULAR BIOLOGY/VIROLOGY. POSTDOCTORAL POSITION available to study the molecular biology and virology in regulation of gene expression, expression vector system and cell culture. Experience in recombinant DNA techniques required. Previous experience in insect or virus research not necessary. Send curriculum vitae and names of three references to: Dr. H. Alan Wood, Boyce Thompson Institute at Cornell University, Tower Road, Ithaca, NY 14853. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Immediate openings for postdoctoral fellows with strong backgrounds in molecular and/or cellular biology to study the molecular pathogenesis of muscular dystrophy, excitation-contraction coupling in skeletal and cardiac muscle, or the biology of CD4+ T cells in excitable cells. Current research projects involve structural and functional studies of dystrophin and dystrophin-associated proteins, excitation-contraction coupling and molecular properties of the various subunits of the dihydropyridine receptor in skeletal muscle, structural and functional studies of the junctional sarcoplasmic reticulum proteins involved in the regulation of Ca++ release, and the purification and cDNA cloning of surface and intracellular Ca++ channels in neuronal cells. Send curriculum vitae and three letters of recommendation to: Dr. Kevin P. Campbell Howard Hughes Medical Institute, 400 EMRB Department of Biology and Biophysics University of Iowa College of Medicine Iowa City, IA 52242 Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

IN GENE EXPRESSION

The named position is available immediately or by the fall to study muscle gene expression in Drosophila. We are studying protein and splice function of muscle-specific protein genes in transgenic flies and protein binding studies in the in vitro cell-free systems. Applicants must have a Ph.D. and must have prior DNA methods training desirable. Starting salary competitive. Send curriculum vitae and names of three references to: Dr. Robert V. Storto, Laboratory of Cell, Tissue and Organ Culture, Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Physiological study of synaptic reorganization after hippocampal lesions and following neural grafts. Techniques include in vitro intracellular recording, intracellular dye staining, and in vivo behavioral assessment. Background in cellular neurophysiology desirable, but other interests will be considered. Available immediately. Apply to: Dr. A. D. Turner, Neurosurgery, Box 3807, Duke University Medical Center, Durham, NC 27710. Telephone: 919-684-6706. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

Available immediately for studies on assembly, structure, and functions of basement membrane collagen, laminin, and proteoglycans. Projects include (i) biochemical characterization and synthesis of laminin subunits and laminin interactions, and (ii) molecular architecture. Salary negotiable. Send resumes and names of references to: Dr. A. D. Turner, Neurosurgery Department, University of Medicine and Dentistry of New Jersey (UMDNJ), Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V.

POSTDOCTORAL POSITION

We have a position open in the Division of Urology, University of Pennsylvania. Salary is negotiable. Ph.D. and/or M.D. preferred. Ph.D. candidates interested in molecular biology or biochemistry should contact Dr. J. H. Kelalis at the University of Pennsylvania, 3400 Civic Center Boulevard, Philadelphia, PA 19104. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH POSITION

Funded by an NIH training grant in immunology. Available immediately for studies on oncogene products involved with signal transduction during lymphocyte activation and neoplastic transformation. Applicants with some experience in immunology and molecular biology or protein purification are particularly encouraged. Send resume and names of three references to: Dr. Nancy S. Magnuson, Department of Microbiology, Washington University School of Medicine, Box 8208, St. Louis, MO 63110. Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF KENTUCKY RESEARCH AND GRADUATE STUDIES

ELECTRON MICROSCOPE MAINTENANCE SPECIALIST

Responsibilities include installation, maintenance, repair service, emergency repairs, purchase of electron microscopes and incalculable equipment as well as training for users on routine operation of electron microscopes. Will consult with faculty and staff on the design of experiments in order to optimize the potential of the equipment. Minimum requirements are an associate degree and 5 years of relative professional experience in the equivalent combination of education and experience. Deadline for receipt of letter of application, resume, and minimum acceptable salary is 9 February 2000, but may be extended if additional applicants are necessary. Send: Patri- cia Butler, Attention: #8849, University of Kentucky, Employment Services, East Maxwell Street, Lexington, KY 40506-0314.

SWISS INSTITUTE FOR EXPERIMENTAL CANCER RESEARCH

STAFF MEMBER

Applications are invited for a position at the junior or senior level in the field of onco genetics and antitumor prevention. We expect candidates to develop an independent and competitive research program and to interact productive with existing research groups. The future group leader will be able to start his activity in the beginning of 1991. Applications, including curriculum vitae and bibliography as well as the names and addresses of three referees, should be submitted by 28 April 1990 to: Dr. Peter K. Wellauer, Swiss Institute for Experimental Cancer Research, Chemin des Boveresses, CH-1066 Epalinges s’Lausanne, Switzerland.

WILDLIFE TOXICOLOGIST

Exxon Biomedical Sciences, Inc., has an immediate opening for a qualified individual specializing in wildlife toxicology. The successful candidate will have an M.S. or Ph.D. and 1 to 3 years of experience in wildlife/vertebrate ecology or wildlife management, with a focus on effects of environmental pollutants on native and/or introduced populations. In addition, the applicant should have a knowledge/familiarity of analytical chemistry techniques and toxicity of industrial chemicals. Please forward resumé to: Christine Ramos, Human Resources Exxon Biomedical Sciences, Inc., Merritts Road East Millstone, NJ 08875–2350 Equal Opportunity Employer, M/F/H/V.
KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization with a staff of more than one thousand employees engaged in applied research in the fields of environmental and earth sciences; water resources; food resources; engineering; petroleum, petrochemicals and materials and techno-economics.

KISR has a vacancy in the following field:

**PLANT BREEDING**

- **Major Duties:**
  - Breeding of vegetables (primarily tomatoes, cucumber and egg plant, etc.) for salt and heat tolerance.
  - Establishing and standardizing of techniques for selecting desired genes or germplasm.
  - Establishing of capability to enhance breeding activities in biosaline research.
  - Selecting of salt and heat tolerance genotypes at cellular level (somaclonal variation) and utilizing of other tissue culture techniques.

- **Qualifications:**
  Applicants should have a Ph.D. in Plant Breeding (Horticulture) plus 5 to 10 years experience. Tissue culture experience is also necessary.

KISR offers attractive tax free salaries commensurate with qualifications and experience and generous benefits that include gratuity, free furnished air-conditioned accommodation, school tuition fees for children, contribution to a savings plan, six weeks annual paid vacation, air tickets, free medical care and life insurance.

Interested applicants are requested to send their Curriculum Vitae with supporting information not later than one month from the date of this publication to:

**Director General**
Kuwait Institute for Scientific Research
P.O. Box 24885 Safat
13109 Safat — KUWAIT.

Respiratory Pharmacologist

The Procter & Gamble Company has an immediate entry level opening for a Ph.D. respiratory pharmacologist or physiologist. Postdoctoral research experience would be desirable. Requirements include an understanding of the in vitro and in vitro techniques used to investigate the pharmacological regulation of pulmonary function in normal and diseased states. Research experience in allergic airway disease would be an advantage.

The successful candidate will be expected to design preclinical research strategies to evaluate novel approaches to treat airway diseases. Applicants must be U.S. citizens or permanent residents. Send resume and publication list to:

Dr. T. J. Logan, Manager
Ph.D. Recruiting
Respiratory Pharmacologist Position
THE PROCTER & GAMBLE COMPANY
P.O. Box 398707
Cincinnati, Ohio 45239-8707

An Equal Opportunity Employer

Be at the Heart of the Pharmaceutical Industry in Central New Jersey.

At ISI, Applied Research has four primary areas of concentration: molecular biology, immunology, cell biology and protein chemistry. Within these disciplines, ISI scientists work in a coordinated program to develop biopharmaceutical technology and products with significant market potential.

- **MOLECULAR GENETICS**
  Molecular biologists with experience in dot blot hybridization, PCR, DNA sequencing, vector construction, cDNA cloning, gene expression and yeast fermentation (RD901).

- **CELL BIOLOGY/IMMUNOCHEMISTRY**
  Biologists with experience in mammalian cell culture, cytokine biological assay, immunoassay, and production and purification of monoclonal and polyclonal antibodies (RD902).

- **PROTEIN BIOCHEMISTRY**
  Biochemists with experience in purification and characterization of proteins, affinity chromatography, and HPLC (RD903).

- **ANALYTICAL BIOCHEMISTRY**
  Protein chemists with experience in protein sequencing, amino acid composition analysis, peptide synthesis and peptide mapping (RD904).

- **PROCESS DEVELOPMENT and IMPROVEMENT**
  Protein biochemists with experience in large scale protein purification and process development (RD905).

- **FORMULATION**
  Protein pharmacologists with experience in oral, topical, parenteral formulation, and stability studies (RD906).

Send resume, with position code to: Personnel Dept., Attn: S. Walker, Interferon Sciences, Inc., 783 Jersey Avenue, New Brunswick, NJ 08901

An Equal Opportunity Employer M/F
NMR Program Head

Battelle, Pacific Northwest Laboratories

Battelle, Pacific Northwest Laboratories is seeking a senior scientist to head a new multuser NMR facility that is part of its Molecular Science Research Center. The NMR facility will contain 300- and 500-MHz spectrometers with capabilities for 2-D NMR on solids and liquids. A new spectrometer operating in the frequency range of 800 to 1000 MHz will also be developed as part of the long-range plans for structural studies on macromolecules, including nucleic acids, proteins and polymers.

The Pacific Northwest Laboratory is one of five national multiprogram energy laboratories, and is operated by the Battelle Memorial Institute under a contract with the U.S. Department of Energy. The Laboratory has a staff of approximately 3000 personnel conducting research in physics, chemistry, materials, engineering, mathematics and computer science, earth and environmental sciences, and the life sciences.

Applicants should send a resume, reprints of 3-5 recent publications, and the names and telephone numbers of 4 references to: Dr. T.S. Tenforde, Chief Scientist, Life Sciences Center (KI-50), Battelle, Pacific Northwest Laboratories, P.O. Box 999, Richland, Washington 99352. Deadline for receipt of application is April 13, 1990. An Affirmative Action, Equal Opportunity Employer.

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NOW YOU CAN SEE YOUR AD IN SCIENCE FOUR DAYS AFTER SUBMISSION

Scientific Recruiters can now advertise positions almost as soon as the need arises. Instead of reserving space a month or more in advance, you can now place your ad four days before the magazine mailing date. Science is mailed on the cover date.

Film (right-reading, emulsion face down) or full camera ready art and insertion order must reach: SCIENCE, Short Close Desk, 1515 Broadway, New York, NY 10036 by NOON Mondays (except for legal holidays when material must reach New York by Noon Fridays). Because space is limited, the four-day close page will be reserved on a first-come, first-served basis, at a 15% premium. ¼ and ½ page ads only.

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For further information, telephone Ed. Keller, Recruitment Advertising Manager, or Donna Rivera, Production Manager at SCIENCE: 212-730-1050, or write to: SCIENCE, 1515 Broadway, NY, NY 10036.
RESEARCH SCIENTIST
MAMMALIAN
EXPRESSION SYSTEMS

Amgen is a recognized leader in the discovery and development of human pharmaceutical and diagnostic products through applied biotechnology. Our continued growth has created an immediate need for a Research Scientist in our diagnostics group in Boulder, Colorado.

Candidates for this position must have a Ph.D. in an appropriate discipline and greater than 2 years' experience in cloning and expression of proteins in mammalian expression systems, development of mammalian expression vectors, and host cell culturing and development. A strong background in cell biology is highly desirable.

Amgen offers an excellent compensation and benefits package as well as the unique opportunity to contribute to significant research programs on the leading edge of biotechnology. If you have the necessary skills and qualifications and would like to be a part of a company that places a high priority on its human resources, please send a resume or C.V., in confidence, to:

AMGEN BOULDER, INC.
Personnel Dept.
2045 32nd Street
Boulder
CO 80301

Equal Opportunity Employer

RESEARCH SCIENTIST
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AMGEN BOULDER, INC.
Personnel Dept.
2045 32nd Street
Boulder
CO 80301

Equal Opportunity Employer

Postdoctoral Positions

Wyeth–Ayerst Laboratories is a leading developer and producer of prescription drugs, biologics, and infant nutrtionals. We currently have two postdoctoral opportunities in the Research Department in our Radnor, PA facility.

Both positions require a background in virology and recombinant DNA technology. Research will be aimed at the development of recombinant adenovirus vaccines. Publications are encouraged, and you will be part of a collaborative effort involving leading research laboratories.

Wyeth–Ayerst offers a competitive salary and comprehensive company benefits. For consideration, forward your resume to: Wyeth–Ayerst Research, Personnel Department, Position #TE9–001/002, P.O. Box 8299, Philadelphia, PA 19101. An equal opportunity employer, M/F/H/W responses encouraged.

WYETH
AYERST

Senior Staff
Pathologist

Genentech, Inc., a leader in the field of biotechnology, has an opening for a Sr. Staff Pathologist in our Safety Evaluation department.

Reporting directly to the Associate Director, the individual will be responsible for performance of directed as well as independent studies related to investigation of real and potential pathological conditions which occur naturally or are induced. These will include preclinical investigative studies as well as GLP toxology studies. Requirements include DVM/VMD, ACVP Board Certification, with a minimum of two years' experience in toxicology or comparative laboratory animal pathology.

Genentech, Inc., offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For consideration, please send your C.V. to Human Resources Department 7019, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity. Women and minorities are encouraged to apply.
VERTEBRATE ECOLOGIST. The University of Arkansas at Little Rock, Department of Biology, invites applications for a tenure-track ASSISTANT PROFES- SOR position in vertebrate ecology beginning August 1990. Candidates must hold the Ph.D. degree and postdoctoral experience is desirable. Teaching duties will include wildlife management techniques, ornithology, and participation in lower level courses. Preference is for a candidate with strengths in statistics and experimental design. Development of a research program, commitment to teaching, and interaction with other faculty in the area are expected. Send a letter of application, curriculum vitae, selected reprints, unofficial transcripts, and three letters of recommendation to: Dr. Robert L. Watson, Department of Biology, University of Ar- kansas at Little Rock, 2801 South University, Little Rock, AR 72204. To be assured of full consideration, applications should be received by 1 March 1990. Ap- plications will be subject to inspection under the Arkansas Freedom of Information Act.

The University of Arkansas at Little Rock is an Affirmative Action/Equal Opportunity Employer and actively seeks the candidacy of minorities and women.

FELLOWSHIPS

POSTDOCTORAL FELLOW. Conduct biochemical research to determine the role of estrogen in cancer. Isolate and analyze DNA from laboratory animals and human samples. Analyze for DNA adducts by \( ^{32}P \)-postlabeling assay. Identify adducts by HPLC analysis and comparison with synthetic analogs. Requirements: Ph.D. or equivalent degree, at least 2 years of demonstrated experience with \( ^{32}P \)-postlabeling analyses and HPLC chromatography. Must be able to synthesize modified nucleotides for adduct analysis. Salary: \$34,000 per year for 40 hours per week. Send résumé and two letters of recommendation to: Josephine G. Liehr, Department of Pharmacology, University of Texas Medical Branch (UTMB), Galveston, TX 77550. UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.

M.D./Ph.D. FELLOWSHIPS

The Medical University of South Carolina (MUSC), offers \$9000 stipends for studies leading to combined M.D./Ph.D. degrees in each of the basic biomedical sciences and molecular and cellular biology/medicine. Contact: Director, Medical Scientist Training Pro- gram, College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425.

TWO POSTDOCTORAL FELLOWSHIPS (NIDCD-funded) in the Department of Otolaryngology–Head and Neck Surgery at The Johns Hopkins University School of Medicine are open immediately. One position is for an otolaryngologist-physician-scientist, approximately 2/3 of the training period is to be spent in the laboratory and the remainder in clinical activities. The other position is a full-time appointment in the laboratory. M.D.’s and Ph.D.’s are invited to apply. Departmental laboratories investigate allergy, cochlear transduction, central auditory anatomy and physiology, head and neck cancer, olfaction, vestibular and ocularmotor control at the molecular, cellular, and organ level. These appointments are for up to 3 years and are only available to U.S. citizens. Please send inquiries, curriculum vitae, and three letters of recommendation to: W. E. Brownell, Director of Research, Department of Otolaryngology–Head and Neck Surgery, Room 424, Traylor Research Building, The Johns Hopkins Medical Institutions, Baltimore, MD 21205–2195.

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POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE POSITION. Available from the summer or fall of 1990 for a recent graduate with a Ph.D. in molecular biology, cell biology, or biochemistry interested in malignant transformation and cellular differentiation. Expertise in one or more of the following areas is desirable: molecular genetics, virology, or protein chemistry. Send curriculum vitae and names of three refer- ences to: Mark A. Israel, M.D., University of Californ- ia, Department of Neurosurgery, Brain Tumor Re- search Center, 2225 Educational Place, San Francisco, CA 94143. Equal Opportunity/Affirmative Ac- tion Employer.

POSTDOCTORAL FELLOW. Position in molecu- lar neurobiology, supported by a training grant and other sources. Projects include analysis of gene regu- lation in the hippocampus during Alzheimer’s disease, in responses to stress, and in association with long-term potentiation. Please send curriculum vitae and three letters of reference to: Dr. Caleb E. Finch, University of Southern California, Ethel Percy Andrus Gerontol- ogy Center and Program in Neural Informational Behavioral Systems, 3715 McClintock Avenue, Los Angeles, CA 90089–0191.

COUPLES AND TRAINING

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NASA PLANETARY BIOLOGY INTER- SHIPS. The Marine Biological Laboratory, Woods Hole, Massachusetts, invites applications from graduate students and seniors accepted to graduate programs for awards of \$2000 plus travel to participate in research at NASA centers and collaborating institutions for approxi- mately 8 weeks. Typical intern programs include: global ecology, remote sensing, microbial ecology, biomineral- ization, and origin and early evolution of life. Application deadline: 1 March 1990. For information/applications, contact: Greg Hinkle, Planetary Biology Intern Pro- gram, Department of Botany, University of Massa- chusetts, Amherst, MA 01003. An Equal Opportunity/ Affirmative Action Institution.

RESEARCH OPPORTUNITIES

THE JACKSON LABORATORY, located on the coast of Maine on the fringe of Acadia National Park, is a world renowned center and resource for mammalian biology and genetics.

- Dr. Benjamin Taylor is seeking to fill three openings in his murine genetics research program. Program includes in- sertional mutagenesis, RFLP mapping, and analysis of developmental mutations.
  - Professional Assistant: BS or MS with experience in molecular biology and strong interest in genetics.
  - Research Assistant: BS in biology and demonstrated aptitude for research.
  - Postdoctoral Fellow: PhD with background in molecular biology and strong interest in mammalian genetics.

- Dr. Gordon Watson has an immediate opening for a Pro- fessional Assistant with a BS and experience in molecular biology. The program involves molecular biology, genetics, and evolution of gene expression in response to hormones. The primary experimental model is the B-glucononidase gene in mouse kidney.

Interested individuals, please contact:

The Jackson Laboratory
Att: Harold R. Wheeler
Employment Manager
600 Main St., Bar Harbor, ME 04609
207/288-3371

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OSTEOPOROSIS RESEARCH OPPORTUNITIES

Join the Wyeth-Ayerst Research team in their continuing commitment to bone metabolism research as a Ph.D. Scientist. Here, you will have the opportunity to direct projects that will complement our current antosteoporotic drug discovery efforts. Wyeth-Ayerst Laboratories is a division of Fortune 100 American Home Products Corporation, and one of the world’s most highly respected pharmaceutical research, development and manufacturing companies.

Our ideal candidate will have advanced training in bone cell biology or bone histopathology and, preferably, postdoctoral experience with histo- morphometric methods of bone analysis.

Wyeth-Ayerst offers competitive salaries, excel- lent benefits and opportunities for professional growth. Our modern research laboratory is located in South Brunswick, New Jersey, minutes north of Princeton and convenient to many cul- tural, educational and leisure activities.

Interested candidates should forward their cur- riculum vitae with salary history/requirements to: Personnel Manager, Wyeth-Ayerst Research, CN 8000, Dept. 2781, Princeton, NJ 08543-8000.

EEO/Affirmative Action Employer
Program of Excellence in Molecular Biology of the Heart and Lung

Postdoctoral Positions

We are initiating a second round of recruitment for postdoctorals to enter our "Program of Excellence in Molecular Biology" under the auspices of a grant from the National Heart, Lung and Blood Institute of NIH. The goals of the Program are to provide skills development and research opportunities in the molecular biology of heart and lung. Individuals entering at the postdoctoral level and may progress to junior faculty status within three years. New investigators will work closely with the sponsor but in the final years will develop a research problem separate from that of the sponsor. During this period, they may apply for independent funding.

The Program is open to Ph.D.s or M.D.s with a strong background in molecular genetics who wish to apply their skills to significant problems of heart or lung or to individuals with strong backgrounds in heart and lung who wish to develop molecular genetic tools for continued study of these problems. We are particularly interested in recruiting minorities to the Program. Stipends begin at $25,000 per year and move to $37,000 in the final years. The faculty are:

1. Jerry Lingrel – Studies of the Na, K-ATPase genes and RFLP analysis of diseases such as familial hypertension.
2. Jeffrey Whitsett – Characterization of lung surfactant proteins and genes.
5. Jeffrey Robbins – Study and targeting of cardiac contractile genes and the developmental control of muscle proteins.
7. Steve Potter – Insertional mutagenesis for identifying critical genes in heart and lung development.
8. Arnold Schwartz – Structure and function of Ca++ channel proteins and gene regulation; isolation of receptors for calcium antagonists.
9. Judith Harmony – Role of apolipoproteins in development; the regulation of cell proliferation and differentiation by apolipoproteins.
10. Thomas Doetschman – Gene targeting in ES cells using homologous recombination. Focus will be on vasculogenesis, angiogenesis and cardiogenesis.

Applicants should submit a C.V. and the names of three references to Jerry B Lingrel, Ph.D., Director, Program of Excellence in Molecular Biology, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, Ohio 45267-0524.

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PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
NATIONAL CANCER INSTITUTE

A Senior Executive Service Vacancy

ASSOCIATE DIRECTOR

Cancer Prevention Research Program
Division Of Cancer Prevention And Control

Location: Rockville, Maryland

The Associate Director, Cancer Prevention Research Program, will be responsible for the overall planning, coordination and monitoring of a worldwide Cancer Prevention Program designed to provide prompt evaluation of new leads in cancer prevention. The Cancer Prevention Research Program has a staff of approximately 46 who administer a large intramural and extramural program with a budget of approximately $36 million annually.

This is a Civil Service position in the Senior Executive Service (SES) with an annual salary compensation between ES-1 through ES-4 (currently $68,700 to $76,400 per annum). In addition, physicians may be eligible for a Physician's Comparability Allowance up to $20,000 per year. (Applicants alternatively may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.) The individual selected, if not presently in SES, must serve a one-year probationary period.

Applicants must meet the minimum educational requirements for Medical Officer, GS-602. Applicants must further meet established mandatory professional/technical and managerial/executive requirements. Applicants will be further evaluated on the degree to which they possess additional desirable qualifications in the areas of professional/technical qualifications, managerial/executive qualifications, scientific reputation/peer recognition, training and education, and honors and awards. A copy of the requirements may be obtained by contacting Ms. Dolores Guido in the Personnel Management Branch, NCI, at (301) 496-8182.

Applications for Federal Employment (SF-171), are to be sent to the above individual at:

The National Cancer Institute
Personnel Management Branch
9000 Rockville Pike
Building 31, Room 3A19
Bethesda, Maryland 20892

A current curriculum vitae and bibliography must accompany all applications for entrance into the SES. Resumes are not acceptable applications for entrance into the SES. Public Health Service Commissioned Officers wishing to enter the SES must follow the above procedures. Officers interested in performing the duties of the position within the Commissioned Corps may submit a resume to the above address.

Applications must be received by February 2, 1990.

SELECTION FOR THIS POSITION WILL BE BASED SOLELY ON MERIT, WITH NO DISCRIMINATION FOR NON-MERIT REASONS SUCH AS RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN, POLITICS, MARITAL STATUS, PHYSICAL HANDICAP, AGE, OR MEMBERSHIP OR NON-MEMBERSHIP IN AN EMPLOYEE ORGANIZATION.

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Graduate fellowships or assistantships are provided for all students in the program. Research interests include molecular biology and genetics (development and differentiation); signal transduction (hormone action, vision, protein kinases); protein engineering (enzyme active sites and modification); and molecular medicine (heart disease, cancer, muscular dystrophy). For further information and applications, please write or call: Graduate Committee Chair, Department of Biochemistry (MC 536), University of Illinois College of Medicine, 1853 West Polk Street, Chicago, IL 60612. Telephone: 312-996-7670.

ASSISTANTSHIPS
GRADUATE PROGRAM IN NEUROSCIENCE

The Neuroscience Program in the College of Medicine at the Milton S. Hershey Medical Center of the Pennsylvania State University has assistantships available in August 1990. This interdepartmental program is designed to confer a Ph.D. degree with a major in neuroscience. Participating faculty have established research programs in molecular biology of the nervous system, neuropharmacology, neuroendocrinology, behavioral science, neuropharmacology, neuroendocrinology, and cerebral blood flow and metabolism. Interested candidates are invited to apply to: Dr. Robert B. Page, Director, Neuroscience Program, P.O. Box 850, Hershey, PA 17033. An Equal Opportunity/Affirmative Action Employer.

NEW INTEGRATED Ph.D. TRAINING PROGRAM with full cross-campus access to faculty in anatomy, biochemistry, cell biology, developmental biology, environmental health science, genetics, molecular biology and microbiology, neuroscience, nutrition, pathology/immunology, and pharmacology. Contact: Bio-medical Sciences Training Program, W452a, Case Western Reserve University (CWRU) School of Medicine, Cleveland, OH 44106. CWRU is an Equal Opportunity Employer.

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For further information contact:
Bonnie Cuthbert
Department of Cell Biology
Baylor College of Medicine
Telephone: 713-798-6200
Deadline: 2 February 1990

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