Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year. Advertising is accepted only in writing, no advertising in print may be at least 2 weeks after date of issue in which ad appears. Also, personal solicitation is accepted only with the understanding that the advertiser does not discriminate among applicants on the bases of race, sex, religion, age, color, national origin, handicap, or sexual preference.

LINE CLASSIFIED ADVERTISING DEADLINES: Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

WANTED POSITIONS: 40¢ per word, plus $4 for use of box number, per week. $10 minimum per week. Prepayment required. This rate is available only to individuals seeking jobs.

LINE CLASSIFIED POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth: $38.00 per line; $380.00 minimum, per week (minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line). No cancellations. No agency commission for ads less than 4 inches. No cash discount. Payment required for all box ads. Persons interested in recruiting foreign ads. Persons interested in recruiting foreign ads. Persons interested in recruiting foreign ads. Persons interested in recruiting foreign ads.

To ESTIMATE ad cost: Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are charged 50% of the cost and are only 52 characters per line. In estimating the cost, multiply total lines x $38.00 = approximate cost of ad. (This is an approximate cost only; Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders may allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY: NOTE: Ad cancellations made after Thursday, two weeks prior to issue date incur a 10% production charge. Cancellations made after Friday, three weeks prior to issue date must be in writing. Send copy for all WANTED Positions and Line Classified Ads less than 1/6 page in size (39 lines):

SCIENCE Classified Advertising 1323 H Street, NW, Room 940 Washington, DC 20005 Telephone: 202-326-6555

Send copy for Fractional Display ads, 1/6 page and larger, and all others to:


Blind ad replies should be addressed as follows:

Box (give number) 1323 H Street, NW Washington, DC 20005


Physiologist, M.D. Research experience in nephrology (hemodynamics, endocrinology). Clinical experience in general internal medicine. Teaching experience in medical physiology. Box 188, SCIENCE

POSITIONS OPEN

ANALYTICAL CHEMIST
Ph.D. analytical chemist, 2+ years of postdoctoral experience in analysis of clinical samples for active pharmacologic agents using HPLC and GC. Assay experience with organic nitrates highly desirable. Experience in pharmaceutical development useful. Send resumes to:

Kremers Urban P.O. Box 2038 Milwaukee, WI 53201

ANIMAL ECOBIOLOGIST
Tenure-track, assistant professor, starting September, 1988. Requirements: Ph.D., postdoctoral and teaching experience. Appointee will teach upper division courses in ecology (with an emphasis on population/ecological methodology) and an introductory course on population biology, and develop an active independent research program which involves undergraduates. Submit curriculum vitae, official undergraduate and graduate transcripts, three letters of reference, and a brief outline of current research and future plans to: Dr. James L. Grangier, Ecology Search Committee, Department of Biology, Santa Clara University, Santa Clara, CA 95053 by 12 February 1988. Santa Clara University, a Jesuit Institution, is an Equal Opportunity Employer through Affirmative Action.

ASSISTANT INVESTIGATOR
To participate in an on-going investigation on the mechanisms of islet cell secretion. Must have a Ph.D. in biochemistry or related field and postdoctoral experience. Candidates should have training in DNA recombination techniques and a record of accomplishment in this area. A competitive compensation and excellent benefits are offered. Apply with curriculum vitae and three references to: Colvin Redman, Ph.D., New York Blood Center, 310 East 67th Street, New York, NY 10021. An Equal Opportunity Employer.

PROFESSOR—BIOLOGY
The joint Biology Department of the College of St. Benedict and St. John’s University in St. Joseph, Minnesota, seeks an assistant professor on a tenure-track position beginning fall term 1988. The successful candidate will participate in introductory biology courses for majors and non-majors, an upper division course in introductory biochemistry and develop a course in molecular biology/virology. Normal teaching load is two courses with laboratory each full term. A strong commitment to undergraduate liberal arts education is highly desirable. Ability to take part in freshman/first year symposium or senior seminar would be considered a plus. Ph.D. required. Write to: Dr. C. Alice Christiansen, Department of Biology, St. John’s University, Collegeville, MN 56321. Application received after 15 March 1988 cannot be guaranteed consideration. Women and minorities are encouraged to apply. Note: Federal law requires proper documentation of identification and employability prior to final consideration for this position.

HARVARD MEDICAL SCHOOL
ASSISTANT PROFESSOR OF GENETICS/MOLECULAR BIOLOGY
The Department of Genetics at Harvard Medical School is seeking to fill a tenure-track position at the assistant professor level, starting September, 1988. Research laboratories will be located in the Department of Molecular Biology at Massachusetts General Hospital in Boston. Major research themes, including postdoctoral research, will be available through the Department of Molecular Biology. The Department of Genetics is building a strong graduate Ph.D. program, and is engaged in teaching genetics to both graduate and medical students. We are interested in candidates conducting research in any area of molecular, developmental or structural biology. Applicants should have experience in one area of molecular genetics research including significant postdoctoral training. Applicants should submit, prior to 1 March 1988, curriculum vitae, reprints, statement of research interests, and letters from at least three references to: Dr. Howard M. Goodman, Chief, Department of Molecular Biology, Massachusetts General Hospital, Boston, MA 02114.

Harvard University/Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers. Qualified women and minority group members are encouraged to apply.

ASSISTANT PROFESSOR—CHEMISTRY
Yale University section of neurosurgery has a Ph.D. position available at the assistant professor level with a degree in biological pharmacology, and at least 3 years of experience studying evoked potentials specifically related to epilepsy patients undergoing deep electrode and cortical surface recording. Submit curriculum vitae and three references by 1 February 1988 to: Dr. Dennis Spencer, 335 Cedar Street, New Haven, CT 06510. Minorities and women are urged to apply. Yale University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR—Inorganic Chemistry
Tenure-track position starting September 1988. Ph.D. and strong commitment to undergraduate required. Duties: teaching senior level theoretical and experimental general chemistry, and introductory general chemistry. Research program involving undergraduates desirable. Send curriculum vitae, transcripts and three letters of reference to: Dr. J. Conteoy, Department of Chemistry and Chemical Engineering 147-75, California Institute of Technology, Pasadena, CA 91125. The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer. California Institute of Technology. Applications are being accepted for a tenure-track position as ASSISTANT PROFESSOR OF CHEMICAL BIOLOGY and for a faculty position at the senior level in structural molecular biology/x-ray crystallography. Outstanding individuals with a strong commitment to excellence in research and teaching are encouraged to apply. Curriculum vitae including a list of publications, and a brief description of proposed research activities should be sent to: Professor John H. Richards, Division of Chemistry and Chemical Engineering 147-75, California Institute of Technology, Pasadena, CA 91125. The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer and welcomes applications from qualified women and minority candidates.

ASSISTANT PROFESSOR, MEDICAL INFORMATICS
Ph.D. computer or cognitive scientist committed to working on medical issues, or MD. with training and interest in computer applications to medicine, especially knowledge representation and decision making. Programming skill essential. Potential to conduct independent research in the area of medical information science; consult/collaborate with other faculty on research projects; develop and teach an elective course in medical informatics in the College of Medicine. Starting Date: 1 July or 1 September 1988, depending on availability. Send curriculum vitae, description of research interests, and names and addresses of at least three referees to: Arthur S. Erlstein, Ph.D., Center for Educational Development, University of Illinois at Chicago, 808 South Wood Street, Room 806, Chicago, IL 60612—4325. Telephone: 312-996-5451. Deadline: 15 February 1988. Applications are being accepted for a faculty position as ASSISTANT PROFESSOR of PLANT PHYSIOLOGY/WEEED SCIENCE. Tenure-track position in basic research. Applicants are expected to offer courses in weed science. Qualification: Ph.D. in weed science or plant physiology with strong background in both areas. Submit curriculum vitae, transcripts, list of publications, and three letters of reference by 1 February 1988 to: R. G. Coolbaugh, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907. Purdue University is an Equal Opportunity/Affirmative Action Employer.
ASISTANT PROFESSOR
VERTEBRATE ECOLOGIST (BIOLOGY)

Tenure-track position. Postdoctoral experience desirable. Position requires teaching and research in basic and advanced laboratory courses in biology. Successful candidate will have proven postdoctoral research experience. The successful candidate is expected to develop a nationally recognized research program. Preference for applicants with interest in functional genomics. Review of applications will begin 15 March 1988. Applicants are encouraged to send curriculum vitae, a brief description of present and proposed research, and the names of several references to: Dr. R. M. Bell; Chair, Search Committee; Section of Cell Growth Regulation and Oncogenesis, Duke University Comprehensive Cancer Center, Box 7633, Durham, NC 27710. To be assured of full consideration, application should be received by 28 February 1988.

Duke University is an Equal Opportunity/Affirmative Action Employer.

ASISTANT PROFESSOR
MOLECULAR BIOLOGY

The Department of Biology, University of Guelph, invites applications for a tenure-track position at the assistant professor level. The successful candidate is expected to develop an independent research program related to molecular biology. The successful candidate will have a Ph.D. in biology or related field and postdoctoral experience. Preference will be given to individuals who have demonstrated teaching ability. Review of applications will begin 15 March 1988. Applications are encouraged to send curriculum vitae, a brief description of present and proposed research, and the names of several references to: Dr. R. M. Bell; Chair, Search Committee; Section of Cell Growth Regulation and Oncogenesis, Duke University Comprehensive Cancer Center, Box 7633, Durham, NC 27710. To be assured of full consideration, application should be received by 28 February 1988.

Duke University is an Equal Opportunity/Affirmative Action Employer.

ASISTANT PROFESSOR
PHYSIOLOGY

The Department of Physiology, Faculty of Health Sciences, University of Guelph invites applications for a tenure-track position at the assistant professor level. The successful candidate is expected to develop an independent research program related to molecular biology. The successful candidate will have a Ph.D. in biology or related field and postdoctoral experience. Preference will be given to individuals who have demonstrated teaching ability. Review of applications will begin 15 March 1988. Applications are encouraged to send curriculum vitae, a brief description of present and proposed research, and the names of several references to: Dr. R. M. Bell; Chair, Search Committee; Section of Cell Growth Regulation and Oncogenesis, Duke University Comprehensive Cancer Center, Box 7633, Durham, NC 27710. To be assured of full consideration, application should be received by 28 February 1988.

Duke University is an Equal Opportunity/Affirmative Action Employer.
THE STATE UNIVERSITY OF NEW JERSEY
RUTGERS

KEY POSITIONS IN AGRICULTURAL MOLECULAR BIOLOGY AT RUTGERS,
THE STATE UNIVERSITY OF NEW JERSEY

The Center for Agricultural Molecular Biology (CAMB) is one of three major initiatives in biotechnology at Rutgers University that are part of a major effort to strengthen the research base for science and technology. Applications are invited for two senior positions in plant molecular biology in CAMB. Candidates should have at least five years postdoctoral experience in molecular biology and an interest in one or more of the following fields: host-parasite interaction, biological control, insect and/or disease resistance, control of gene expression, restriction mapping, plant transformation and vector development, plant hormonal responses, or other agriculturally relevant areas. Each appointee will form a core-funded research group and will participate in the recruitment of additional senior staff.

Generous start-up funding will be provided for equipment and supplies.

The positions will be tenure-eligible in an appropriate University department. Candidates will be expected to undertake some teaching. Salaries are competitive, and rank will be determined by experience and achievement. These positions are funded through the University's Fund for Distinction, the NJ Commission on Science and Technology, and the NJ Agricultural Experiment Station.

Some 16 senior researchers will be recruited to CAMB.

They will collaborate with the New Jersey Agricultural Experiment Station, and with other faculty throughout the University. A major new facility is being designed which will provide 90,000 square feet to house the Center.

Interested applicants should send curriculum vitae, an outline of their current and proposed research and the names of three references to: Dr. Peter N. Day, Professor of Genetics and Director, Center for Agricultural Molecular Biology, PO Box 531, Cook College, New Brunswick, NJ 08903. Rutgers is an affirmative action, equal opportunity employer.

THE NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES (NIAID), National Institutes of Health (NIH), invites applications for a Post Doctoral Research Fellow in its Hematology and Oncology Division. Required is a PhD in Biology, Chemistry or Genetics, preferably with experience in protein chemistry, tissue cultures and electrophoresis. Must be able to work with live animals. We offer competitive salaries and comprehensive benefits. Send your CV to: Dr. T. Boussios, PhD, Hematology/Oncology Division, St. Luke's/Roosevelt Hospital Center, 114th Street and Amsterdam Avenue, New York, NY 10025. An Equal Opportunity Employer M/F.

ST. LUKE'S/ROOSEVELT

St. Luke's/Roosevelt Hospital Center, New York City's largest voluntary hospital and an affiliate of the Columbia University College of Physicians and Surgeons, currently seeks a Post Doctoral Research Fellow in its Hematology and Oncology Division. Required is a PhD in Biology, Chemistry or Genetics, preferably with experience in protein chemistry, tissue cultures and electrophoresis. Must be able to work with live animals. We offer competitive salaries and comprehensive benefits. Send your CV to: Dr. T. Boussios, PhD, Hematology/Oncology Division, St. Luke's/Roosevelt Hospital Center, 114th Street and Amsterdam Avenue, New York, NY 10025. An Equal Opportunity Employer M/F.

Health Research

POST DOCTORAL RESEARCH FELLOW

St. Luke's/Roosevelt Hospital Center, New York City's largest voluntary hospital and an affiliate of the Columbia University College of Physicians and Surgeons, currently seeks a Post Doctoral Research Fellow in its Hematology and Oncology Division. Required is a PhD in Biology, Chemistry or Genetics, preferably with experience in protein chemistry, tissue cultures and electrophoresis. Must be able to work with live animals. We offer competitive salaries and comprehensive benefits. Send your CV to: Dr. T. Boussios, PhD, Hematology/Oncology Division, St. Luke's/Roosevelt Hospital Center, 114th Street and Amsterdam Avenue, New York, NY 10025. An Equal Opportunity Employer M/F.

DEAN OF MEDICINE

Duke University

Duke University seeks applications and nominations for the position of Dean of the School of Medicine and Executive Vice-President for Health Affairs. The Dean has overall responsibility for, and authority over all academic and non-academic activities in the Medical Center. Including those in the Hospital, allied health programs and the Nursing School.

Minimal requirements include an MD degree, experience in academic administration, a distinguished background in teaching and research, and a strong commitment to scholarly activities.

The position will be available July 1, 1988. Applications and a copy of their curriculum vitae and other credentials should be sent to: Dean, School of Medicine Search Committee, DUKE UNIVERSITY, 215 Allen Building, Durham, NC 27706.

Deadline for receipt of applications is March 1, 1988.
**PSYCHOBIOLOGIST**  
**NATIONAL INSTITUTE OF MENTAL HEALTH**

The Laboratory of Neuropsychology, National Institute of Mental Health, Alcohol, Drug Abuse, and Mental Health Administration, seeks a developmental psychobiologist for a 4-year research position to study the ontogeny of memory and its neural basis in nonhuman primates. Ph.D. required. Must be skilled in most of the following: experimental design and statistics, memory testing, assessment of socio-emotional behavior, experimental neurosurgery, neuroanatomical tracing techniques, receptor autoradiography, and the 2-deoxyglucose method. Must also have experience in supervising the care of a rhesus monkey nursery as well as in applying the foregoing behavioral and neurobiological techniques to infant rhesus monkeys. Send Standard Form 171 (Application for Federal Employment), transcripts, and bibliography to: Personnel Office, NIMH, Bldg. 10, Rm. 4C101, 9000 Rockville Pike, Bethesda, MD 20892 (Attn: J. Barr).

U.S. CITIZENSHIP REQUIRED  
NIH IS AN EQUAL OPPORTUNITY EMPLOYER

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**JPL/NASA VISITING SENIOR SCIENTIST**  
**BIOLOGICAL SYSTEMS RESEARCH**  
**Exobiology, Biospherics, CELSS**

The Jet Propulsion Laboratory invites applications to the Visiting Senior Scientist Program in the area of Biological Systems Research (Exobiology, Biospherics and Controlled Ecological Life Support Systems). The position requires a PhD or equivalent research experience in one of the fields of Biological Systems Research (including molecular biology, chemistry, ecology, paleontology and plant physiology); a record of research publications in the refereed literature; a demonstrated ability to work with other scientists and to synthesize advisory information and strong communication skills.

Responsibilities include aiding in the planning and implementation of the Biological Systems Research and Analysis (R&A) Program within the Life Sciences Division at NASA Headquarters. Duties include continuing extensive contacts with the research community, conducting peer reviews of research proposals, recommending selection of investigations as well as assisting in the maintenance of a balanced and productive program within available budgetary resources. The appointee is expected to work closely with the managers at several NASA centers and to advise potential investigators from the NASA centers and the university community how their plans relate to the NASA program as well as to assure that R&A activities are supportive of current and planned life sciences missions.

Frequent travel and residence near NASA Headquarters (in the Washington, D.C. area) will be required. Tenured faculty members are the preferred choice with a desired start date sometime in the summer of 1988. Appointees must be U.S. Citizens or Permanent Residents and are expected to return to their home institution following their NASA assignment. Please provide curriculum vitae, bibliography and the names of four references to: Dr. Harry Ashkenas 160-900, Dept. U31, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, CA 91109, (818) 354-8251. An Equal Opportunity Employer.

"There's only one."

Jet Propulsion Laboratory  
California Institute of Technology

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**Molecular Biology Of Parasites**

The Parasitology Research Group and the Molecular Biology Research Group of the Upjohn Company are seeking a Research Associate at the BS or MS degree level with demonstrated experience in molecular biology, including experimental design and interpretation of research data. This position offers a challenging scientific environment and the opportunity to participate in an innovative research program including collaborative work with investigators both within and outside of Upjohn. Research will focus on the molecular biology of helminthic parasites with chemotherapeutic implications. At least three years of relevant experience is essential, with skill in basic recombinant DNA techniques required. Knowledge of parasite biology is helpful but not required.

We are located in Kalamazoo in Southwestern Michigan, midway between Chicago and Detroit, offering varied cultural events, cosmopolitan shopping and entertainment, lakes and woodlands minutes away, abundant year-round sports and recreation. Upjohn offers advancement opportunities, a highly competitive salary commensurate with experience, comprehensive benefits and relocation assistance. Please call from outside of Michigan toll free 1/800/253-8600, ext. 3-6767, (inside Michigan call collect 616/323-6767) to request an application for employment. Please refer to advertisement number 22295-A when calling. We are an Equal Opportunity Employer M/F.

Our Commitment To Scientific Excellence Continues...

Upjohn
ASSISTANT/ASSOCIATE PROFESSOR—BIOLGICAL SCIENCES. To teach general biology for non-majors, zoology, and course in specialization. Ph.D. degree with specialization in invertebrate zoology and/or developmental biology and/or animal behavior. Send letter of application, curriculum vitae, all undergraduate and graduate transcripts, and three letters of recommendation by 15 February 1988 to: James Schlegel, Department of Biology, University of Wisconsin–Whitewater, Whitewater, WI 53190. Women, members of minority groups, persons with disabilities and Vietnam Era veterans are encouraged to apply. Affirmative Action/Equal Opportunity Employer.

BIOLGICAL ASSISTANT PROFESSOR. The Department of Biology, State University of New York (SUNY) Albany invites applications and nominations for a tenure-track position available September 1988. Qualifications include a Ph.D. in biological sciences and a commitment to undergraduate instruction and research. Experience in developmental biology is preferred. The College has a student population of about 5,000 undergraduates and is located near Lake Erie, 40 miles from Buffalo. The Department has 10 faculty and about 250 undergraduate majors in biology, medical technology, and recombinant gene technology. Master's degrees are offered in these fields and in biology education. Applicants should include curriculum vitae, three letters of recommendation, and a letter explaining teaching and research interests. Applications should be sent to: Search Committee, Department of Biology, SUNY College at Fredonia, Fredonia, NY 14063. Application deadline is 15 February 1988. SUNY College at Fredonia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSOCIATE RESEARCH SCIENTIST. To perform research on the development of nuclear magnetic resonance (NMR) methods in medicine. Perform high resolution multinuclear studies of tumor cells in suspension as well as NMR imaging. Perform studies of implanted tumors in animals. Devise and supervise quality control procedures on magnetic resonance imaging (MRI) system, and implement novel methods for non-invasive diagnosis of cancer. Understanding and characterization of NMR contrast agents for tumor-specific enhancement. Requires Ph.D. in chemistry. Also, must have experience in the application of Inorganic spectroscopy, Nuclear magnetic resonance (NMR), spectroscopic methods, inorganic and organometallic chemistry, and chemical synthesis, as evidenced by at least one doctoral level course or an authored article for professional publications in each discipline. Requires demonstrated ability to synthesize and handle inorganic compounds and familiarity with experimental methods in NMR spectroscopy. Monday to Friday, 9:00 a.m. to 5:00 p.m. $135.00 per hour. Please send résumé to: Job Service Technical Unit, Connecticut Depart- ment of Labor, 120 Brook Boulevard, Westerly, CT 02891. Refer to Job Order #3005389.

ASSOCIATE RESEARCH SCIENTIST. To perform research on the development of nuclear magnetic resonance (NMR) methods in medicine. Perform high resolution multinuclear studies of tumor cells in suspension as well as NMR imaging. Perform studies of implanted tumors in animals. Devise and supervise quality control procedures on magnetic resonance imaging (MRI) system, and implement novel methods for non-invasive diagnosis of cancer. Understanding and characterization of NMR contrast agents for tumor-specific enhancement. Requires Ph.D. in chemistry. Also, must have experience in the application of Inorganic spectroscopy, Nuclear magnetic resonance (NMR), spectroscopic methods, inorganic and organometallic chemistry, and chemical synthesis, as evidenced by at least one doctoral level course or an authored article for professional publications in each discipline. Requires demonstrated ability to synthesize and handle inorganic compounds and familiarity with experimental methods in NMR spectroscopy. Monday to Friday, 9:00 a.m. to 5:00 p.m. $135.00 per hour. Please send résumé to: Job Service Technical Unit, Connecticut Depart- ment of Labor, 120 Brook Boulevard, Westerly, CT 02891. Refer to Job Order #3005389.

BIOLOGIST. Tenure-track assistant professor beginning 15 August 1988. Ph.D. required with demonstrated ability in molecular biology. Teaching experience emphasized. Send curriculum vitae, transcripts and three letters of recommendation before 15 February 1988 to: Search Committee, Department of Biology, University of South Carolina, Columbia, SC 29208. Women and minorities are encouraged to apply. Send transcripts and three letters of recommendation before 15 February 1988 to: Dr. Robert White, Chairmen, Search Committee, Department of Biology, University of South Carolina, Columbia, SC 29208. Women and minorities are encouraged to apply. Send curriculum vitae and three letters of recommendation by 15 February 1988 to: Donald B. Williams, Box 251, Department of Biology, Vassar College, Poughkeepsie, NY 12601 by 22 February 1988.

BIOLOGISTS The Vassar College Department of Biology seeks to broaden its biological science faculty and departmental research programs. In addition to these positions, the department may be able to fund one additional assistant professor position. Applicants are invited to apply for these positions to: Search Committee, Vassar College, Poughkeepsie, NY 12601 by 22 February 1988. The Biology Department of City College plans to hire one or two BIOLOGISTS on tenure-track lines for 1 September 1988. Candidates are expected to utilize their expertise in research and teaching. Areas of preference are developmental neurobiology gene structure and function, or the evolution of regulatory systems. Candi- dates should have recent postdoctoral experience. Send curriculum vitae and three letters of recommendation to: Robert D. Williams, Box 251, Department of Biology, Vassar College, Poughkeepsie, NY 12601 by 22 February 1988. Send curriculum vitae and three letters of recommendation to: Robert D. Williams, Box 251, Department of Biology, Vassar College, Poughkeepsie, NY 12601 by 22 February 1988.

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CARDIOVASCULAR SCIENTIST

The American Heart Association National Center (AHA) invites applications and nominations for a Cardiovascular Scientist. This person will provide scientific information, interpretation, coordination and guidance in all cardiovascular studies. The Cardiovascular Scientist will also provide leadership in special task forces and committees and will assist in the design, development and initiation of special projects. Project responsibilities may include literature studies and the writing of statements for publication. The candidate must have a Ph.D. or equivalent degree in a discipline such as cardiovascular science, neuroscience of molecular biology. A minimum of 3 years of postdoctoral experience is also necessary. The salary range is from $40,000 to $50,500 annually. Please send curriculum vitae and the names of three references to: American Heart Association National Center, Attention: National Center Staffing Coordinator, 7320 Greenville Avenue, Dallas, TX 75231. Applications must be received by 15 February 1988.

CELL BIOLOGIST for CENTRE FOR BIOMATERIALS UNIVERSITY OF TORONTO

The Centre for Biomaterials of the University of Toronto is funded by the Canadian Institute of Health Research (CIHR) and the Canadian Institutes of Health Research (CIHR) to fill a new creation position to head up a tissue culture laboratory to study cell—biomaterials interactions. This is an opportunity to work within the Ontario Centre for Materials Research (OCMR). The OCMR has been recently established by the Government of Ontario as a Centre of Excellence to promote fundamental and applied research in advanced materials technologies.

The Ontario Centre for Materials Research (OCMR) is a new initiative bringing together the expertise of the University of Toronto, Royal University of Canada, the Ontario Institute for Research, the Federal government, the Province of Ontario, and the private sector. The OCMR has been established to promote excellence in research and development in advanced materials technologies.

The Centre for Biomaterials of the University of Toronto is a multidisciplinary research center that focuses on the development of new biomaterials for medical applications. The Centre is funded by the Canadian Institutes of Health Research (CIHR) and the Canadian Institutes of Health Research (CIHR) to fill a new creation position to head up a tissue culture laboratory to study cell—biomaterials interactions. This is an opportunity to work within the Ontario Centre for Materials Research (OCMR). The OCMR has been recently established by the Government of Ontario as a Centre of Excellence to promote fundamental and applied research in advanced materials technologies.

Preferred candidates will have formal training in cell biology or related discipline with experience in tissue culture techniques and biomaterials. The person appointed will be expected to obtain training in cell biology in the context of the tissue culture laboratory. The Centre for Biomaterials of the University of Toronto is a multidisciplinary research center that focuses on the development of new biomaterials for medical applications. The Centre is funded by the Canadian Institutes of Health Research (CIHR) and the Canadian Institutes of Health Research (CIHR) to fill a new creation position to head up a tissue culture laboratory to study cell—biomaterials interactions. This is an opportunity to work within the Ontario Centre for Materials Research (OCMR). The OCMR has been recently established by the Government of Ontario as a Centre of Excellence to promote fundamental and applied research in advanced materials technologies.

Applications should be sent together with curriculum vitae and letters of reference to: Dr. John Smith, Director, Centre for Biomaterials, University of Toronto, 124 Edward Street, Toronto, Ontario M5G 1N9. The deadline for applications is 15 February 1988. In accordance with Canadian Immigration requirements the advertisement is directed toward Canadian citizens and permanent residents. The University of Toronto encourages both men and women to apply.
ACADEMIC RESEARCH ENHANCEMENT AWARD

Academic Research Enhancement Awards (AREAs) provide funding for feasibility studies, pilot studies and other small-scale health related research projects. Awards are made in amounts of up to a total of $75,000 in direct costs (plus applicable indirect costs) for a period of up to three years; however, no more than $35,000 in direct costs may be awarded for any one year.

Eligibility Requirements

1. Applicant Institutions
   All domestic institutions offering baccalaureate or advanced degrees in the sciences related to health are eligible, except those that have received an NIH Biomedical Research Support Grant (BRSG) of $20,000 or more per year for four or more years during the period from FY 1982 through FY 1986.

2. Applicant Principal Investigators
   Must not have active research grant support (including an AREA) from either NIH or the Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) at the applicant institution at the time of award of an AREA grant.
   May not submit a regular NIH or ADAMHA research grant application for essentially the same project as a pending AREA application.
   Are expected to conduct the majority of their research at their own institution, although limited access to special facilities or equipment at another institution is permitted.
   May not be awarded more than one AREA grant at a time nor be awarded a second AREA grant to continue the research initiated under the first AREA grant.

Award Criteria

Funding decisions are based on the research project’s scientific merit and relevance to NIH programs, and the institution’s contribution to the under-graduate preparation of doctoral-level health professionals. Among projects of essentially equivalent scientific merit and program relevance, preference will be given to those submitted by institutions that have granted baccalaureate degrees to 25 or more individuals who, during the period 1977-1987, obtained academic or professional doctoral degrees in the health related sciences.

APPLICATION RECEIPT DATE
June 22, 1988

Anticipated Number of Awards:
Approximately 125 grants

For information and application materials, contact:
Office of Grants Inquiries
Division of Research Grants
National Institutes of Health
Westwood Building, Room 449
Bethesda, Maryland 20892
(301) 496-7441

INTINTEGRATED

Harvard Graduate School of Education
Tenure Position in Teaching and Learning

The Harvard Graduate School of Education seeks a tenured faculty member with the following qualifications: dedication to the study of learning and teaching; research and publications using a disciplinary or other theory-based mode of inquiry (e.g. psychology, philosophy, history, cognitive science); ability to apply principles in a specific domain (e.g. math, the arts, social studies) as well as the potentiality for cross-curricular relevance; concern for learning within the K-12 years of compulsory education, as well as the potentiality for cross-age relevance (pre-school to adult); and the demonstrated ability to work with teachers to relate theory and practice, and to apply general principles to decisions about specific learners. Application deadline: February 1, 1988. To apply, please send letter of application, curriculum vitae, two recent publications, and three letters of reference to: Professor Courtney B. Cazden, Chairperson, Teaching and Learning Search Committee, Harvard Graduate School of Education, 122 Longfellow Hall, Cambridge, MA 02138.

Administrative/Faculty Director of Teacher Education

The Harvard Graduate School of Education seeks a director of teacher education at the administrative/faculty rank of lecturer, senior lecturer, assistant, associate or tenured professor. Qualifications include: ability to assume intellectual leadership and administrative responsibility for the teacher education programs and to teach in them; demonstrated interest in the development and strengthening of model teacher education programs; specialist’s knowledge of a subject-matter discipline (and teaching thereof); and generalist’s capacity to contribute significantly to the national debate about teacher education.

At present, teacher education programs (all at the secondary level) include: the Undergraduate Teacher Education Program, the Teaching and Curriculum Program, and the Midcareer Math and Science Program. Application deadline: February 1, 1988. To apply, please send letter of application, curriculum vitae, and three letters of reference to: Professor Donald Oliver, Chairperson, Teacher Education Search Committee, Harvard Graduate School of Education, 122 Longfellow Hall, Cambridge, MA 02138.

Harvard University is an Affirmative Action/Equal Opportunity Employer.

INTEGRATED GENETICS

Integrated Genetics, Inc., a recognized leader in biotechnology, develops therapeutic and diagnostic products for the healthcare industry. Our continued success leads to these new opportunities.

DIRECTOR/PROTEIN CHEMISTRY

An outstanding protein chemist is needed to direct Protein Chemistry at IG. Involves managing over 30 professionals in the areas of characterization, purification, scale-up, analytical chemistry, and protein engineering. Successful candidate must possess a broad background in the above areas with a track record of successful research in at least one. Requires a Ph.D. with at least 7 yrs' postdoctoral experience, preferably in industry. Excellent management skills essential.

RESEARCH MANAGER

Lead work on Hemopoietic Growth Factors from conception to scale-up. Work includes supervision cloning of and assay groups, overseeing production and purification of clinical-grade material, and interacting with all internal and external collaborators. Requires a Ph.D. and 7 yrs' postdoctoral experience in molecular and cellular biology, preferably with emphasis on characterization of growth factors and hands-on experience with cDNA cloning of low abundance mRNAs. Strong management skills required. Industrial experience preferred.

Integrated Genetics offers an attractive compensation and benefits package, including equity participation. For immediate consideration, please send your resume to David Nikko, Human Resources, Dep'tS8, Integrated Genetics, Inc., 31 New York Avenue, Framingham, MA 01701.

An Equal Opportunity Employer

Harvard University
POSTDOCTORAL FELLOWSHIP IN MOLECULAR GENETICS
NATIONAL INSTITUTE ON AGING
NATIONAL INSTITUTES OF HEALTH
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Position available for a Staff/Senior Staff Fellow in the Laboratory of Molecular Genetics of the NIA. Salary $20,000 to $40,000 depending on qualifications. Current areas of research include: genetic analysis of lymphokine and hormone changes with age; identification of age-specific brain transcripts; isolation of antiproliferative mRNAs' and study of age-related genes in transgenic organisms. Applicant should have Ph.D and/or M.D. degree. Candidates for Staff Fellowships should have less than 3 years of post-doctoral experience and candidates for Senior Staff Fellowships should have 3 to 7 years of post-doctoral experience. Send curriculum vitae and bibliography to Dr. Edward Schneider, c/o Personnel Office, National Institute on Aging, Gerontology Research Center, 4940 Eastern Avenue, Baltimore, Maryland 21224. For further information contact Ms. Barbara Hughes, 301-550-1733.

Applications must be postmarked no later than April 25, 1988.

U.S. CITIZENSHIP IS REQUIRED.
NIH IS AN EQUAL OPPORTUNITY EMPLOYER

BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc., a major innovator in the research, development and marketing of ethical drugs, has the following opening in the Department of Pharmacology. This position is located at our Research and Development Facility in DANBURY, CONNECTICUT.

PULMONARY PHARMACOLOGIST

Responsibilities include the performance of novel research, development of state-of-the-art techniques for the measurement of pulmonary function and inflammation, development of in-vivo models of acute and chronic pulmonary inflammation, characterization of inflammatory processes using in-vitro assays, participation on multidisciplinary teams, and performance of basic research aimed at the discovery of specific mechanistic approaches to the design of new therapeutic agents.

Requirements include a Ph.D. in pulmonary physiology, pharmacology, immunology or equivalent with expertise in measurement of pulmonary function, mechanics and/or inflammation. Expertise in the pulmonary effects of the metabolites of arachidonic acid, biochemical pharmacology and/or the neuropeptides is desired but not required. Peptides is desired but not required.

BOEHRINGER INGELHEIM offers a highly competitive compensation and benefits package, relocation assistance, an excellent work environment and the opportunity to have your contributions recognized.

For confidential consideration, please forward your curriculum vitae and salary requirements to: Dept. JC-JP BOEHRINGER INGELHEIM PHARMACEUTICALS, Inc., 90 East Ridge, PO. Box 368, Ridgefield, CT 06877. We are an equal opportunity employer m/f/h/v.

University of Pennsylvania
Dean of the School of Dental Medicine

Nominations and applications are invited for the position of Dean of the University of Pennsylvania School of Dental Medicine. Correspondence should be directed to Dr. Norton S. Taichman, Chair, Dean Search Committee, University of Pennsylvania, 121 College Hall, Philadelphia, PA 19104-6382. The Committee requests that applications and nominations be submitted by February 28, 1988.
RESEARCH OPPORTUNITIES

Bristol-Myers, Pharmaceutical Research and Development Division, is an internationally recognized leader in the discovery and development of innovative pharmaceutical agents. Currently we have three openings in the Screening and Biochemical Research Department at our new research facility located in Wallingford, Connecticut.

The screening and biochemical research department is primarily involved in research on novel systems for the detection of biological activities in both naturally occurring and synthetic materials. If you are attracted by the prospect of working in a demanding, multi-disciplinary environment, the following openings may be of interest to you:

**BIOCHEMIST** - Requires a PhD in Biochemistry with significant experience in the application of molecular biological techniques to biochemical problems. Appropriate post-doctoral experience would be a definite asset.

**CELL BIOLOGIST** - Requires a BS/MS in Biology or a related field and proven skills in primary mammalian cell culture. Additional experience with defined media and hybridomas is desirable.

**ORGANIC CHEMIST** - Requires a BS/MS in Chemistry with a minimum of two years experience in organic synthesis, preferably involving peptide synthesis and purification.

Bristol-Myers offers excellent salaries along with comprehensive benefits including relocation assistance. For confidential consideration, forward your resume, including salary history to: Bristol-Myers Company, Pharmaceutical Research & Development Division, Dept. PD/SCI2, 5 Research Parkway, Wallington, CT 06492. Principals only please. An equal opportunity employer.
The University of South Carolina School of Medicine invites applications and nominations for Chair of the Department of Microbiology and Immunology. Candidates must have a Ph.D. or M.D. degree in an appropriate discipline, an established and active research program, and a commitment to medical and graduate education, and the ability to provide strong administrative leadership. The successful candidate will lead an active preclinical research program and faculty and are currently funded to pursue research in: immuno- modulation, immunophylogeny, membrane receptors, bacterial pathogenesis, and inflammatory disease. Bacterial adaptation and taxonomy, molecular biology, viral genetics and antivirals. Applications should be submitted on the university's website or to the Search Committee, Department of Pathology and Immunology, College of Medicine, 1251 Medical Drive, Columbia, SC 29208.

The Albert Einstein College of Medicine invites applications and nominations for the Chair of the Department of Physiology and Biophysics. Applicants must be qualified and experienced professionals with established research programs and research facilities. The Chair's role is to ensure the continued growth and development of the department. Applicants should submit curriculum vitae and a letter of interest by 28 February 1988.

The Yale University Department of Human Genetics has a faculty position beginning 1 July 1988 for Director, DNA Diagnostic Laboratory. Must have M.D. or Ph.D. RE/BC, American Board of Medical Genetics desirable. Responsibilities include supervising a service laboratory using DNA-based techniques for diagnosis and carrier detection of genetic disorders. Please use specific probes, RFLPs and molecular linkage analysis is required. Close collaboration with the department's clinical service will be an important part of the position. The individual's clinical role and activities for research will be tailored to interest and experience. Applications should be sent to: Robert Morris, Search Committee, University of Connecticut, Cell Biology, M/C A-86-135-R. Closing date is 15 February 1988. Yale University is an Equal Opportunity/Affirmative Action Employer.

The College of Arts and Sciences of Widener University invites applications for a tenure-track position as Assistant Professor of biology, beginning 1 September 1988. Ph.D. is required. Undergraduate education is the primary emphasis of the position. Competence in computer science, molecular biology, and learning strategies is desirable. The application deadline is 1 February 1988. Letters of application, complete curriculum vitae, and three letters of recommendation should be sent to: Robert Morris, Biology Department, Widener University, Chester, PA 19013.

The Yale University Department of Human Genetics has a faculty position beginning 1 July 1988 for Director, DNA Diagnostic Laboratory. Must have M.D. or Ph.D. RE/BC, American Board of Medical Genetics desirable. Responsibilities include supervising a service laboratory using DNA-based techniques for diagnosis and carrier detection of genetic disorders. Please use specific probes, RFLPs and molecular linkage analysis is required. Close collaboration with the department's clinical service will be an important part of the position. The individual's clinical role and activities for research will be tailored to interest and experience. Applications should be sent to: Robert Morris, Search Committee, University of Connecticut, Cell Biology, M/C A-86-135-R. Closing date is 15 February 1988. Yale University is an Equal Opportunity/Affirmative Action Employer.

The Ecology and Evolution Group seeks an ASSISTANT OR TENURED ASSOCIATE PROFESSOR commencing September 1988 or as soon thereafter as possible. The appointee must have a strong record of research productivity and grant funding, and will contribute to the undergraduate and graduate teaching program. The appointee’s area will be population and community ecology. Salary will be commensurate with rank and experience. Send curriculum vitae, research and teaching interests, and names of at least three references to: Sidney B. Simpson, Jr., Head, Department of Biological Sciences (M/C 066), University of Illinois at Chicago, Box 4548, Chicago, IL 60680. Closing date is 15 March 1988. Appointment depends on availability of funds. The University of Illinois at Chicago is an Equal Opportunity/Affirmative Action Employer.

The University of California, Division of Agriculture and Natural Resources Cooperative Extension is seeking a career-track academic candidate to: (i) serve as Director of two extension labs and be responsible for development of research programs, procedures, and methods; produce computer programs and mathematical models, and (iii) train lab personnel and work with extension agents and specialists in other fields relating to research, agriculture, and the environment. Ph.D. in soil or plant science or related field with thorough training in analytical chemistry. Proven ability to conduct applied research, preferably field research. Length of experience varies. Send letter of interest, resume and names of three references to: Professor Rafael Bras, 48-311, M.I.T., Cambridge, MA 02139. Closing date is 15 February 1988. M.I.T. is an Equal Opportunity Employer.

The University of California, Division of Agriculture and Natural Resources Cooperative Extension is seeking a career-track academic candidate to: (i) serve as Director of two extension labs and be responsible for development of research programs, procedures, and methods; produce computer programs and mathematical models, and (iii) train lab personnel and work with extension agents and specialists in other fields relating to research, agriculture, and the environment. Ph.D. in soil or plant science or related field with thorough training in analytical chemistry. Proven ability to conduct applied research, preferably field research. Length of experience varies. Send letter of interest, resume and names of three references to: Professor Rafael Bras, 48-311, M.I.T., Cambridge, MA 02139. Closing date is 15 February 1988. M.I.T. is an Equal Opportunity Employer.

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RESEARCH

SCIENTIST

California Biotechnology Inc., a leading biotechnology company engaged in the development of human therapeutics, has an opening for a Scientist to work in our Drug Delivery group.

We are seeking an individual who is interested in the novel delivery of protein and peptide therapeutics. Responsibilities will include the development of nasal formulations using our proprietary Nazdel® delivery technology, detailed physico-chemical characterization of protein/peptide formulations, investigations into the mechanisms of protein transport across mucous membranes and alternate dosage form design. The applicant should possess a Ph.D. in Pharmaceutical Chemistry or Physical Biochemistry. Post-doctoral experience is preferred but not required.

We offer a stimulating work environment with a competitive compensation and benefits package. For prompt consideration, please submit your curriculum vitae with three names of reference to: California Biotechnology Inc., Human Resources LM-BL, 2450 Bayshore Parkway, Mountain View, CA 94043. No telephone calls, please. An equal opportunity employer.

CAL BIO

RESEARCH POSITIONS IN PLANT CELL AND MOLECULAR BIOLOGY

The Department of Biology at Texas A&M University has vigorous research programs in plant molecular and cell biology. The following positions are available immediately in the laboratories of the indicated faculty members:

Postdoctoral Research Associate. Brome Mosaic Virus replication. This position is one of the very few for which a cell-free replicase system exists. Duties involve site-directed mutagenesis of specific regions of the BMV genome and analysis of these mutants in vitro and in vivo. Familiarity with viral systems is preferred. Contact: Dr. Timothy C. Hall.

Postdoctoral Research Associate. Molecular biology of plant lipid biosynthesis. Experience in biochemical methods is required. Experience in the analysis of lipids or in recombinant DNA techniques is preferred but not required. Contact: Dr. Terry L. Thomas.

Postdoctoral Research Associate. Isolation and analysis of tissue specific monoclonal genes. Experience in recombinant DNA techniques and DNA sequencing are required; additional experience in plant gene transfer methods is preferred. Contact: Dr. Timothy C. Hall.

Postdoctoral Research Associate. cis and trans-acting factors involved in the organogenic control of plant gene expression. Experience in recombinant DNA techniques and DNA sequencing are required; additional experience in plant gene transfer methods of analysis of DNA-protein interactions is preferred. Contact: Dr. Terry L. Thomas.

Postdoctoral Research Associate. Analysis of trans-acting factors involved in the expression of embryo-specific plant genes. Experience in recombinant DNA techniques and DNA sequencing are required; additional experience in plant gene transfer methods or analysis of DNA-protein interactions is preferred. Contact: Dr. Timothy C. Hall.

Postdoctoral Research Associate. Transformation and regeneration of sunflowers. Experience in plant tissue culture required; experience in Agrobacterium mediated transformation and electroporation preferred but not essential. Opportunity to learn additional techniques in plant cell and molecular biology. Contact: Dr. Craig L. Nessler.

Research Assistant. Regulation of gene expression in plant development. B.S. in microbiology or biochemistry required. An M.S. degree in one of these areas or one to two years research experience using recombinant DNA techniques preferred. Contact: Dr. Timothy C. Hall.

Research Assistant. Production of transgenic monocot and dicot plants to facilitate the analysis of plant gene structure and function. B.S. degree in microbiology, biochemistry, botany or biology required. Cell culture experience required, preferably plant cell culture. Contact: Dr. Timothy C. Hall.

Send applications, including a C.V. and the names of three references with addresses and phone numbers, to the contact person for each position at the following address: BIOLOGY DEPARTMENT, TEXAS A & M UNIVERSITY, COLLEGE STATION, TX 77843-3258.

NATIONAL INSTITUTES OF HEALTH

BIOMEDICAL ENGINEERING AND INSTRUMENTATION BRANCH

DIVISION OF RESEARCH SERVICES

An APPLIED PHYSICIST is sought who will take the initiative in developing collaborative research projects with biomedical investigators in the NIH Intramural Program. Applicant must also have the capability to respond effectively in consultations, and to creatively implement solutions for occasional short-term research requirements. Strong experimental skills are desired. The position is in the Mechanical Engineering Section which consists of five Ph.D.'s and three visiting postdoctoral staff members. Appointment is to a Staff Fellow position ($32,567/annum) or, if applicant has more than 3 years post Ph.D. experience, to a Senior Staff Fellow ($36,727/annum) position. Duration of appointment is 2 years, with multiple one year renewals possible. U.S. citizenship required. Please send curriculum vitae and the names of three references to: Seth Goldstein, Sc.D., Chief, Mechanical Engineering Section, Building 13, Room 3W13, National Institutes of Health, 9000 Rockville Pike, Bethesda, MD. 20892.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

Vice President, Research and Development

ESKAYEF, Ltd., Bangalore, India

Smith Kline & French Laboratories is seeking an outstanding scientist to direct an established Research and Development organization currently comprised of about 40 scientists at its subsidiary company, ESKAYEF, Ltd., in Bangalore, India. ESKAYEF is located on an extensive, private campus 20 km outside Bangalore. This research group will be devoted to the discovery of novel natural products from fungi and actinomycetes. The discovery of novel compounds will be guided by state-of-the-art mechanism-based bioassays relevant to important targets in cardiovascular, inflammatory, viral and neoplastic diseases. The Vice President, R&D, will have overall responsibility for research at ESKAYEF and will coordinate drug discovery efforts with scientists at SK&F Laboratories in Philadelphia, PA.

The successful candidate must have a Ph.D. in biochemistry, pharmacology, cell biology, or a closely related field plus at least two years of formal postdoctoral training. Also required is at least six years of professional experience in academic or industrial research with a proven record of productivity as demonstrated by a consistent publication record. Expertise in biochemistry and biochemical pharmacology as well as administrative and managerial capabilities must be demonstrated. Research experience in drug discovery and natural product evaluation is desirable. Excellent communication skills are required with fluency in both Hindi and English.

We offer an excellent compensation and benefits program as well as an excellent relocation package. For confidential consideration, send your curriculum vitae and names of three references to both SK&F Laboratories and to ESKAYEF, Ltd., at the addresses below:

- Robert F. Obst, Manager, Personnel Relations
  P.O. Box 1539
  King of Prussia, PA 19406-0539

- Personnel Department
  ESKAYEF, Ltd.
  Devanahalli Road
  Off Old Madras Road
  Bangalore 560-049
  India

We are an Equal Opportunity Employer, M/F/H/V.
These extensive excellent openings in genomic biological techniques, human biosynthesis, positions for highly trained scientists. Candidates should have a Ph.D. with 0-10 years of postdoctoral experience.

Scientists, Immunodiagnosticists
Scientists are sought for positions in immunodiagnostic areas where new and innovative techniques are being developed, including development of rapid infectious disease tests. Candidates should have a Ph.D. with 0-10 years of postdoctoral experience.

Scientists, Bacteriology and Microbial Metabolism
Positions require fundamental training in microbiology relating to microbial physiology, genetic engineering, clinical microbiology, or food microbiology. Candidates should have a B.S. or M.S. with solid training in microbiology and/or biological chemistry.

Engineer, Process Development
An engineer with industrial experience in microbial fermentation processes is sought to develop a unit process development process. Candidates are expected to have a background in engineering and biomedical development experience.

Difco Laboratories offers a competitive salary in a company poised for substantial growth. Please send your resume and salary requirements to:

D.J. Schaefer
DIFCO LABORATORIES
Research and Development Center
1180 Ellsworth Road
Ann Arbor, MI 48108 USA

An Equal Opportunity Employer

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BIOCHEMIST/MOLECULAR BIOLOGIST

Merck Sharp & Dohme Research Laboratories, a world leader in the development of ethical pharmaceuticals for human and animal health, currently has two immediate openings for biochemists/molecular biologists in its Department of Molecular Pharmacology and Biochemistry.

These individuals should possess a B.S. or M.S. and have extensive experience in tissue culture and molecular biological techniques such as screening of DNA and genomic libraries, isolation of DNA and RNA, Southern, Northern, and Western blotting and DNA sequencing. The positions involve the use of cell culture and recombinant DNA technology to study the regulation of cholesterol biosynthesis. This is an excellent opportunity for motivated individuals to continue their scientific growth and development, with the potential for gaining considerable independence.

Merck Sharp & Dohme Research Laboratories are located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits, and growth potential are excellent.

Interested candidates should submit their resume with the names of three references and salary requirements to: Ms. Jacqueline A. Eismann, Merck & Co., Inc., PO. Box 2000, Rahway, New Jersey 07065.

Equal Opportunity Employer

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POSTDOCTORAL FELLOWSHIPS

St. Jude Children's Research Hospital, a large multidisciplinary research institute, has openings for postdoctoral investigators in the basic biomedical sciences. Fellowships are available in molecular genetics, tumor cell biology, pharmacology, biochemistry, immunology and other related disciplines.

Specific areas of investigation include proto-oncogenes and growth factors, genetic control of cellular differentiation, biochemical basis of multiple drug resistance in childhood neoplasms, regulatory properties of viral proteins, macrophage immunobiology, phospholipid metabolism, and cellular messenger systems. Successful applicants train with internationally recognized preceptors in a fully equipped facility and are given the opportunity to develop as independent investigators. Annual salaries begin at $20,000 and are commensurate with experience.

Application forms and a more detailed description of the training program can be obtained from:

Ms. Evonne Toland, Director of Office
St. Jude Children's Research Hospital
P.O. Box 318
Memphis, TN 38101

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- Membership rates (individual only)
  - $65 USA  $75 Canada  $92 Foreign
  - $130 air-surface delivery via Holland

- Subscriber rates
  - $98 USA  $130 Canada  $125 Foreign
  - $163 air-surface delivery via Holland

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**UCLA**

The Department of Physiology invites applications for tenure track faculty positions at the level of

**ASSISTANT PROFESSOR**

Outstanding candidates working in any area of contemporary physiology will be considered, but those in smooth muscle, reproduction and development, endocrinology, sensory transduction, and the cardiovascular system are encouraged to apply. Successful candidates are expected to have a Ph.D. or M.D. with post-doctoral experience, to provide evidence that they can pursue a vigorous, independent research program supported by extramural grants, to be experienced in state-of-the-art techniques, and to participate fully in our teaching program.

Resources are available for start-up funds, and an excellent environment exists for building a research program within a large and interactive research community. Interested scientists should send their curriculum vitae, a statement of present and future research interests, and names of three references to: Dr. Ernest M. Wright, D.Sc., Professor and Chairman, Department of Physiology, UCLA School of Medicine, Los Angeles, CA 90024-1751.

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

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**BIOTECHNOLOGY RESEARCH INSTITUTE**

(Montreal, Quebec)

The Biotechnology Research Institute, a division of the National Research Council of Canada, is located in Montreal. It will employ approximately 240 people and will host up to 200 researchers from industries, universities and other research organizations. The Institute pursues generic research, both basic and applied, aimed at finding solutions to general problems related to industrial development of biotechnology. The Institute is presently looking for scientists and engineers.

**Applied Microbiologists (RB86-51)**

The Applied Microbiology Group of the Institute requires microbiologists with backgrounds in fermentation, using bacteria (aerobic, anaerobic) yeasts and filamentous fungi. The duties include identification and development of promising microbial products and processes, selection improvement and preservation of strains (in collaboration with genetic engineers), and optimization of cultivation media and conditions (in collaboration with biochemical engineers).

**Engineer—Large-Scale Separation (RB86-56)**

To develop purification processes up to pilot scale and to conduct generic research on recovery and processing techniques applicable to biotechnology. Duties include characterization and improvement of techniques for separation and purification of fermentation and cell culture products as well as scale-up and process engineering studies. Research projects are to be conducted on various unit operations including chromatography, membrane-based systems, extraction and solid-liquid separations.

Candidates for these positions should have a Ph.D., in microbiology, biochemistry, chemical engineering, biochemical engineering or in a relevant discipline and at least 2 years of post-doctoral experience. Experience in applied research and technology transfer will be a definite asset. Both English and French are working languages at the Institute.

**SAKY: Benefits are fully competitive and salary will be commensurate with qualifications and experience.**

Apply in writing, giving complete details of education and experience to: The Manager, Employment Office, National Research Council of Canada, Ottawa, Canada, K1A OR6. In reply, please quote the appropriate reference number.

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**SUMMER 1988**

**TEN ENVIRONMENTAL SCIENCE AND ENGINEERING FELLOWSHIPS**

**Applications Invited**

The American Association for the Advancement of Science (AAAS) invites applications for ten environmental science and engineering fellowships available for summer 1988. The fellows will work closely with the Environmental Protection Agency (EPA), Office of Research and Development, and other program offices, in Washington, DC, and assist in identifying and assessing the significance of long-range environmental problems and opportunities. The 10-week appointments are scheduled for 6 June through 12 August 1988. The awards will be announced prior to the end of April 1988.

Postdoctoral to mid-career scientists, engineers, and other appropriate professionals are encouraged to apply. Candidates may be from the physical, biological, or behavioral sciences, or any field of engineering or other relevant professional fields. They are expected to be critical thinkers, articulate, adaptable, and able to work with a variety of people from different professional backgrounds.

The 1986 Environmental Fellows will receive a taxable stipend of $700 per week and a nominal additional amount for temporary relocation expenses and travel in connection with the fellowships.

A detailed, future-oriented research project will be conducted by each fellow which is of mutual interest to him or herself and the EPA. A project report will be submitted at the completion of the summer's work. Typical areas of research interest within EPA include: environmental risk assessment; biological pesticides; acid deposition; mobile source air pollution; oxidants, gases and particles; municipal waste water and spills; drinking water; hazardous waste; chemical testing and assessment; pesticides; radiation; and energy.

For further information and specific application requirements contact:

Lisa Beth L. Levey
Environmental Science and Engineering Fellows Program
American Association for the Advancement of Science
1333 H Street, NW, Washington, DC 20005
Telephone: 202-326-6600

Deadline for applications is 1 March 1988.
ECOSYSTEMS ECOLOGIST. Assistant professor, tenure-track position, August 1988. Teaching in environmental studies and specialty area. Active terrestrial or aquatic research program development expected. Suitable specialties include ecosystems modeling, nutrient cycling, and community interactions. Ph.D. required. Environmental studies teaching experience and/or postdoctoral research experience preferred. Send curriculum vitae, research statement of goals, and three reference letters to: Dr. Frank deNoyelles, Director, Environmental Studies Program, 606 Crowder Hall, The University of Kansas, Lawrence, KS 66045. Equal Opportunity Employer/Affirmative Action.

FACULTY—NEUROCHEMICAL PHARMA-
COLOGIST. A tenure-track position for a neuropharmacologist with experience in immunoneurochemical neuropathology and behavior is available in the Department of Basic Sciences, University of Illinois College of Medicine at Peoria. Responsibilities: participate in curricular development and in teaching pharmacology to medical students and residents; conduct original investigations into neurochemical, electrophysiological and/or immunoneurochemical neuropathology of behavior and diseases of the nervous system including epilepsy; establish collaborative research programs within the College of Medicine, Research Ophthalmology, and University of Illinois College of Veterinary Medicine. Applicants must have a Ph.D. in neurochemistry or a related discipline, a demonstrated capacity for excellence in teaching and research, and a documented capacity for excellence in teaching medical students. A minimum of 4 years of postdoctoral experience is preferable but not essential if other credentials are sufficiently outstanding. Positions available 1 March 1988 or after. Appointment is envisioned at the level of instructor or assistant professor. Salary and rank will be commensurate with qualifications and responsibility. The University of Illinois is an Affirmative Action/Equal Opportunity Employer. Send curriculum vitae and names of three references to: Phillip C. Joe, PhD, Professor and Chair, Department of Basic Sciences, University of Illinois College of Medicine at Peoria, P.O. Box 1649, Peoria, IL 61656. Applications will be received until the position is filled.

FACULTY POSITION

SCHOOL OF KINESIOLoGy

SIMON FRASER UNIVERSITY

The School of Kinesiology at Simon Fraser University invites applications for a tenure-track position in the general area of Biomechanics. A Ph.D. in the area of biomechanics is required. Successful candidates will have a Ph.D. and experience in human and/or occupational biomechanics. Canadian immigration laws require that preference be given to either Canadian Citizens or landed immigrants. Simon Fraser University is committed to the principle of Equal Employment Opportunity. All appointments are subject to budgetary authorization.

The application should include curriculum vitae and the names and addresses of three individuals to whom reference can be made. Send applications to: Dr. E. W. Banister, School of Kinesiology, Simon Fraser University, Burnaby, British Columbia, Canada V5A 1S6.

FACULTY POSITIONS AVAILABLE IN

DEPARTMENT OF MEDICINE,

HYPERTENSION DIVISION

CASE WESTERN RESERVE UNIVERSITY

The Hypertension Division of the Department of Medicine invites applications from candidates with M.D. and/or Ph.D. degree for tenure-track junior and senior positions. Candidates with strong credentials in the area of structure and function of receptors and G-proteins are especially encouraged to apply. This environment provides excellent opportunities to develop independent research programs. Applicants should send curriculum vitae, brief summary of current research, and names and addresses of three references to: Dr. Janice Douglas, Department of Medicine, Case Western Reserve University, 2074 Abington Road, OH 44106. The University is an Equal Opportunity/Affirmative Action Employer.

GEOLOGY

The College of Veterinary Medicine at Cornell University invites applications for a tenure-track position in geology at the associate professor level for a tenure-track position, starting in September 1988. The successful candidate will teach at the graduate and undergraduate levels in Geology 2. M.S. and Ph.D. candidates. All areas of biology which complement the research areas of our faculty will be considered, but strong courses ineology, with particular emphasis on geophysical, geological, and paleontological research. Send curriculum vitae, statement of research and teaching interests, and three letters of recommendation by 15 July 1988 to: Dr. Frank deNoyelles, Director, Environmental Studies Program, 606 Crowder Hall, The University of Kansas, Lawrence, KS 66045. Equal Opportunity Employer/Affirmative Action.

FACULTY POSITION IN

EXPERIMENTAL ONCOLOGY

CORNELL UNIVERSITY COLLEGE OF VETERINARY MEDICINE

The College of Veterinary Medicine at Cornell University invites applications for a cancer cell biologist to join its new laboratory for Experimental and Clinical Oncology. The ideal candidate will bring strong research responsibilities and provide leadership in the development and planning of a modern oncology unit. The ideal candidate will have a Ph.D. (or D.V.M., M.D.) degree, an active research program, and a publication record. He/she will also be expected to interact with the clinical oncologists in the development of novel, experimental cancer treatment strategies, and to participate in the teaching of graduate students. Rank and salary are commensurate with qualifications. Applicants should send a letter outlining their research programs, curriculum vitae, and three letters of reference to: Bengt Bengtsson, Ph.D., Chairman, Animal Science, College of Veterinary Medicine, Cornell University College of Veterinary Medicine, Ithaca, NY 14853-6401. Cornell University is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF PITTSBURGH

DEPARTMENT OF BIOLOGICAL SCIENCES

FACULTY POSITION

The Department of Biological Sciences at the University of Pittsburgh invites applications from highly qualified individuals with a strong research commitment for a tenure-track assistant professor position in one of the following research areas: Molecular genetics, cell and developmental biology, or molecular structure. This position is currently open. The University is particularly interested in applications from candidates with experience in cell biology, immunology, and biochemistry, and with a specific research interest in the area of molecular biology. The position is subject to tenure. Responsibilities include research in molecular biology, supervision of graduate students, and undergraduate teaching. Applications from candidates with a Ph.D. degree in molecular biology are requested. For a complete description of the position and application procedures, see the University of Pittsburgh website at http://www.pitt.edu/

GENETICIST—Furman University has a September 1988 tenure-track assistant professor position in genetics. The candidate is expected to teach introductory genetics and population genetics in the junior college setting. The college has strong programs in biology, earth sciences, and business. The successful candidate will be expected to develop a strong research program and contribute to the teaching programs. Starting date: 1 September 1988. Applicants with a Ph.D. and postdoctoral experience should forward a brief description of research plans, curriculum vitae, and a letter of recommendation to be sent to: Faculty Search Committee, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA 15260. The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer. Applications from minority and women candidates are especially encouraged.

GEOLOGY

The Laboratory of Molecular Endocrinology at the Massachusetts General Hospital seeks a POSTDOC-
TORAL ASSISTANT to work on the regulation of polypeptide hormone genes. Experience in recombinant DNA techniques is preferable, but potential. The laboratory is interested in analyzing the cis-acting regulatory elements of the insulin and growth hormone genes with emphasis on interaction with tissue- and hormone-specific transcription factors. Send curriculum vitae and a letter of recommendation to: Dr. J. H. L. S. Keller, Mass General Hospital, 55 Fruit Street, Boston, MA 02114.

HUMAN ANATOMIST

Applications are invited from candidates with the Ph.D., M.D. or equivalent degree and significant postdoctoral research experience for a position in the Division of Medical Sciences. The appointee will teach a course in Gross Anatomy and may be expected to assume the assistant professor level beginning in fall 1988. The appointee will teach in a team-taught course in Gross Anatomy. Applicants should have demonstrated the potential for development of a productive research program in molecular or cellular neurobiology. Send curriculum vitae and the names of four individuals who are familiar with the candidate's research to: Chairman, Department of Anatomy and Cell Biology, Emory University School of Medicine, Atlanta, GA 30322. An Equal Opportunity/Affirmative Action Employer.
PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH
NATIONAL CANCER INSTITUTE
An Intramural Research Scientist Vacancy
Chief, Laboratory for Nutrition and Cancer Research
Division of Cancer Prevention and Control

The National Cancer Institute develops the overall national strategy against cancer, coordinates Federal government and non-Federal research programs, and supports international programs of cancer research. The incumbent of this position serves as the Chief, Laboratory for Nutrition and Cancer Research in the Cancer Prevention Reserarch Program, Division of Cancer Prevention and Control. The Laboratory Chief plans, develops, implements and coordinates the NCI's programs in research on diet and nutrition as they relate to the prevention of cancer in humans. The program includes three major areas: (1) requiring an interdisciplinary approach to both basic and applied research. Investigations are to be conducted in 1) Basic science pertaining to nutrition, 2) Nutritional Epidemiology, and 3) Clinical/metabolic research in humans. The Chief directly supervises and assumes responsibility for this multidisciplinary nutrition research program. Each of the three major research areas could have four or more Sections and a total staff of 60 or more full-time individuals when fully operational.

This is a Civil Service position at the GM-15 level with a salary range from $53,830 to $57,976 per annum and requires a doctoral degree or equivalent. In addition, candidates with an M.D. degree may be eligible for a Physician's Comperability Allowance up to $20,000 per year. (Candidates alternatively may be eligible for appointment in the Commissioned Corps of the U.S. Public Health Service.)

In addition, it is desirable that candidates demonstrate professional/technical and managerial/executive qualifications. Candidates will be reviewed to determine the extent to which they exceed the minimum requirements and possess additional factors including scientific reputation/peer recognition, training and education and honors and awards. A copy of the requirements may be obtained by contacting Ms. Nancy Saltzman in the Personnel Management Branch, NCI at (301) 496-6864.

Applications for Federal Employment (SF-171) are to be sent to the above individual at: The National Cancer Institute, 9000 Rockville Pike, Building 31, Room 3A123, Bethesda, Maryland 20892-3100. A current curriculum vitae and bibliography must accompany all applications, which must be received by February 1, 1988. Applications from women and/or minority group members are especially solicited. U.S. Citizenship is required.

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PHARMACEUTICAL RESEARCH

Fortune 250 Allergan, Inc. is an international leader in eye and skin care products. We seek experienced research scientists for our Irvine, California headquarters.

**Inflammation**

The successful candidate will be responsible for a research program for studying ocular anti-inflammatory and immune regulatory compounds as potential therapeutic agents. A PhD in immunology, cell biology or molecular biology is highly desirable. Research experience in molecular biology is a definite plus. Please send resume with salary history to: Dept. JB-1056-S.

**Glucoma**

Primary responsibilities include independent glaucoma research directed toward the identification of novel anti-glaucoma drugs. A PhD or equivalent experience in pharmacology, physiology or cell biology is preferred. Membrane transport experience is essential. Please send resume with salary history to: Dept. JB-1054-S.

Allergan offers excellent salaries and benefits. Responses to: Allergan, Inc., Human Resources (indicate dept. #), 2525 Dupont Drive, Irvine, CA 92715. Equal Opportunity Employer M/F/H/V.

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ALLERGAN, Inc.
IMMUNOLOGIST
NATIONAL CANCER INSTITUTE
NATIONAL INSTITUTES OF HEALTH

The Biologics Evaluation Section of the Cancer Therapy Evaluation Program, DCT is seeking an Immunologist who is interested in the application of preclinical models on the design of cancer trials. The Cancer Therapy Evaluation Program, DCT sponsors extramural clinical trials with BRMs including IFNs alpha, beta and gamma, TNF alpha, IL-2, adoptive immunotherapy, colony stimulating factors and monoclonal antibodies. The primary responsibilities for the immunologist will be: to coordinate and direct the laboratory research of contractors conducting trials with activated leukocytes; in conjunction with the BRM Committees in Oncology Cooperative Groups, to develop methodology for immunologic monitoring on selected Cooperative Group trials; in conjunction with the Biological Response Modifiers Program of the NCI, to identify agents with potential antitumor activity and implement the preclinical studies necessary for the rational clinical development of BRMs; to assess the relevance of preclinical data submitted to support proposed clinical trials; and to determine the immunologic monitoring to be performed on proposed clinical trials with BRMs.

Applicants should have a strong background in immunology with experience as an independent investigator, preferably in an area related to host mediated tumor killing and an interest in the application of basic science observations to the clinical development of biological agents. Applicants should have skills in verbal and written communication.

Salary range from 38,727 - 50,346 depending upon qualifications. The National Institutes of Health is an Equal Opportunity Employer. Applicants should contact:

Michael J. Hawkins, M.D.
Head, Biologics Evaluation Section
Investigational Drug Branch
Cancer Therapy Evaluation Program, DCT, NCI
7910 Woodmont Avenue, 4C-19 Landow Building
Bethesda, Maryland 20814

*U.S. Citizenship Required*

Molecular Neurobiology

Professor of Molecular Neurobiology and Associate Director of Biotechnology Center

The Ohio State University is launching a major effort in molecular neurobiology to build on an existing foundation in neuroscience that spans many departments. Molecular neurobiology is one of the two areas chosen for development into major centers of excellence by the university's Biotechnology Center.

The established molecular neurobiologist we seek will move into a newly remodeled laboratory and provide leadership in building a team of about 10 new faculty who will occupy a 30,000 sq ft floor in the Ohio State Biotechnology Center building. This group will be part of the interdepartmental graduate program in neuroscience and will have access to other graduate programs in basic and biomedical sciences. The molecular neurobiology group will also be part of a university-wide network of interacting research groups involved in molecular approaches to the solution of problems in medicine, agriculture and related areas. An instrumentation center for services such as protein and DNA synthesis and sequencing is available as an integral part of this program. The successful candidate will hold a tenured appointment in one of the departments in the College of Medicine. A competitive salary and an attractive package to set up a modern laboratory will be provided.

The Ohio State University is a major comprehensive university with all of the basic science and professional colleges in one campus in the state capital. Columbus, a growing community of 1.3 million population, is within 500 miles of most midwestern and eastern population centers of North America.

Please send nominations and applications to P.E. Kolattukudy, Director, Biotechnology Center, Rightmire Hall, The Ohio State University, Columbus, Ohio 43210. Equal Opportunity Affirmative Action Employer.

Biochemist/Cancer Research

Pfizer Central Research has recently expanded its Cancer Research Group and, as a result, has an impressive multidisciplinary team developing agents against a variety of tumor-specific targets. There is an opening in this group for a Biochemist with experience in studying signal transduction mechanisms in both normal and tumor cells.

Candidates for this position must have a PhD in Biochemistry, or a related field, and a keen interest in discovering and studying the mechanisms of action of drugs which selectively affect signal transduction in tumor cells. Candidates should have completed a post-doctoral fellowship in a laboratory concerned with growth regulation and oncogene molecular biology.

This position offers an excellent opportunity for professional recognition and career growth. We also offer competitive compensation, benefits package and the opportunity to live in an attractive Connecticut shore community.

Please send resume and description of research accomplishments to:
Mr. Donald R. Nelson, Manager of Employee Relations, Pfizer Central Research, Eastern Point Road, Groton, CT 06340.

UNDP/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases (TDR)

Call for Research Proposals on the Immunology of Malaria

The UNDP/WORLD BANK/WHO Special Programme for Research and Training in Tropical Diseases (TDR) wishes to stimulate research proposals on high-priority areas in research on the immunology of malaria.

High-Priority Topics:
- antigenic analysis of human and murine malaria parasites;
- cloning of murine malaria genes encoding analogues of human malaria vaccine candidate molecules;
- evaluation of immune responses to antigenic epitopes; identification of T and B epitopes;
- role of antigenic diversity in naturally acquired immunity;
- role of genetic factors in protection and in immunopathology;
- development of diagnostic tests and tests for the measurement of protective immunity in malaria.

Research proposals are reviewed twice a year. Closing dates for receipt of proposals in 1989 are 11 February and 31 July. Details of funding policy will be provided upon request. For further information and application forms, please address all inquiries to:

Dr. L. Martinez, Secretary,
Steering Committee on the Immunology of Malaria
World Health Organization
1211 Geneva 27
Switzerland
Tel.: (41-22) 31 27 54/55; Telex: UNESA-GENEVA;
Telex: 27821 OMG; Fax: 910746
PROCTER & GAMBLE has entry-level staff positions available for Ph.D. life scientists to be filled between now and September 1988. This is a direct result of growth in the health, personal care, and pharmaceutical areas and our continued commitment to the human and environmental safety of all our products. Openings are in the following disciplines:

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Molecular Biology
(Genral)
Molecular Biology of Carcinogenesis

Pharmaceutical Science
Pharmacokinetics
Pharmacology
Pharmacy
Physiology (GI)
Protein Chemistry
Toxicology (all types)

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If you're looking for industrial employment in any of these discipline areas, please send your resume and publication list to:

Dr. Ted J. Logan, Manager
Ph.D. Recruiting/1988 Openings
THE PROCTER & GAMBLE COMPANY
Miami Valley Laboratories
P.O. Box 398707
Cincinnati, Ohio 45239-8707

An Equal Opportunity Employer

Allow 6-8 weeks for response. All candidates must have U.S. citizenship or permanent resident visa status.

No agency referrals, please.
APPLICATION OF THREE TEACHING OPPORTUNITIES

The Diagnostic Laboratory at Cornell University’s College of Veterinary Medicine invites applications for a veterinarian virologist. Requirements for this position are a D.V.M., M.D., Ph.D. and/or equivalent degree with specific training in virology.

Prospective candidates with the Ph.D. degree should also have at least 2 years of postdoctoral experience. Preference will be given to candidates with additional training in modern approaches to viral diagnostics, virology, immunology, or viroimmunology, although all qualified candidates are urged to apply. This full-time position will require the candidate to assist in the supervision of a diagnostic virology program and to develop a competitive research program. Collaborative research with the New York Blood Center’s Human and Primate Immunology Laboratory and Histocompatibility Laboratory. Send curriculum vitae, a statement of research interests, and three references to: Dr. Edward J. Dubovi, Diagnostic Laboratory, New York State College of Veterinary Medicine, P.O. Box 786, Ithaca, NY 14851-0786.

Cornell University is an Affirmative Action/Equal Opportunity Employer/Educator.

HEMATOLOGIST: FACULTY POSITION

Applications and nominations are invited for a faculty position in the College of Medical Technology. Major responsibilities include teaching hematology in a baccalaureate level medical technology program, and establishing a research-oriented program that will apply the knowledge and skills of hematology in the diagnosis of diseases. Send curriculum vitae, statement of research interests, and three references to: Dr. Bernhard Ludvigsen, Department of Medical Technology, University of South Alabama, Mobile, AL 36688.

Application deadline: 29 February 1988, or until filled.


HUMAN NUTRITION: FACULTY POSITION

The College of Agriculture, Texas A&M University, is seeking a qualified individual to serve as Director of its Histocompatibility Laboratory. The appointee must have the M.D. or Ph.D. degree, appropriate training and/or experience in clinical histoimmune compatibility testing and meet competencies outlined by the American Society of Histocompatibility and Immunogenetics (ASHI). The successful applicant will oversee the clinical activities of the histoimmune compatibility laboratory, and participate in its administrative management. Active contribution to ongoing teaching and research programs within the Division of Animal and Nutritional Sciences is required. The level of faculty appointment and salary will be commensurate with experience. Interested applicants should send curriculum vitae, statement of achievements and three references to: Dr. H. O. Kunkel, Dean, College of Agriculture, Texas A&M University, College Station, TX 77843. Telephone: 409-845-3714. Equal Employment Opportunity Employer.

IMMUNOLOGIST: FACULTY POSITION

The Division of Organ Transplantation and Immunology, Department of Surgery at the Yale University School of Medicine is seeking a qualified individual to serve as Director of its Histoimmunology Laboratory. The appointee must have the M.D. or Ph.D. degree, appropriate training and/or experience in clinical histocompatibility testing and meet competencies outlined by the American Society of Histocompatibility and Immunogenetics (ASHI). The successful applicant will oversee the clinical activities of the histocompatibility laboratory, and participate in its administrative management. Active contribution to ongoing teaching and research programs within the Division of Immunology and Developmental Biology is required. The level of faculty appointment and salary will be commensurate with experience. Interested applicants should send curriculum vitae, statement of achievements and three references to: Dr. Marc I. Lorber, M.D.; Director, Division of Organ Transplantation and Immunology, Department of Surgery, University of Connecticut School of Medicine, 320 Farmington Avenue, Box 3333, New Haven, CT 06510. The deadline for receipt of application is 1 March 1988. Yale University is an Equal Opportunity Employer. Women and minority candidates are encouraged to apply.

APPLICATIONS ARE INVITED FOR A CHEMIST FAMILIAR WITH IMMUNOCHEMICAL TECHNIQUES AND MONOCLONAL ANTIBODY TECHNOLOGY.

The candidate will be expected to conduct quantitative and/or semiquantitative assays, develop new immunological reagents and/or reagent systems, and develop new immunological methods. Please indicate status. Application to: Dr. Wolf M. Kirschen, Chief, Division of Neuropsychology, University of New Mexico Search Committee, Albuquerque, NM 87131.

Equal Employment Opportunity Employer.

IMMUNOLOGIST—UNIVERSITY OF SOUTHERN CALIFORNIA COMPREHENSIVE CANCER CENTER

The USC Comprehensive Cancer Center is recruiting an immunologist to complement its program in cancer immunology. The appointment will be at the assistant professor level and a tenure-track position in the Department of Microbiology at the USC School of Medicine. The successful candidate will be expected to develop an independent research program in modern immunology and to interact with other cellular and molecular immunologists. Send résumé and names of three references to: Gunther Dennert, Ph.D., Chair, Search Committee, USC Comprehensive Cancer Center, 1441 Eastlake Avenue, Los Angeles, CA 90033. Affirmative Action/Affirmative Opportunity Employer.

MICROBIOLOGY AND IMMUNOLOGY—ASSISTANT PROFESSOR

The joint Biology Department of the College of Saint Benedict and Saint John’s University seeks to fill a 1-year, 2-year position for the 1988-1989 academic year. Teach an upper division course in plant physiology, and participate in introductory biology for science majors and/or non-majors courses as required by the need of the department. Ph.D. preferred. Send curriculum vitae and three letters of recommendation to: Dr. R. P. Gilbertson, Director, Coordinator, College of Saint Benedict, Saint Joseph, MN 56374. Applications received after 19 February 1988 cannot be guaranteed consideration. Women and minority applicants are encouraged to apply.

INSTRUCTOR/ASSISTANT PROFESSOR

BIOLOGY

The Biology Department at the University of Illinois at Chicago (UIC) seeks a tenure-track position at the instructor level. A Ph.D. in experimental biology is required. The candidate is expected to teach courses at the undergraduate level and supervise research. Specific criteria are open. Please send curriculum vitae, statement of teaching interests and philosophy, and three letters of recommendation to: Dr. M. P. M. Al-Ahmady, Chair, Search Committee, Department of Biology, University of Illinois at Chicago, 2190 South University Avenue, Chicago, IL 60612. Affirmative Action/Affirmative Opportunity Employer.

MOLLECOULAR BIOLOGY

The Molecular Biology Institute of the University of California, Los Angeles invites applications for a FACULTY POSITION at either the junior or senior level, possibly in the area of molecular evolution or molecular recognition broadly defined. Areas of perceived interest include, but are not limited to, molecular evolution and comparative and computational biochemistry, including: RNA enzymes and the evolution of catalysis; sequence and structure of RNA molecules; RNA translation and replication; molecular recognition and design; microbial phylogenetics; nucleic acid and protein interaction patterns; and genome organization. Exceptional candidates are sought, however, without regard to field. Send curriculum vitae, a description of research interests, and three letters of recommendation by 25 February 1988 to:

James A. Lake, Chair
Faculty Search Committee
Molecular Biology Institute
University of California, Los Angeles
Los Angeles, CA 90024

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

IMMUNOCHEMIST

Applications are invited for a chemist familiar with immunochromatographic techniques and monoclonal antibody technology. The position is a non-tenure track. Please indicate status. Application to: Dr. Wolf M. Kirsch, Chief, Division of Neuropsychology, University of New Mexico Search Committee, Albuquerque, NM 87131. Equal Employment Opportunity Employer.

MATERIALS SCIENCE

The Biology Department at the University of Illinois at Chicago (UIC) seeks a tenure-track position at the instructor level. A Ph.D. in experimental biology is required. The candidate is expected to teach courses at the undergraduate level and supervise research. Specific criteria are open. Please send curriculum vitae, statement of teaching interests and philosophy, and three letters of recommendation to: Dr. M. P. M. Al-Ahmady, Chair, Search Committee, Department of Biology, University of Illinois at Chicago, 2190 South University Avenue, Chicago, IL 60612. Affirmative Action/Affirmative Opportunity Employer.

IMMUNOLOGIST—LABORATORY FOR CELL, MOLECULAR, AND DEVELOPMENTAL BIOLOGY

UNIVERSITY OF ILLINOIS AT CHICAGO

The Department of Biological Sciences of the University of Illinois at Chicago seeks a senior molecular biologist to join the Laboratory for Cell, Molecular, and Developmental Biology. The appointment will be at the rank of full professor with tenure. The appointee will coordinate current programs and ongoing development of the Laboratory.

The Laboratory for Cell, Molecular, and Developmental Biology (LCMDB), was established to consolidate research and training programs in modern cellular, molecular, and developmental biology, and represents one facet of a campus-wide commitment to foster excellence in the areas of molecular biology and biotechnology. Permanent funding exists for LCMB support staff, graduate fellowships, postdoctoral fellowships, new equipment, and facilities. Salary lines for the recruitment of junior faculty are also available.

The candidate should have a Ph.D. degree, currently hold a postdoctoral position, and be familiar with molecular biology techniques. The candidate should have a strong publication record, and have an exceptional and ongoing record of research accomplishment, and be recognized as a leader in his or her field. Specific research specialty is open, but should be in an area that is related to molecular biology and/or molecular genetics.

The position will be available 1 July 1988. Salary is competitive. Applications should be submitted by 15 March 1988 with a curriculum vitae and the names of three references. Applications, nominations or inquiries should be directed to: Dr. Brian Nichols, Senior Molecular Biology Search Committee, Department of Biological Sciences m/c 067, University of Illinois at Chicago, P.O. Box 4348, Chicago, IL 60680. Telephone 312-996-5064.

The University of Illinois is an Affirmative Action/Affirmative Opportunity Employer.
THE AUSTRALIAN NATIONAL UNIVERSITY
RESEARCH SCHOOL OF BIOLOGICAL SCIENCES
ECOSYSTEM DYNAMICS

FELLOWS, RESEARCH FELLOW
POSTDOCTORAL FELLOWS

The Australian National University is undertaking a major development in the ecology of the dynamics of terrestrial ecosystems. A research group of about eight academic staff is being established to investigate the processes of establishment, development and rehabilitation of particular ecosystems and to develop predictive models of changes in terrestrial ecosystems. The approach will include a combination of theoretical and experimental studies with particular emphasis being given to the eventual application of the results to land management. The initial emphasis of the group will be on Eucalyptus communities but the theoretical and modelling efforts will encompass a broader range of ecosystems. The group currently consists of three staff (one tenured) whose interests include community and population ecology, ecological modelling and eco- physiology. A second tenurable appointment of a community ecologist has already been advertised and will be filled early in 1988. A third tenurable appointment is now advertised, together with up to three non-tenured posts. These are full-time research positions although the appointees will also be expected to assist in the supervision of post-graduate students. The Ecosystem Dynamics group has strong links with existing programs in plant physiology and resource management elsewhere in the University.

FELLOWS IN BIOLOGICAL MODELLING/
INFORMATION SCIENCE (one position)

A tenurable position is offered for an appointee with experience in the application of information science in ecology or related areas. The particular skills sought include bio-mathematics, modelling, or geographical or biological information systems. It is essential that the appointee be able to provide continuing leadership in the longer-term development of this rapidly expanding field both by direct contribution and via collaboration with research groups such as the ANU Centre for Information Science Research. (Ref: BS 3.12.1)

RESEARCH FELLOW/POSTDOCTORAL FELLOW IN POPULATION
OR COMMUNITY ECOLOGY (up to three positions)

Several non-tenured positions are available for population or community ecologists. The areas of research priority include ecological variation between Eucalyptus subgenera, competition between mature and immature plants, comparative studies of seasonal patterns of resource use in Eucalyptus communities, and the relationship between environmental and biological interactions in determining species distributions along resource gradients. The successful applicants will have demonstrated research potential in ecology and an ability to work co-operatively with other researchers. A knowledge of the Australian biota would be an advantage. (Ref: BS3.12.2)

RESEARCH FELLOW/POSTDOCTORAL FELLOW IN BIOLOGICAL
MODELLING/INFORMATION SCIENCE

A non-tenured position is available for an appointee with experience in the application of information science in ecology or related areas. The successful applicant will have demonstrated research ability in information science or quantitative ecology and will be expected to undertake research into the application of succession models to land management. (Ref: BS 3.12.3) Further particulars may be obtained from the School Secretary, Research School of Biological Sciences. Telephone: Canberra (062) 494138. Fax (062) 489995.
Closing date: 22 January 1988

POSTDOCTORAL FELLOW IN GRASS TAXONOMY

The Australian Biological Resources Survey has funded a position to prepare taxonomic descriptions of the Australian Poaceae-Pooideae. Data will be stored using the DELTA taxonomic computer programs. The data will be used to prepare a printed account suitable for the flora of Australia and a data base for interactive identification and retrieval programs in microcomputers. Applicants should have a higher degree with experience in grass plant taxonomy at the species level, interest in grasses and experience with, or enthusiasm for, practical taxonomic applications of computers. The position will be available from mid-1988 and, it is expected, will be renewable annually for up to three years. Enquiries to Mr. L. Watson, Taxonomy Lab. (062) 494666.
Closing date: 12 February 1988 Ref: BS 3.12.4

SALARY: Fellow: A$32,999-A$44,032 p.a.; Postdoctoral Fellow Grade 1 (fixed point): A$24,535-A$28,029 p.a.; Research Fellow: A$28,381-A$37,122 p.a.; Senior Research Fellow: A$39,439-A$46,942 p.a.; APPOINTMENT: Fellow, tenurable. Research Fellow up to three years, possibility of extension to five years; Postdoctoral Fellow normally two years, possibility of extension to three years.

APPLICATIONS should be submitted in duplicate to the Registrar, The Australian National University, GPO Box 4, Canberra ACT 2601, quoting reference number and including curriculum vitae, list of publications and names of at least three referees. The University reserves the right not to make an appointment or to appoint by invitation at any time. Further information is available from the Registrar.

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If you're interested in a career with a leading pharmaceutical company, why not begin your search with a company respected the world-over for its profound commitment to care, to quality, and to innovation? Baxter Healthcare Corporation has demonstrated that commitment for over 30 years. Currently, our Hyland Division is seeking qualified individuals for these opportunities:

**Senior Research Scientist — Virologist**

As part of the R&D department, you will initiate, design, and implement animal virology laboratory studies in efforts to develop therapeutic human monoclonal antibodies. This function will utilize state-of-the-art techniques for studying the role of viruses and viral sub-units in hybridoma and mAb function and production. You will also be responsible for devising action plans in order to coordinate work in conjunction with R&D project needs. Qualification requirements include: Ph.D. with two years post-doctoral training in animal virology with demonstrated expertise in immunology and biochemistry; capability to design and direct bench-level experiments; and the ability to interpret and communicate research results. Working knowledge of mAb technology is desired.

**Senior Research Scientist — Cell Culture Process Engineering**

In this R&D position, you will utilize state-of-the-art dynamic modeling techniques to design and evaluate technology and process configurations for product-scale mammalian cell culture production of GMP-grade therapeutic proteins. In addition, you will also devise and automate sensor and process control strategies, and develop research programs to study mass and energy transfer kinetics in order to maximize production and purification efficiencies. Qualification requirements include: Ph.D. with at least two years academic or industrial post-doctoral training in biochemical engineering or equivalent, and demonstrable expertise in the theory and practice of cell culture process engineering. Experience with hybridomas and monoclonal antibodies is desired.

If you qualify for either of these positions, you will receive all the advantages of working with a world-class leader, including an excellent salary and benefits package, and a stable, yet creative, work environment. For immediate consideration, please forward your resume to: Ms. Liz Di Bernardo, Human Resources Dept., Baxter Hyland Division, 444 W. Glenoaks Blvd., Glendale, CA 91202. An Equal Opportunity Employer.

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Hyland Division
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IGEN, INC. turned down a major pharmaceutical firm's offer to purchase us because we believe IGEN can become one of the major biotechnology firms dedicated to the development of proprietary diagnostic systems and pharmaceuticals.

In order to utilize its non-isotopic detection system technology in the nucleic acids based diagnostic area, IGEN has decided to establish a group in Nucleic Acid Assay Research and Development. We are looking for an exceptional scientist who is ready to take the challenge of leadership in establishing this group. The ideal candidate will have a Ph.D. and several years of experience in nucleic acids probe research and development. Experience in or familiarity with modern immunodiagnostic assay systems and recombinant DNA methodology is a plus.

If you are a qualified candidate, ready to join a rapidly growing biotechnology firm, while earning a salary commensurate with your experience and coverage under an attractive benefits package, this position is for you.

Send your resume with salary history in confidence to: IGEN, INC., Dept. CH-0188, 1530 East Jefferson Street, Rockville, Maryland 20852.

STAFF
PATHOLOGIST

Bio/dynamics Inc., an expanding toxicological contract laboratory located near Princeton, N.J., is seeking a professional Pathologist to join its experienced staff.

Primary responsibilities include the microscopic examination of tissues from a variety of laboratory animal species used in toxicological and carcinogenesis studies, independent and collaborative evaluation and interpretation of pathomorphological findings and the presentation of written reports.

We require that the successful candidate have a degree from an accredited school of veterinary medicine and be board certified or eligible and to have a minimum of 5 years of experience in toxicological pathology. A working knowledge of specialized techniques will be favorably considered.

We can offer you the challenges that you desire as well as a competitive salary and comprehensive benefits package. Please send a resume which must include salary history and requirements to:

ATT: Personnel Manager—Dept. 51
Bio/dynamics Inc.
P.O. Box 2360, East Millstone, NJ 08875-2360

NATIONAL SCIENCE FOUNDATION (NSF)

NSF's Division of Astronomical Sciences is seeking qualified applicants for Program Director, Stars and Stellar Evolution (STE) Program, Astronomy Research Section. The position will be filled on a 2- or 3-year rotator/temporary basis, beginning approximately June or July, 1988, and is excepted from the competitive civil service. The salary range is $45,763 to $72,500 per annum.

The Program Director is responsible for review, recommendation and processing of proposals assigned to the STE Program.

Applicants should have a Ph.D. in Astronomy or Astrophysics or equivalent experience. In addition, 6 or more years of successful independent scientific research. Research administration and/or managerial experience is desirable. For technical information please contact the Division of Astronomical Sciences (202) 357-9488.

Applicants should send resume or SF-171, Application for Federal Employment to: National Science Foundation, Division of Personnel and Management, 1800 G St., N.W., Washington, DC 20550. Attn: Catherine Handle. For further information call 202/357-7840.

Hearing impaired individuals should call TDD 202/357-7492. NSF is an Equal Opportunity Employer.

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Opportunities for Protein Chemists

Genentech, Inc., a leader in the field of biotechnology, has a strong commitment to a new department in research to work on state-of-the-art purification and sequence determination of novel proteins.

The success of this group will require the addition of personnel at all levels including Postdocs, Scientists, Senior Scientists, and a Director at the Ph.D. level who have a proven record of innovative and productive research in this area. Senior Scientist level individuals will be expected to establish and lead teams to support the efforts of the group to become a leading force in this field.

Positions will also be available for Research Assistants and Associates with a BS or MS in Biochemistry, Chemistry or related degree. Experience in protein purification, especially high resolution techniques such as FPLC, HPLC, as well as two-dimensional gel electrophoresis and tissue culture would be helpful.

Genentech offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send your curriculum vitae, a summary of your research interests and three letters of reference to Dr. Bart Aggarwal, Senior Scientist, Protein Chemistry Department, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.
POSITIONS OPEN

MOLECULAR BIOLOGY POSITIONS

The Biology Department, Central Michigan University, invites applications from qualified candidates for two newly established, tenured-track assistant professor positions at the assistant or associate professor level to begin August, 1988. A Ph.D. degree and an educational background in molecular biology are required. Postdoctoral research and teaching experiences are also desired. Both positions will be 1/2 time research and 1/2 time teaching. The research position requires an interest in oncogenes and growth factors in tumor progression. Send curriculum vitae, abstracts of research, and names and addresses of three references to: Dr. Lawrence Koehler, Chairperson, Department of Biology, Central Michigan University, Mt. Pleasant, MI 48859. Deadline: 15 February 1988. Telephone: 517-774-1227.

CMU is an Affirmative Action/Equal Opportunity Institution.

MOLECULAR BIOLOGIST

Senior research associate position available to participate in an ongoing research program to study the regulation of biosynthesis of extracellular matrix proteins. The successful applicant will have the opportunity to develop an independent research project in the future. A Ph.D. in molecular biology or recombinant DNA techniques are required. Some postdoctoral training is preferred. The position includes a full-time technician, and is available immediately. The salary will be competitive and based on qualifications and experience. Please send curriculum vitae and names of references to: Dr. Suzanne Bourgeois, Director, Regulatory Laboratory, The Salk Institute for Biological Studies, P.O. Box 85800, San Diego, CA 92138. Telephone: 619-453-4100, Extension 365. Equal Opportunity Employer M/F/V/H.

MOLECULAR BIOLOGIST: The Department of Biology of The University of Akron has an assistant professor, tenure-track position available September 1988. A Ph.D. with postdoctoral experience is preferred, and preference will be given to those investigating endocrine systems. Responsibilities include developing an active research program, developing a molecular biology course for graduate students, and some involvement in an introductory undergraduate genetics course. Send curriculum vitae, description of research interests, and three letters of recommendation to: Dr. Dale Jackson, Chair, Department of Biology, The University of Akron, Akron, OH 44325. The deadline for applications is 7 February 1988. Women and minorities are encouraged to apply. The University of Akron is an Equal Education and Employment Institution.

PHYSIOLOGIST—Assistant Professor, tenure-track. Ph.D. required with expertise in systemic physiology. Responsibilities will include teaching human anatomy and physiology laboratory, advising students, and teaching other departmental physiology courses. The applicant should be willing to supervise undergraduate/graduate research. For further information, send a letter of application, curriculum vitae, transcripts of all undergraduate and graduate work, and three letters of recommendation. Send applications before January 15, 1988. Our department especially encourages women and members of minority groups to apply. The Ohio State University is an Equal Education and Employment Institution.

POSITIONS OPEN

MOLECULAR BIOLOGY POSTDOCTORAL POSITION

A position is available immediately to join a laboratory investigating the role of extracellular matrix proteins in cell attachment and migration. Applicants should have a recent Ph.D. in molecular biology, with a strong background in recombinant DNA techniques. We are interested in using genetically engineered constructs to study the regulation of extracellular matrix proteins in vivo. Send curriculum vitae, a statement of research experience, and names of three references to: Dr. John H. Amatruda, Department of Pharmacology, University of Cincinnati, Cincinnati, OH 45267. The University of Cincinnati is an Equal Opportunity/Affirmative Action Employer.

PLANT ECOLOGIST: Kalamazoo College invites applications for a 1-year sabbatical replacement position with teaching responsibilities in botany, ecology, environmental sciences. Send letter of application, curriculum vitae, and three letters of recommendation by 15 February 1988 to: Dr. David A. Evans, Department of Biology, Kalamazoo College, Kalamazoo, MI 49007. Kalamazoo College encourages and values diversity and actively encourages women and members of minority groups to apply. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to engage in projects on G protein-mediated transmembrane signaling. Experience in molecular biology and membrane biochemistry is desirable. Start date, April 1988. Salary up to $17,000. Send curriculum vitae, a statement of research experience, and names of three persons who may be contacted for reference to: Dr. Henry J. Arizna, Department of Biochemistry, Me­ harry Medical College, Nashville, TN 37208.

POSITIONS OPEN

POPULATION BIOLOGIST

The Department of Biology at Princeton University plans to make three appointments in the next few years in Population Biology: the study of animal behavior, evolution, and population or quantitative genetics. We expect to make one appointment in 1988; the rank is open. Preference will be given to applicants with strong theoretical implementation of these interests, and a demonstrated interest in the evolution of the interests of existing members of Princeton’s Ecology, Evolution, and Behavior group: Bonner, Gould, Grant, MacArthur, Maynard Smith, and Thompson. Interviews will be held at the annual meetings of the S.E.B. in San Francisco and Terborg. The closing date for applications is 15 March 1988. Applicants should send curriculum vitae and three letters of reference to be sent to: Henry H. Horwitz, Search Committee, Department of Bio­ logy, Princeton University, Princeton, NJ 08544. Princeton University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—A postdoctoral research position is available immediately for the production of cDNA clones from genetic strains of mosquitoes and from various arboviruses. Experience with molecular biological techniques is required; virological experience advantageous. This position has NIAID support for 3 years. Salary: $21,948 to $23,964, depending upon qualifications. Send curriculum vitae and three letters of recommendation by 15 February 1988 to: Dr. J. L. Hardy, School of Public Health, University of California at Berkeley, Berkeley, CA 94720. Affirmative Action/Affirmative Action Employer.

POSTDOCTORAL POSITION

Position available for protein chemist to work in isolation of growth-promoting factors in vascular tissue. Studies directed at characterization of growth factors from cultured vascular cells at both the protein and molecular biology levels. We are seeking a Ph.D. in biochemistry, with experience in purification procedures and antibody production. Applicants should respond with a resume, statement of purpose, and three references by 15 February 1988, to: David J. Riley, M.D., Professor of Medicine, UMDNJ—Robert Wood Johnson Medical School, CN-19, New Brunswick, NJ 08903—0019. An Equal Opportunity/Affirmative Action Employer. M/F/H/V.

POSTDOCTORAL POSITION in reproductive immunobiology available for Ph.D., M.D., or holders of equivalent degrees. The areas under study include the role of the immune system in regulating fertility and the role of antibodies in biologic responses that culminate in labor in pregnant women and analyses of the functions of placental X cells in pregnant women. Send curriculum vitae and three letters of recommendation by 15 February 1988, to: Dr. Robert L. Keng, Assistant Professor, Department of Immunology, Mayo Foundation, Rochester, MN 55905. Telephone: 507-284-2511. An Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL POSITION on NIH-training grant to study mechanisms of insulin action and insulin resistance in the liver. Applicant should have experience in one or more of the following: molecular biology, lipoproteins, protein kinases, and membrane glycoproteins. Position must be filled before 30 June 1988. Send resignation and names of three references to: Dr. John M. Amatruda, Endocrine-Metabolism Unit, University of Rochester School of Medicine, Box 693, 601 Elmwood Avenue, Rochester, NY 14642.

POSTDOCTORAL POSITIONS are available immediately for studies of multidrug resistance (MDR). Areas include the cell biology and molecular pharmacology of P-53, multidrug resistance (MDR). S.J. Children’s Hospital is a multi­disciplinary, bio-molecular research center with many opportunities for scientific interactions. Annual salaries are commensurate with experience, and begin at $22,000. Send curriculum vitae and names of three references to: Dr. William T. Beck, Ph.D., Chief, Department of Pharmacolo­gy, S.J. Children’s Hospital Research, 332 North Lauderdale, Memphis, TN 38101.

S.J. Children’s Hospital Research Hospital is an Affirmative Action/Affirmative Action Employer.
**SCIENTIST II**

The Chemistry Department of Zoecon Research Institute, a division of Sandoz Crop Protection Corporation, is seeking an experienced chemist in peptide synthesis. This scientist will actively participate in a research program focused upon the discovery and development of neuropeptides and related substances as agents for insect control and plant protection. Laboratory work will involve the use of an automated peptide synthesizer, as well as manual purification and characterization of synthetic peptides.

Candidates should have an MS degree plus three years experience, or a BS degree with eight years experience, in chemistry or biochemistry; experience in peptide synthesis, purification and characterization; and experience with modern methods of organic synthesis and analysis. Candidates must also be able to maintain accurate records and to communicate the results of their work effectively.

To apply for this position, please send curriculum vitae and three references to:

Sandoz Crop Protection Corporation  
Zoecon Research Institute  
Human Resources Department  
975 California Avenue  
Palo Alto, CA 94304-1104  
AA/EOE

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**Research Scientist/ Biochemical Engineer**

Collagen Corporation, engaged in the research, development, production and marketing of differentiated biomedical products, seeks a Research Scientist/Biochemical Engineer to join our Process Development area. The selected candidate will be involved in protein isolation and purification processes, concentrating in the critical and completion stages of process development.

You'll exercise independent judgment to determine and develop solutions through research and will frequently interact with members of our Scientific and Production staffs. Our ideal candidate will have an MS or Ph.D in chemical engineering, biochemical engineering or related field with 3-5 years' relevant experience with a pharmaceutical or biotechnology firm.

Collagen Corporation offers a unique and stimulating environment where employees enjoy both the autonomy and team support needed to succeed. To learn more about this position and our attractive salaries and benefits, send your resume, with salary history, to: S. Hansen, Human Resources, Collagen Corporation, 2500 Faber Place, Palo Alto, CA 94303.

We are an equal opportunity employer.

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**Ag Chemical Research Is Growing Faster For The Abbott Scientist**


**DEVELOPMENT SCIENTIST**

Must have an MS and at least 2 years experience or a BS with 3-5 years experience in plant physiology or plant biochemistry. This position in ag R&D involves a variety of activities in both the lab and greenhouse. Knowledge of lab instrumentation, radiochemicals and organellar isolation desired. Industrial agricultural products experience a plus.

**MOLECULAR BIOLOGIST/ BIOCHEMIST**

Position involves extensive interaction with fermentation, entomology and regulatory affairs groups in the development of pesticides and other ag products. Candidate will have Ph.D in Molecular Biology or Biochemistry with a minimum of 2 years post-doctoral experience involving Bacillus genetics or related areas. Industrial research background with knowledge of microbial insecticides preferred. We are located in an attractive suburban area, 30 miles north of Chicago and offer an attractive salary and benefit package. For consideration, send resume indicating position desired and salary history, in confidence to: Keith Allen, Corporate Placement, Dept. SCI 1/8. Abbott is an Affirmative Action Employer.

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**PRODUCT DEVELOPMENT (Medical Nutritional Products)**

Ross Laboratories, division of Abbott Laboratories and the leading producer of infant and medical nutritional products, has newly created positions available in Product Research and Development.

The individuals we are seeking should have a PhD in Biochemistry, Pharmacy or a related discipline. Prior experience in industry is helpful but not required.

Projects will involve significant technical challenge and the opportunity to interact with both technical and non-technical groups including outside vendors. Excellent communication skills, both oral and written, are essential.

We offer the opportunity to work in a research environment stimulated by a long history of success and challenged with the goal of developing new enteral nutritional and/or pharmaceutical products.

Interested persons should forward resume in confidence to: Technical Recruiter, Dept. 317.
POSITIONS OPEN

POSTDOCTORAL POSITION—Conduct basic and applied research on the interaction of slow electrons with excited molecules. Thorough knowledge of advanced theoretical and experimental physics and electron and laser physics. Knowledgeable in advanced electronics and use of microcomputers. 8:00 a.m. to 5:00 p.m. Salary $22,200. Send résumé to: Tennessee Department of Employment Security, P.O. Box 831, Knoxville, TN 37901. Attention: Mr. Bob Edixon.

POSTDOCTORAL POSITION available starting August 1988 to study the structure, function and distribution of the proton pumps involved in acidification of intracellular compartments. Experience in membrane protein chemistry, immunological techniques, or molecular biology desirable. Send curriculum vitae, reprint and three letters of reference to: Dr. Michael Forgac, Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111.

POSTDOCTORAL POSITION available now for pharmacologist/biochemist to examine the role of increased ionized calcium in toxicity produced by halogenated hydrocarbon toxins. Experience with calcium-activated enzymes or isolation and characterization of mutant populations of somatic cell lines desirable. Curriculum vitae and names of three references to: Dr. Leon Moore, Department of Pharmacology, Uniformed Services University, 4301 Jones Bridge Road, Bethesda, MD 20814.

POSTDOCTORAL POSITION in biofilm microbial community structure. Research will involve recombinant DNA, comparative physiology and rRNA sequencing, in situ hybridization and electron microscopy to characterize natural communities developed in biofilms. Prefer background in microbiology, experience in EM desirable. Available immediately; salary $20,000; closing date: 1 March 1988. Send résumé and names of three references to: Dr. David Stahl, College of Veterin ary Medicure, 2001 South Lincoln Avenue, Urbana, IL 61801. Telephone: 217-333-8418. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION IN PLANT PHYSIOLOGICAL ECOLOGY

Postdoctoral position available immediately for field studies of ecophysiological aspects of host and insect interactions. Study involves mineral nutrition, photosynthesis, water relations and use of stable isotopes. Send curriculum vitae and list of references to: Dr. James Ehleringer, Department of Biology, University of Utah, Salt Lake City, UT 84112. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS—PLANT MOLECULAR BIOLOGY/GENETICS with United States Department of Agriculture, Agricultural Research Service. Two postdoctoral positions are available immediately to participate in studies of gene inactivation in plants. Research focuses on the development of a system for in vivo inactivation of genes in crop species using antisense RNA. Previous experience in molecular biology, plant biochemistry and/or plant genetics required. Salary range GS-11, $27,172/GS-12, $32,567. For information on the research program contact: Dr. William Belknap, telephone: 415-486-5631, Western Regional Research Center, USDA, ARS, 800 Buchanan Street, Berkeley, CA 94710. For application procedures/forms, contact: Rita Mallard, ARS Personnel Division, Beltsville, MD, telephone: 301-344-3158. Applications should be marked Code 8W003. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATES

Biochemists/Cell Biologists

Positions are currently available to study the cellular biology and biochemistry of wound healing. Primary research interests include the isolation and characterization of several unique growth factors. Candidates should have experience in characterization of biologically active proteins, as well as bioassy, and cell culture experience. Send curriculum vitae and references to: David R. Knighton, M.D., Department of Surgery, Box 120 UMH, University of Minnesota, Minneapolis, MN 55455.
POSTDOCTORAL POSITION—NEUROENDOCRINOLOGY. Available spring 1988. Focus of the research is on hypothalamic and placental factors which regulate prolactin surges during pregnancy. Experience in animal surgery, catecholamine measurements, RIA helpful. The successful applicant will have three references to: Dr. James Voogt, Department of Physiology, Kansas University Medical Center, Kansas City, KS 66103. Applications reviewed and accepted until position is filled. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE
A postdoctoral/research associate position is available for September 1988. The study is on muscle gene expression in Drosophila. We are studying promoter and splicing function in transgenic flies and cell-free systems. Applicants must have a Ph.D. and experience in recombinant DNA methods will be favored. Starting salary is competitive. Send curriculum vitae and names of three references to: Dr. Robert V. Storti, Department of Biochemistry, University of Utah Medical Center, 30 North Medical Drive, Mail Stop 300, Salt Lake City, Utah 84132.

POSTDOCTORAL/RESEARCH ASSOCIATE
Senior research associate position available to participate in an ongoing research program to study the regulation of biosynthesis of eukaryotic matrix proteins. The successful applicant will have the opportunity to develop an independent research project in the future. A Ph.D. degree and experience in molecular biology and recombinant DNA techniques are required. Some postdoctoral training is preferred. The position includes a full-time technical staff available immediately. The salary will be competitive and based on qualifications and experience. Please send curriculum vitae and names and addresses of three references to: Dr. Suzanne Bourgeois, Director, Research Associate Program, National Institute of Biomedical Studies, P.O. Box 58800, San Diego, CA 92138. Telephone: 619-453-4100, Extension 365. Equal Opportunity Employer MF/FV.

POSTDOCTORAL/RESEARCH ASSOCIATE
Position available to study biochemical mechanisms of parathyroid hormone action in epithelia and the cellular mechanisms of urinary acidification. Preference given to Ph.D. in biochemistry, with expertise in one or more of the following areas: enzymology, receptor assays, membranes, flow cytometry, lipids. Send curriculum vitae and the names and addresses of three references to: Dr. Sandra Sabatini, Department of Internal Medicine, Texas Tech University Health Sciences Center, Lubbock, TX 79430. Equal Opportunity Employer.

POSTDOCTORAL TRAINING IN LEUKOCYTE BIOLOGY
We have several postdoctoral fellowships available now for individuals interested in obtaining advanced training in leukocyte biology. Successful applicants will have the opportunity of joining and working with a diverse, multidisciplinary group of scientists interested in multiple aspects of macrophage biology, including surface receptors, intracellular mechanisms of signal transduction, cell-cell recognition, gene regulation, and tumor biology. Emphasis in training is placed on analysis of a problem of the fellow’s choice in the above areas with tools in contemporary cellular and molecular biology. The faculty group includes individuals skilled in leukocyte biology, protein chemistry, cell biology, or molecular biology. Previous training in biochemistry, protein chemistry, receptor biology, or cellular/molecular biology would be particularly helpful, though not essential. An attractive stipend, commensurate with experience, will be offered. Openings are available immediately for training. Interested applicants should send curriculum vitae to: Dolph O. Adams, Laboratory of Cell and Molecular Biology of Leukocytes, Department of Pathology, Duke University Medical Center, Durham, NC 27710. Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE—IMMUNOLOGY/BIOCHEMISTRY. University of Massachusetts Medical School, Division of Immunology. Position available immediately in the pre-clinical and clinical development of immunomodulators for cancer therapy. Experience in both in vivo and in vitro immunoglobulin modification and analysis, monoclonal antibodies and tissue culture desirable. Academic appointment or equivalent experience at University Medical School, depending on qualifications. Position is for 1 or 2 years. Please send curriculum vitae and three letters of reference to: Dr. Thomas Griffin, Director, Clinical Research Division of Immunology, University of Massachusetts Medical School, 55 Lake Avenue North, Worcester, MA 01655. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE
Position available to conduct research in molecular pharmacology, studying the effect of nucleotide analogs on DNA methylation, using recombinant DNA techniques. Experience in nucleic acid technology, microbial genetics, or protein chemistry desirable. Candidates should have a Ph.D. degree in biochemistry or microbiology. Send curriculum vitae and references, to: Dr. Stanley Friedman, S.D. School of Medicine at Rochester, 450 Clarkson Avenue, Box #29, Brooklyn, NY 11203. Equal Employment Opportunity/Affirmative Action Employer. DMC #C-0156.

POSTDOCTORAL/RESEARCH POSITION IN CARBOHYDRATE CHEMISTRY.
The research position will involve purification of cell surface antigens from euglenoids and characterization of the protein-polysaccharide complexes. Experience in carbohydrate chemistry is desirable. Candidates should have a Ph.D. degree in organic or biochemistry. The position is immediately available and the salary will be competitive. The successful candidate will have the opportunity to work with established coworkers in the area of carbohydrate chemistry. Interested individuals should send curriculum vitae and three letters of reference to: Dr. P. K. Mopper, Department of Chemistry, University of Maryland, College Park, MD 20742. Equal Opportunity Employer.

REPRODUCTIVE BIOLOGIST
A private, nonprofit research institute is seeking a reproductive biologist to head up a group of six workers to conduct research on the physiological role of the newly discovered intravaginal polypeptide regula- tors of contraceptive function. A minimum of 2 years of postdoctoral training and experience in gonadal cell culture is required. Initial salary, equipment, and supplies will be provided with the understanding that the candidate is expected to participate with a group of biochemists and molecular biologists to secure funding to work on the isolation, characterization, and physiology of the polypeptide regulators in ovarian follicular fluid. Send curriculum vitae, statement of research interest, and the names of three references to: Nicholas Ling, Ph.D., Whitaker Institute for Diabetes and Endocrinology, 9894 Genesee Avenue, La Jolla, CA 92037. Closing date for applications is 31 January 1988.

RESEARCH PROGRAM DIRECTOR—CARIOVASCULAR
CyRx Corporation, a development stage public company, has an immediate opening for a Ph.D. pharmacologist/toxicologist with experience in developing cardiovascular products in the areas of all aspects of preclinical development of pharmaceuticals as well as laboratory management skills. Candidates should be self-motivated independent individuals with five to nine years of postdoctoral experience in any of the following areas: antilipid agents, hemorheology, thrombosis, or vascular cell biology. The ideal candidate should have a research environment with opportunity available for academic collaborations and scientific publications. Please send your curriculum vitae and letter of interest to: Dr. Lee Horne, CyRx Corporation, 150 Technology Parkway, Technology Park/Atlanta, Norcross, GA 30092.

RESEARCH ASSOCIATE
Position available with background in experimental rats, enzyme kinetics, pharmacokinetics and computer modeling. Excellent research experience expected. The successful candidate will be responsible for the generation of experimental single-unit recording techniques, auditory physiology, neuronalanatomical training, and careful integration of potential single-unit recording techniques, auditory physiology, neuronal anatomical training, and computer proficiency. Inquiries or applications should be sent by 7 February 1988 to: Dr. J. D. Nagel, Department of Pharmacology, Indiana University School of Medicine, Indianapolis, IN 46223. Equal Opportunity Employer.

RESEARCH ASST. PROFESSOR
We seek an individual to join our study of functional organization of sound direction and sound level in the auditory system. Experience in recording in anesthetized cats and awake monkeys, and neuroanatomical tracing of pathways is the position is available immediately. Annual salary ranges from $27,500 depending upon experience. A Ph.D. in a relevant field is required, and expertise in one or more of the following areas is desirable: single-unit recording techniques, auditory physiology, neuroanatomical training, techniques of studying auditory system (e.g., electrophysiological instrumentation. Inquiries or applications should be sent by 1 February 1988 to: Dr. J. A. Nagle, Department of Pharmacology, University of Washington, Seattle, WA 98195. Equal Opportunity Employer.

RESEARCH ASSOCIATE: Position available with background in experimental rats, enzyme kinetics, pharmacokinetics and computer modeling. Excellent research experience expected. The successful candidate will be responsible for the generation of experimental single-unit recording techniques, auditory physiology, neuronal anatnome training, and computer proficiency. Inquiries or applications should be sent by 7 February 1988 to: Dr. J. D. Nagel, Department of Pharmacology, Indiana University School of Medicine, Indianapolis, IN 46223. Equal Opportunity Employer.

The Cell Biology Section of the Experimental Therapy Department at the Wellcome Research Laboratories (Research Triangle Park, North Carolina), is presently searching for a SCIENTIST to initiate and conduct an independent research program involving hematopoiesis and nuclear receptor function. This newly created position will primarily involve the establishment of an in vitro hematopoietic colony assay system to assess bone marrow toxicity of potential therapeutic compounds and conduct research related to hemopoiesis. The successful candidate will have significant cell culture experience with specific knowledge of hematopoietic colony assay systems desirable, demonstrated ability to conduct independent research and a desire to interact in a multidisciplinary approach to drug development. Interested candidates should send curriculum vitae to: Employment Supervisor, Position #3019, Burroughs Wellcome Co., 1030 Cornwallis Road, Research Tri- angle Park, NC 27709.

Burroughs Wellcome is an Equal Opportunity/Affirmative Action Employer. Women, members of minority groups, the handicapped and veterans are encouraged to apply.

SENIOR EUKARYOTIC MOLECULAR GENETICIST
The Department of Anatomy and Cellular Biology of Tufts University School of Veterinary Medicine is seeking an established eukaryotic molecular geneticist to join the faculty in the School of Veterinary Medicine. The program will be housed in newly renovated, high-quality laboratory space at the School’s 634-acre Grafton campus, located 37 miles west of the School’s Boston campus. The individual selected will have the opportunity to recruit other scientists for this program and help design and equip this facility. Candidates should possess a doctoral degree, have substantial experience in eukar-yotic molecular genetics or a related field, be capable of developing and sustaining a program in this field, and have an excellent record in obtaining competitive funding. Preference will be given to individuals who have expertise in gene expression and the application of techniques of molecular biology to an area of animal biology. We especially seek candidates who would interact well with an existing group involved in molecular, cellular and physiological studies of early development in invertebrates and domestic animals and transgenic manipulations thereof, and with neighboring biotechnology companies. Academic appointment can be at the Professor level and will require the candidate to submit a letter of interest, curriculum vitae, a description of current and future goals and current research support, and the name of at least one well-established scientist. Applications should be submitted to: Dr. Bryan Toole, Chairman, Department of Anatomy and Cellular Biology, Tufts University Schools of Veterinary Medicine, Dental Medicine, and Medicine, 150 Harrison Avenue, Boston, MA 02111.
POSITIONS OPEN

TWO MARINE SCIENTISTS, UNIVERSITY OF CALIFORNIA SANTA BARBARA

The Marine Science Institute, University of California, Santa Barbara invites applications for two professional researchers in any field of marine science. Ph.D. required in any one of the following areas: marine biology, oceanography or marine science. Each selected candidate will be expected to raise, through extramural funds, 50% of annual salary and develop strong research program. Rank and salary negotiable. One-year appointments with possibility of annual renewal.

Send letter of interest, curriculum vitae, and three names of references to: James Bennett, Marine Science Institute, University of California, Santa Barbara, CA 93106. Apply by 15 February 1988; applications accepted until position is filled.

SENIOR RESEARCH ASSOCIATE—The Division of Trauma in the Department of Surgery at the State University of New York at Stony Brook is recruiting for an individual to develop and organize its research program in trauma, burns, shock, sepsis and intensive care. A Ph.D. or M.D., or an equivalent degree; a minimum of 4 years in a major research program with 5 years of laboratory experience in trauma, burns, shock, sepsis, or intensive care required. Salary is negotiable. Send curriculum vitae to: J. S. K. Krueger, Chair, Division of Trauma, Health Sciences Center, Stony Brook, New York 11794.

SUNY at Stony Brook is an Equal Opportunity/Affirmative Action Employer.

VISITING ASSISTANT PROFESSORSHIP

A 1-year temporary replacement position to teach a one-semester introductory course in biology for non-majors; and to teach in the teaching of a one-semester introductory biology course for majors; and to teach an upper-level course in biochemistry, immunology, or virology. Applicants should send curriculum vitae and three letters of reference by 15 February 1988 to:

Tom Brady, Chairman
Biological Department
Hampton College
Clifton, N.J. 07013

Hamilton College is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

WILDLIFE BIOLOGIST/ASSISTANT PROFESSOR (Ph.D.). Tennessee Technological University is seeking a wildlife biologist to fill a ten-track position in the Department of Biology beginning as early as spring quarter 1988 (24 March 1988). Preference will be given to persons with expertise in waterfowl biology and wetlands ecology. The individual will be expected to teach courses in wildlife science, direct graduate thesis research, and conduct an extensive program of research and student advisement. Additional duties will include teaching general zoology and coordinating the general zoology program. Salary will be commensurate with experience and qualifications. Application deadline is 15 February 1988 or until filled. Tennessee Technological University is an Affirmative Action/Equal Employment Opportunity Employer. Applicants should send letter of application, complete resume, names, addresses, and telephone numbers of four references to:

Dr. Michael J. Harvey, Chairman
Department of Biology
Tennessee Technological University
 Cookeville, TN 38505

TRAINING PROGRAM

NASA PLANETARY BIOLOGY INTERNSHIPS

The Marine Biological Laboratory, Woods Hole, MA, invites applications from graduate students and seniors accepted in graduate programs for $2000 awards plus travel to participate in research at NASA-funded and collaborating laboratories on the Marine Station at approximately six weeks. Application deadline: 1 March 1988. For information and applications, contact: Michael Enzien, Planetary Biology Internship, Room E, Department of Biology, Boston University, 2 Cumming Street, Boston, MA 02215. An Equal Opportunity/Affirmative Action Institution.

SYMPOSIUM

BIOCHEMICAL ENDOCRINOLOGY SYMPOSIUM

The Tenth Annual Meeting of the University of California, Riverside-Nichols Institute Symposium on Cellular and Molecular Endocrinology will be held Thursday and Friday, 24 and 25 May 1988 at the University of California, Riverside campus at the foot of the Box Springs Mountains. The purpose of the meeting is to foster communication among scientists who are interested in the cellular, biochemical and structural aspects of endocrinology. The meeting will have five sessions devoted to the topics of: (a) reproductive biology, (b) growth and insulin-like growth factors, (c) immunity/cancer, (d) calcium regulating hormones, and (e) steroid receptors. Fifteen internationally renowned scientists will present lectures on their work in these areas. They include the following: Alan Balmain (Scotland), Bruce Beutler (USA), Craig V. Byus (USA), T. R. G. Campbell (UK), R. A. Chao (USA), H. A. Eisman (USA), R. H. Gomperts (USA), D. B. Griswold (USA), M. H. G. Kato (USA), P. K. A. Donoho (USA), R. E. Reents (USA), P. A. Rapraeger (USA), F. D. Rockett (USA), R. D. Rennert (USA), C. G. R. Gruenberg (USA), P. L. A. Harris (USA), and P. A. L. Harris (USA).

Registration fees for the meeting are $75.00 per person ($70.00 for postdoctoral students/fellows). Meals are included. For further information contact: Dr. William R. Gallard, Department of Biological Science, University of California, Riverside, CA 92531. Telephone: 714-787-9800.

TRAINING PROGRAM

GRADUATE PROGRAM IN EXPERIMENTAL PATHOLOGY

The Experimental Pathology Program at the University of California, San Diego, has graduate fellowships available in September 1988. This interdepartmental program places a particular emphasis on understanding the molecular mechanisms of human disease. Research areas include viral carcinogenesis and oncogenes (G. Walter, J. Lipinski), molecular basis of retinoblastoma (W.-H. Lue), virus-induced autoimmune disease (R. Fujinami), mechanisms of signal transduction (J. Peramico), neuropathology of the AIDS virus (C. Wiley), differentiation of African trypanosomes (C. Davis), and cardiovascular disease (G. Bloor). This Ph.D. program is open to students with a Bachelor's degree who wish to enter medical research without becoming physicians; and to the study of biology, medicine, and veterinary science. Further information and application forms available from: Dr. J. Lipinski, Department of Pathology M-012, University of California, San Diego, La Jolla, CA 92039.

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain a doctor of optometry (O.D.) degree in two calendar years. Opportunities exist in private practice, industry, education, and research. Contact: Ph.D.-O.D. Program Director, Admissions Office, The New England College of Optometry, Room 14, 424 Beacon Street, Boston, MA 02215.

FELLOWSHIPS

A limited number of POSTDOCTORAL FELLOWSHIPS will be available in the fall of 1988 in research in marine science, geology, and ocean engineering. Research areas include physical oceanography, marine biology, invertebrate larval biology, zooplankton biology, invertebrate reproduction and development, fish ecology and behavior, mechanical, electrical or environmental engineering. Deadline for application is 1 April 1988. Specifying area of interest with request for information brochure and application packet from: Dr. Marshall Youngbluth, Postdoctoral Program, Harbor Branch Oceanographic Institution, Inc., 5600 Old Dixie Highway Fort Pierce, FL 34946. An Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP

The Division of Medical Genetics, Emory University School of Medicine, is seeking applications for a postdoctoral fellowship to study the molecular techniques of RFLP linkage analysis and cloning the Emery-Dreifuss Muscular Dystrophy gene. To apply, send curriculum vitae and a synopsis of current and future research interest to:

Dr. Louis J. Elasta, II, Director
Division of Medical Genetics
Emory University School of Medicine
2040 Ridgewood Drive
Atlanta, GA 30322

Deadline for receipt of applications is 22 January 1988.
The Molecular Pharmacology Department, directed by Dr. Stanley T. Crooke at Smith Kline & French Laboratories, located in suburban Philadelphia, is offering Postdoctoral Research opportunities in several ongoing research projects. Postdoctoral scientists will work in close association with SK&F scientists who are involved in the basic research process of novel drug-target and drug discovery. Positions are currently available in the following areas.

**Phospholipases**
We are seeking a Postdoctoral Scientist to study the enzymology and regulation of phospholipases. The successful candidate will study the regulation and enzyme reaction mechanism of mammalian phosphoinositide-specific phospholipase C and/or mammalian phospholipase A$_2$ using a combination of genetic, cell biological, and classical biochemical techniques.

The successful candidate is required to have:
- Ph.D. in Biochemistry, Molecular Pharmacology, or a related discipline with 0-2 years postdoctoral experience.
- Training in protein biochemistry, molecular biology, cell biology, or related discipline.
- Experience and/or practical knowledge in enzyme kinetics, biochemistry of phospholipids, and signal transduction mechanisms.

**Ubiquitin**
The Postdoctoral Scientist will participate in genetic and biochemical studies with the goal of understanding the role of ubiquitination processes in cellular physiology and pathophysiology. This is a multidisciplinary research project involving protein engineering (see J. Biol. Chem. 262: 14213, 1987), structural characterization, enzymology, cell physiology, and mammalian gene regulation.

The successful candidate is required to have:
- Ph.D. with 0-2 years of postdoctoral experience.
- Training in molecular biology, biochemistry, cell physiology, mammalian cell genetics, or related field.

**Topoisomerases**
The Postdoctoral Scientist will participate in a program directed at the genetic, biochemical, and pharmacologic characterization of a variety of forms and subtypes of these enzymes and their functional roles in cellular differentiation, transformation and malignancy. The scientist will receive extensive training in molecular biology and cellular pharmacology relating to these enzymes.

The successful candidate is required to have:
- Ph.D. with 0-2 years of postdoctoral experience.
- Training in biochemical pharmacology, cell biology and/or molecular biology.

We consider postdoctoral studies to be of major importance in an individual's career and encourage publication of findings in leading journals and full interaction with the scientific community. Our postdoctoral appointments are normally for two years duration.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send you C.V. and the names of three references to Robert F. Obst, Manager, Personnel Relations, R0121, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.
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