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The Department of Cell Biology invites applications for a position at the rank of assistant professor starting in 1993. Candidates must hold the degrees of M.D. and/or Ph.D. and have at least 2 years of postdoctoral experience. Candidates should have research expertise in cell or developmental biology, in molecular biology applied to study of cell function, or in cellular or molecular neurobiology. Successful candidates will be expected to develop independent, externally funded research programs and to participate in the teaching and training of medical students, graduate students, and postdoctoral fellows. Applicants should send their curriculum vitae, a statement of research accomplishments, research plans and teaching interests, and names of three referees before 1 July 1992 to: Chair, Department of Cell Biology, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510.

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The Division of Neuropathology at Northwestern University is expanding with the hiring of three additional neuropathologists and one molecular neurobiologist. The Division is looking for individuals at the **ASSISTANT AND ASSOCIATE PROFESSOR** levels with demonstrated capacity for independent research. We are particularly interested in candidates with interests in Alzheimer's and other neurodegenerative diseases, in human and experimental neurooncology and in interactions of the CNS with growth factors and cytokines. The Ph.D. neurobiologist should have a major interest in the biology and pathology of myelin. Successful candidates will interact with three neuropathologists, one of whom is at the Childrens Hospital, and with an increasing number of investigators in the neurological sciences. The M.D. neuropathologists will be involved in both diagnostic and didactic neuropathology, but will have ample time for research. Laboratory space and research support for 3 years will be provided. Please send curriculum vitae and three names of referees to: Mauro C. Dal Canto, M.D., Division of Neuropathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611. Northwestern University is an Affirmative Action/Equal Opportunity Employer and women and minorities are particularly encouraged to apply.

POSITIONS OPEN

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SENIOR STAFF (ASSISTANT PROFESSOR EQUIVALENT) OR POSTDOCTORAL FEL-LOWSHIP (depending on qualifications) available immediately to study regulatory mechanisms and functions of small molecular weight GTP binding proteins (RAS superfamily). Particular emphasis on the roles for these proteins in protein secretion in mammals and yeast. Experience in nucleotide binding or protein secretion fields preferred. Send curriculum vitae and names of three references to: Richard A. Kahn, Ph.D., Laboratory of Biological Chemistry, National Cancer Institute, NIH, Building 37, Room 5D-02, 9000 Rockville Pike, Bethesda, MD 20892. An Equal Opportunity/ Affirmative Action Employer.

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ASSISTANT PROFESSOR. One-year position; begins August 1992. Teach a freshman level diversity of life course and an upper level comparative animal physiology course. Ph.D. in the biological sciences and commitment to undergraduate teaching, liberal arts and sciences education, and cultural diversity. Prefer specialities in invertebrate or vertebrate physiology or neurophysiology. A national, tenure-track search will be conducted during the 1992–1993 academic year. Tenure-track faculty are expected to develop research programs that actively involve undergraduate students in the research process. Send interest letter, curriculum vitae, and three letters of reference by 17 April 1992 to: Physiologist Search, University of Puget Sound, P.O. Box 7297, Tacoma, WA 98407. An Equal Opportunity/Affirmative Action Educator/Employer.

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The strengths of this department include active research thrusts in (1) membrane receptor and ion channel biology, (2) neuropharmacology and intracellular signaling, (3) nucleic acid biochemistry and molecular mechanisms of resistance of anticancer drugs, (4) cell adhesion mechanisms, and (5) membrane protein structure/function. The department faculty interact extensively with basic and clinical scientists in other departments and with academic and industrial scientists throughout the Research Triangle. The department conducts a strong graduate program supported by an NIH training grant.

The University of North Carolina is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Applicants should send curriculum vitae, a statement of research plans, and the names of at least three referees to: K. D. McCarthy, Ph.D., Faculty Search Committee Chairman, Department of Pharmacology, CB #7365, University of North Carolina, Chapel Hill (UNC-CH), NC 27599-7365. UNC-CH is an Equal Opportunity/Affirmative Action Employer.

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Join in the development of *in vivo* disease models and ongoing research using molecular, cellular and ion channel techniques directed toward the discovery of novel therapeutics for the treatment of stroke, diabetes and atherosclerosis. Respond to Department CM.

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409/845-5777). The Texas A&M University System is an Equal-Opportunity/Affirmative-Action Employer.

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The Agouron Institute has an opening in its Microbiology Group for an established investigator who intends to maintain an independent research program in the area of bioremediation. The Microbiology Group at Agouron emphasizes environmental microbiology, particularly work with anaerobic halophiles and thermophiles from marine and subsurface environments. The basic mechanisms involved in maintenance, distribution and function of these organisms are being studied using a broad range of approaches including molecular biology, genetics, physiology, biochemistry and ecology. An investigator with interest in more applied aspects, i.e. bioremediation, is sought to broaden the spectrum of activities of the Group.

The Agouron Institute is a non-profit, research organization with several autonomous research groups in eukaryotic and prokaryotic biology.

Please send a Curriculum Vitae and a letter describing research interests to: Mike Silverman, Melvin Simon, or Willis A. Wood, The Agouron Institute, 505 Coast Blvd. South, La Jolla, CA 92037. An equal opportunity employer.

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR

Position available to evaluate clinical pharmacology and metabolism of antiviral and anti-HIV agents evaluated in clinical trials. Experience in analytical chemistry techniques (HPLC, GC, RLA, etc.) and pharmacokinetic analysis is essential. A Ph.D. in pharmacology or equivalent, or a Pharm.D. with at least 3 years of demonstrable productive postdoctoral experience in academia is desirable. Stipend is highly competitive. Forward curriculum vitae and names of three references to: Dr. J. P. Sommadossi, AIDS Pharmacology Program—VH 113, 1700 University Boulevard, University of Alabama at Birmingham (UAB), Birmingham, AL 35294–0019. UAB is an Affirmative Action/Equal Opportunity Employer.

FACULTY LEVEL RESEARCH POSITION is immediately available to study the molecular mechanisms of leukocyte chemoattractant signal transduction. Research will focus on delineating structure/function relationships of chemoattractant receptors and the role of heterotrimeric and *ras*-related GTP-binding proteins. Requirements include outstanding doctorate training in biochemistry, molecular/cellular biology or related discipline as well as an exemplary record of postdoctoral research in a relevant area. The preferred candidate will also have experience in the biology of leukocyte function. The level of appointment (ASSOCIATE OR ASSIST-ANT RESEARCH PROFESSOR) will depend on the individual's qualifications. This research is fully funded for a minimum of 3 years. Send curriculum vitae and names of three references to: Ralph Snyderman, M.D., Department of Medicine, Duke University Medical Center, Box 3701, Durham, NC 27710. Duke University is an Equal Opportunity/Affirmative Action Employer.

SENIOR STAFF (ASSISTANT PROFESSOR EQUIVALENT) OR POSTDOCTORAL FEL-LOWSHIP (depending on qualifications) available immediately to study HIV transcriptional regulation and retroviral assembly mechanisms. Studies will focus on the cloning and characterization of cellular transcriptional factors and mechanisms of viral protein subcellular targeting and intracellular interactions. Experience in molecular biology and protein purification preferred. Send curriculum vitae and names of three references to: Dr. R. L. Felsted, Laboratory of Biological Chemistry, Building 37, Room 5D-02, NIH, 9000 Rockville Pike, Bethesda, MD 20892. An Equal Opportunity/ Affirmative Action Employer.

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Department of Anesthesiology is inviting applications and nominations for faculty positions at ASSISTANT **PROFESSOR AND ASSOCIATE PROFESSOR** levels. These positions offer excellent opportunities to develop an academic career in a department with excellent clinical and research resources and facilities. We are interested in qualified candidates in general anesthesia and in basic science research in molecular pharmacology of ion channels or cerebrovascular physiology or pharmacology. Qualified candidates should send curriculum vitae to: William F. Childres, M.D., Chairman, Department of Anesthesiology, Baylor College of Medicine, 6550 Fannin, Suite 1003, Houston, TX 77030. Baylor College of Medicine is an Affirmative Action/Equal Opportunity Employer.

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Mercer University School of Medicine has a tenuretrack faculty position available for a person with background or experience in nutrition. The appointee will contribute to nutrition/biochemistry education in a problem-based medical curriculum and will be expected to develop an independent research program. Consideration will be given only to applications will be accepted until the position is filled. Submit curriculum vitae, statement of career goals, and names of three references: Dr. Robert J. Moon, Chairman, Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA 31207. An Equal Opportunity/Afirmative Action Employer. Women and minority candidates are encouraged to apply.

POSITIONS OPEN

ACADEMIC SURGICAL PATHOLOGIST. The Department of Pathology of Harbor-UCLA Medical Center is seeking an academic surgical pathologist at the ASSISTANT/ASSOCIATE PROFESSOR level. The hospital is a 553-bed facility affiliated with the University of California at Los Angeles (UCLA) School of Medicine and is located in a suburb of metropolitan Los Angeles, close to the ocean with an exceptional climate. Applicants should be Board-eligible/certified in anatomic pathology and must be qualified for California licensure. Experience and/or training in a subspecialty field is desirable. A commitment to research, and teaching medical students and residents, is essential. Academic appointment in the UCLA School of Medicine and salary commensurate with qualifications and experience. Send curriculum vitae to: Shi-Kaung Peng, M.D., Ph.D., Head, Surgical Pathology, HARBOR-UCLA MED-ICAL CENTER, 1000 West Carson Street, Tor rance, CA 90509. Harbor-UCLA Medical Center is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR AT STANFORD UNIVERSITY MEDICAL CENTER AND DIRECTOR OF THE CENTER FOR NARCOLEPSY

The Department of Psychiatry and Behavioral Sciences at the Stanford University School of Medicine is recruiting for the full-time faculty position of Director of the Center for Narcolepsy in the Sleep Research Center. This tenure-track position is at the level of assistant professor of the School of Medicine.

Applicants for this position must have an M.D., Ph.D. or equivalent degree and should be Board-eligible or -certified in sleep disorders medicine. A proven record of training and investigation in basic and clinical sciences related to the molecular genetics and pharmacology of narcolepsy research is required. The successful candidate will oversee the management of the narcoleptic canine colony, the Center for Narcolepsy program project and also be involved in the training of residents and fellows in the Sleep Research Center.

Stanford University is committed to increasing the representation of minority groups and women on its faculty and particularly encourages amplication from such candidates.

articularly encourages application from such candidates. Applicants should send curriculum vitae and the names of three references within 4 weeks of the date of publication of this advertisement to: William C Dement M D. Ph D.

William C. Dement, M.D., Ph.D. Chairman of Search Committee Sleep Research Center Department of Psychiatry and Behavioral Sciences TD-114 Stanford Medical Center Stanford, CA 94305

JACOB JAVITS NEUROSCIENCE AWARD laboratory has an opening for a RESEARCH ASSIST-ANT PROFESSOR, with a Ph.D., or an extremely well-qualified RESEARCH ASSOCIATE, to supervise the main histology laboratory. Candidate should have experience as a histologist or morphologist and will be required to learn computer-based morphometry. Special consideration will be given to individuals with previous experience in the investigation of brain microvascular anatomy or vascular disease.

anatomy or vascular disease. Check the following references for a sense of the direction of the research: Soc Neurosci Abstr 13, 1251 (1987); A/NR 11, 431-439 (1990); Ann Neurol 28, 477-486 (1990); Clin Neuropathol 9, 196-204 (1990). Send a single-page concise résumé to: Dixon M. Moody, M.D., Department of Radiology, Bowman Gray School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1088, or FAX: 919-748-2029. Affirmative Action/Equal Opportunity Employer.



Postdoctoral Opportunities.

Listed below are a few of the excellent opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

Developmental Biology Igor B. Dawid, PhD

The molecular basis of vertebrate embryogenesis is being studied using the frog *Xenopus laevis* as an experimental system. Current research on the role of peptide growth factors in the cell interactions required for the formation of the mesoderm and for axis formation has focused on the activation of regulatory genes, in particular homeobox genes of the LIM class, in the embryo. Laboratory of Molecular Genetics (OE-8), NICHD, Building 6B, Room 413.

Developmental Biology/Molecular Evolution Graeme J. Wistow, PhD

The molecular evolution, structure and function of crystallins—the lens structural proteins which have been directly recruited from enzymes and stress proteins—are being studied. Current projects concentrate on the molecular biology and promoter mechanisms of novel mammalian enzyme crystallins and on the regulation of the lymphokine-related growth factors and other molecules involved in development of the normal eye. A background in molecular biology is strongly preferred. Laboratory of Molecular and Developmental Biology (OE-8), NEI, Building 6, Room 204.

Immunology Lois Salzman, PhD

An immunologist is sought to determine the structure and properties of polyreactive antibodies. Experience is desirable in protein chemistry, development of synthetic peptides, production of monoclonal antibodies, and the study of antigen processing and presentation. Opportunity exists for technical and/or postdoctoral support. Intramural Research Program (OE-8), NIDR, Building 30, Room 131.

Molecular Biology of the Phagocytic Cell Harry L. Malech, MD

Molecular biology of the structure, function and regulation of neutrophil NADPH oxidase and the molecular basis of chronic granulomatous disease (CGD) are being studied. Site directed mutagenesis of cDNAs encoding oxidase components, retroviral expression of oxidase components, and the culture of myeloid progenitor cells are directed towards both analysis of the oxidase and genetic reconstitution of CGD. Background in molecular biology and/or hemopoietic progenitor culture is desirable. Laboratory of Host Defenses (OE-8), NIAID, Building 10, Room 11N113.

Molecular Endocrinology Kevin J. Catt, MD, PhD

The molecular mechanisms of signal transduction are being studied in endocrine target cells in the hypothalamus, pituitary, and adrenal glands. Current studies are focused on the expression, regulation, and structurefunction properties of receptors for angiotensin II, GnRH, and ACTH. Experience in molecular biology (cloning, transfections, gene regulation) is required. Endocrinology and Reproduction Research Branch (OE-8), NICHD, Building 10, Room BIL400.

Neuroethology John D. Newman, PhD

Behavioral neuroscience techniques are used to study the central mechanisms of auditory communication in nonhuman primates. Two positions are currently available:

Ethopharmacology. Behavioral effects of neuropeptides and monoamine receptor ligands are being studied under semi-naturalistic conditions.

Auditory neurophysiology. The acoustic features embedded within species—specific vocalizations which activate cortical neurons—are being characterized. Animal Center (OE-8), NICHD, Building 112, Room 205, Elmer School Road, Poolesville, MD 20837-0289.

Additional Postdoctoral Fellowship Opportunities

For an on-line listing of additional postdoctoral openings you may access the NIH EDNET Bulletin Board's POSTDOC conference via modem (1,3014922221). The settings for modem access are "7,Even,1". When connected to NIH, type in ",vt100 at the connect message, "F5E" at initial, and "AJLI" at account. Those interested in receiving a catalog featuring descriptions of NIH research laboratories and other postdoctoral opportunities may contact the Office of Education, Building 10, Room 1C129. Phone: 301-496-2427.

To Apply

If you hold a PhD, MD, or equivalent degree and would like to be considered for one of these positions, please send a cover letter, Curriculum Vitae, bibliography, and statement of research interests to the

address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



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The Division of Pharmacokinetics and Drug Metabolism has an opportunity for a scientist to assist in all aspects of *in vivo* and *in vitro* disposition studies on drug candidates to GLP standards, including dosing and sampling, developing and validating analytical methods, and reporting the results of these studies.

Candidates must have a Ph.D. degree in chemistry, pharmacology, toxicology, or a related science; **OR** a Master's degree in one of the above fields plus two years of experience in drug disposition studies; **OR** a Bachelor's degree in one of the above fields plus four years of experience in drug disposition studies. One year of experience in HPLC and/or immunoassay methods is required. Experience with computer-based data analysis packages such as SAS, RS/I, Excel, or equivalent is needed, as well as experience with *in vivo* studies. Candidates selected for interview will take an on-site writing assessment. Other factors to be considered include experience working under GLP requirements and communication skills.

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To aid us in achieving our mission, we seek an experienced Analytical Biochemist for our expanding research & development center

Working in our Analytical Sciences Department, you will advance researchstage projects into development by characterizing the structure, identity and purity of recombinant proteins and monoclonal antibodies.

The successful candidate will have a BS/MS and several years relevant experience along with the ability to work effectively with others in multidisciplinary project efforts. Knowledge of modern protein analytical techniques including SDS-PAGE, IEF, Western blot, immunoassay, HPLC and capillary electrophoresis is desirable.

We offer an excellent compensation and benefits package and relocation assistance to qualified individuals in a dynamic, people oriented environment in our expanding, campus like facility located in DANBURY, CT.

We will have representatives at the FASEB meeting at Anaheim, CA and the ACS meeting in San Francisco, CA.

For consideration, send resume and salary history to Dept. MH-211-1S Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877. As a progressive health care company, we have a nonsmoking environment. We are an equal opportunity employer m/f/h/v.



POSITIONS OPEN

The Department of Pathology at Harbor-UCLA invites applications for an academic neuropathologist at the ASSISTANT/ASSOCIATE PROFESSOR level. Har-ASSISTANI/ASSOCIATE PROFESSOR level. Har-bor-UCLA is affiliated with the UCLA School of Med-icine and is located in a suburb of Los Angeles. Academic appointment is in the UCLA School of Medicine and applicants should be Board-eligible/certified in anatomic pathology and must be qualified for California licensure. The candidate is expected to conduct a neuropathology disgnostic service and traching program within the de-The candidate is expected to conduct a neuropathology diagnostic service and teaching program within the de-partment, to conduct an independent research program and to collaborate with neuroscientists at Harbor and at UCLA. Harbor-UCLA Medical Center has a strong clinical program in neurology and neurosurgery as well as a neuroscience research unit. Teaching program re-sponsibilities include training of anatomic pathology residents, neurology residents and UCLA medical stu-dents in neuronathology. dents in neuropathology, and directing neuropathology portion of the systemic pathology course for UC River-side second-year medical students at Harbor. Please send your curriculum vitae to: Dr. Samuel French, Chair-man of the Search Committee, Department of Pathol-ogy, Harbor-UCLA Medical Center, 1000 West Car-son Street, Torrance, CA 90509. Harbor-UCLA Medical Center is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE RESEARCHER OF MOLECULAR CELL BIOLOGY OR ASSISTANT/ASSOCIATE ADJUNCT PROFESSOR

Ph.D. with expertise in molecular/cell biology to join a program investigating the immuno/cell/molecular biolo-gy of the glomerulus and glomerular diseases. Adjunct Professor requires documentation of proficiency in teaching of students. Four years of start-up funding. Submit curriculum vitae with five references to: Dr. Dennis Styne, Chair, Department of Pediatrics (5): Dr. Dennis Styne, Chair, Department of Pediatrics, 2516 Stock-ton Boulevard, Sacramento, CA 95817. The Universi-ty of California, Davis, is an Affirmative Action/Equal Opportunity Employer. Position remains open until filled but not later than 30 September 1992 to be considered.

COLUMBIA UNIVERSITY FACULTY POSITIONS II DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences of Columbia University invites applications from outstanding candi-dates for full-time faculty positions at the senior and junior levels. Preference will be given to established investigators applying at the ASSOCIATE PROFES-SOR OR PROFESSOR LEVEL for at least one position. The search will focus on individuals using molecular and genetic approaches in the study of development.

Candidates should forward their curriculum vitae, a summary of research interests, and the names of three references (junior candidates should arrange for letters to be sent) to: Faculty Search Committee, Department of Biological Sciences, 600 Fairchild, Columbia Univer-sity, New York, NY 10027. The deadline for applica-tions is 30 April 1992. Columbia University is an Equal Opportunity/Affirmative Action Employer.

PROFESSOR

Stanford University is seeking a faculty member at the professor level to join the Cardiovascular Research Center and develop research in molecular cardiology. Candi-dates must have a Ph.D. in molecular or cellular biology and an established record of excellence in basic science investigation on molecular biology of the heart. Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates. Send curricu-lum vitae and names of three potential referees to: Victor J. Dzau, M.D., Chief, Division of Cardiovascular Medicine, Scanfed University Cabel of Medicine Medicine, Stanford University School of Medicine, Stanford, CA 94305-5246.

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SCIENCE, VOL. 255

POSITIONS OPEN

FACULTY POSITION IN PHARMACOLOGY TOXICOLOGY FOR TOXICOLOGIST

The University of Mississippi Medical Center invites applications for a position with the rank of ASSOCI-ATE OR FULL PROFESSOR in the Department of Pharmacology and Toxicology. The applicants should have a Ph.D. or M.D. degree, a strong record of published research and a history of grant support in areas using modern biochemical, cell biological or molecular genetic approaches to toxicological research. Applicants interested in immunological, neurological, environmental, or reproductive toxicology are most desired. Salary and rank will be commensurate with education and experience. The successful applicant is expected to establish an independent, extramurally funded research program and participate in the teaching activities of the department. Interested persons should send curriculum vitae with a brief description of research interests and arrange for three letters of reference. These should be sent to: Arthur S. Hume, Ph.D., Chairperson of Search Committee, Department of Pharmacology and Toxicology, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216–4505. Equal Opportunity Employer, M/F/H/V.

ASSOCIATE OR PROFESSOR AND CHAIR, PHYSICS. Dynamic person to chair Physics Department. Begin fall 1992. Enhance intro sequences, expand major. Requires doctorate in physics or related; teaching, research, administrative experience. Nominations, applications to include curriculum vitae, three reference letters, to: Chair, Physics Search Committee, 3033 Cowley Hall, University of Wisconsin–La Crosse, La Crosse, WI 54601. All must be received by 15 May 1992. Women, minorities encouraged to apply. Alphabetical list of nominees and applicants, without differentiation, may be released after deadline. An Affirmative Action/Equal Opportunity Employer.

DEPARTMENT HEAD. Position available for our expanding Retrovirology Department. This person would direct a large staff involved in ex vivo antiviral studies with HIV-1. Applicants should have an advanced degree and direct experience in this area. Make inquiries by 20 April 1992 to: William A. Meyer, III, Ph.D., at 1-800-368-2576, ext. 1593, or to: Maryland Medical Laboratory, Inc., 1901 Sulphur Spring Road, Baltimore, MD 21227.

CANCER CENTER DIRECTOR

The Dartmouth-Hitchcock Medical Center seeks a Director for the Norris Cotton Cancer Center (NCCC), an NCI-designated Comprehensive Cancer Center. Candidates with either basic science or clinical orientations will be considered. Essential qualifications are a strong record of research achievement and administrative experience in cancer-related areas. Responsibilities of the Director include: developing program goals and direc-tions for the teaching, research, and patient service activities that take place under the auspices of the Cancer Center; working with other administrative officers of the Madical Context to accurate the interactive and accurate Medical Center to ensure the integration and continuity of these activities; directing the preparation of funding applications including the institution's Cancer Center Support (Core) Grant; participating with the Cancer Center staff in the process by which programs of preven-tion, screening, and improved care are mounted within the region served by the Cancer Center. Within the Medical Center and its affiliated organizations the Direc-tor participates in the development of policy, and serves as a focus for furthering multidisciplinary clinical and research activities in areas related to cancer. The Director will hold a tenure-track academic appointment in a department of Dartmouth Medical School. Letters of application should include curriculum vitae with a summary of relevant research, clinical, and administrative experience, and the names of at least three references. Please send letters of application to: Allan Munck, Ph.D., Chairman NCCC Director Search Committee, c/o NCCC Administration Office, 1 Medical Center Drive, HB 7920, Building 4, Level 4, Lebanon, NH 03756-0001 (telephone: 603-650-5505). Consider-ation of applications will begin 15 April 1992. The Dartmouth-Hitchcock Medical Center is an Affirmative Action/Equal Opportunity Employer.

27 MARCH 1992

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The Hyland Division of Baxter Healthcare, a leader in the area of human plasma-derived protein therapeutics, is undertaking the development of its next generation of therapeutics with the aid of state-of-the-art biotechnology. We seek energetic individuals who can contribute effectively in a multi-disciplinary R&D environment in the following areas:

SCIENTIST IV Virology (Dept. LD/V-4)

The successful candidate will assist in a broad range of R&D activities, including process validation and development/evaluation of antiviral agents, as well as PLA/IND support, assay development and applied viral research. A PhD is required in Virology, Microbiology, Biology, Biochemistry or a related field, plus 3-5 years post doctoral experience in Virology. Applicants must possess a strong background in general virology, process validation, GLP and GMP, as well DNA virus experience. Regulatory and virus risk management background desired.

SCIENTIST III Virology (Dept. LD/V-3)

This individual will be responsible for evaluation of antiviral agents, and immunochemical and biochemical assays in virology, including retrovirology. We require a BS degree in Microbiology, Biology, Biochemistry or a related field, plus 3-5 years related experience; or an MS degree with 1-3 years experience in retrovirology or related laboratory discipline. Experience with infectious HIV infectivity assays, immunochemical and biochemical assays is desirable. Strict interpretation and compliance with sterile technique and biohazard containment are essential. Applicants must be familiar with process validation and GLP.

The name Baxter Healthcare Corporation is synonymous with products, systems and services devoted to improving health care throughout the world. We are a Fortune 100 company providing a smoke-free environment, competitive compensation and benefits. Please send your resume in confidence (indicating on the outer envelope the Dept. Code for your position of interest) to: **Baxter Hyland Division, Human Resources Dept., 1710 Flower Avenue, Duarte, CA 91010.** An Affirmative Action/Equal Opportunity Employer.

Hyland Division



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SCIENTIST

We're a leader in monoclonal antibody technology, developing therapeutic products for life threatening diseases. We have an excellent opportunity in our Toxicology/Pharmacology Department for a Scientist.

You will work with technical staff in the development of experimental models of septic shock. You will participate in the design of experimental protocols and will conduct experiments which evaluate efficacy of drugs in these models. Emphasis will be placed on systems physiology approaches; however, additional expertise in related fields such as tissue culture could be utilized.

Requires a PhD in Physiology, Pharmacology, or related discipline, with 0-3 years' post-doctoral training. Experience in cardiovascular and/or renal pharmacology/physiology at the whole animal level and/or cellular level necessary.

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SCIENTIST

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SmithKline Beecham Pharmaceuticals, a leader in innovative pharmaceutical research, has an opportunity for a Postdoctoral Scientist to participate in the discovery of novel antineoplastic agents. The successful candidate will be involved in devising novel bioassays to selectively identify inhibitors of targets relevant to the growth and progression of neoplastic cells. Targets of current interest include recombination pathways involved in DNA damage repair, novel mechanisms for producing DNA damage, topoisomerases and signal transduction pathways involved in growth regulation. Bioassays will be transferred to a screening group for identification of leads from extracts of plants, marine organisms, and microorganisms. The successful candidate will have responsibility for investigating the mechanism of action of compounds discovered in the screens.

Requirements include a Ph.D. in Biochemistry, Pharmacology, Molecular Biology or a related field with 0-2 years of postdoctoral research experience. Skills in yeast genetics are highly desirable since many of the assay methods involve construction of specific yeast mutants. Demonstrated productivity as evidenced by publication in the scientific literature required.

Our state-of-the-art research facility is located in suburban Philadelphia, near Valley Forge, PA. SmithKline Beecham Pharmaceuticals provides a stimulating and challenging work environment based on creativity, commitment and teamwork. We offer an attractive compensation/benefits/relocation package. For confidential consideration, please send your C.V. and the names of three references to: Marilyn Leggleri, L0109, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.



Yale UNIVERSITY

Plant Developmental Geneticist

The Department of Biology seeks to appoint a tenure level plant biologist. Applications are invited from individuals using genetic, molecular and cell biological approaches to study plant development. The successful applicant is expected to conduct a vigorous research program and to be an effective teacher at the undergraduate and graduate levels.

Please send curriculum vitae, description of research interests and the names and addresses of three references by April 30, 1992 to: Plant Developmental Genetics Search Committee, c/o Chair, Department of Biology, Yale University, P.O. Box 6666, New Haven, CT 06511–8112.

Yale University is an Affirmative Action/Equal Opportunity Employer. Women and Minority Group Members are especially urged to apply.

Postdoctoral Research Associates

The Agricultural Research Service, as the principal scientific research agency of USDA, conducts research to solve technical food and agricultural problems of broad scope and high national priority. The agency's work is carried out under six specific research objectives---conservation of soil, water and air, plant productivity, animal productivity, commodity conversion and delivery, human nutrition and well-being, and integration of systems. Overall aim of ARS research is to ensure the continuation of an adequate supply of food and fiber of high quality to meet the needs of American people and for export.

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ARS is currently recruiting for 150 postdoctoral positions throughout the United States. **Opportunities exist in many** research areas, including:

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Successful candidates will be hired initially for up to 2 years in duration. Salary for these positions \$32,423 to \$38,861 (higher in parts of CA and NY) will be based on qualifications and experience. There are some employment restrictions for non-U.S. citizens.

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N.L. Bakes **Personnel Division (SC) USDA/ARS** 6305 Ivy Lane, Room 129A Greenbelt, MD 20770-1435 or call:

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Working in our Pharmaceutical Products Division, you will be involved in research relating to the role of cell adhesion molecules in the cardiovascular system (neutrophil-, monocyte adhesion to endothelial cells, atherosclerosis, thrombosis, inflammation, tissue repair, etc.). This will include collaborating with other scientists, studying the interactions of cytokines and cell adhesion molecules. investigating their role in vascular pathology, and developing new therapeutic approaches.

We require a Ph.D. or equivalent in the life sciences (cell biology, biochemistry, immunology preferred) and 3-5+ years of postdoctoral experience in the field of cell adhesion. Reply to Dept. PH, Job #50291.

ASSOCIATE BIOCHEMIST **Cell/Molecular Biology**

Working in our Diagnostics Division, this position will participate in research lead-ing to the identification of hepatitis markers. Responsibilities will include purifica-tion and characterization of liver antigens and immunoassay development.

We require an M.S. with a broad knowledge of protein biochemical techniques and molecular biology. Experience in immunoassay development or enzymolo-gy would be advantageous. Reply to Dept. AR, Job# 55793. We also are looking for:

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- Sequencing) Sr. Research Biochemists
- Instrument Development Scientists Analytical Chemists
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- Organic Chemists
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SUPERVISORY GENERAL BIOLOGIST-

The National Fisheries Contaminant Research Center, U.S. Fish and Wildlife Service (USFWS), Columbia, MO invites applications for Chief of its Field Research Division. The Field Research Division is responsible for identifying, evaluating, and predicting the effects of environmental contaminants on aquatic resources. This is a management position dealing with the administration of eight field research stations located across the Nation, and a research coordination unit in Columbia, MO. The Division currently consists of 41 professional and technical staff.

Candidates should have a diverse background in natural resource issues. Candidates with an equivalent of a Ph.D. are preferred with experience in supervisory/management positions, experience in budget preparation, administration, and legislative processes. Solid communication and interpersonal skills are a must. Must meet Office of Personnel Management qualification requirements.

The salary is \$54,607. Those interested should send a letter and curriculum vitae to Ms. Arlene Schwab, U.S. Fish and Wildlife Service, National Fisheries Contaminant Research Center, 4200 New Haven Road, Columbia, MO 65201 requesting application instructions. We will advise you where to send your formal application and the process.

For additional information about the position, contact **Dr. Richard Schoettger, Director, NFCRC, 314-875-5399.** ALL CANDIDATES WILL RECEIVE CONSIDERATION WITHOUT REGARD TO AGE, RACE, RELIGION, COL-OR, NATIONAL ORIGIN, POLITICS, SEX, OR OTHER NON-MERIT FACTOR.

PATHOLOGY

Veterinary Pathologist

he Department of Experimental Pathology, SmithKline Beecham Pharmaceuticals, is seeking an experienced Veterinary Pathologist to participate in the discovery and development of new therapeutic agents. SmithKline Beecham, a world leader in pharmaceutical research, is located in suburban Philadelphia, near Valley Forge, PA.

Successful applicants must have demonstrated ability in experimental pathology with an M.S. or Ph.D. or through publication of scientific work. Participation in the design, conduct and reporting of toxicity studies is expected as are collaborative interactions with Research Departments: investigation of pathogenic mechanisms is emphasized. A background in laboratory animal pathology is desired and board certification by the American College of Veterinary Pathologists is preferred.

SmithKline Beecham offers excellent compensation and benefits, an attractive relocation policy and a collegial work environment that offers considerable opportunity for personal and professional growth. For confidential consideration, please forward your curriculum vitae to: Helene McConnell, #M030, SmithKline Beecham Pharmaceuticals, PO Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.



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As a part of this group, you will focus on identifying novel therapeutic targets for the treatment of glaucoma, inflammatory and hyperproliferative diseases. Qualified candidates will be skilled in molecular biological techniques that might include gene cloning and expression, in situ hybridization, and transgenic animal work, normally acquired through a Ph.D. and three years postdoctoral research experience. A working knowledge of pharmacology is desirable.

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SCIENTISTS

(Candidates should have a Ph.D. and at least 2–3 years of post-doctoral experience)

MOLECULAR BIOLOGIST: Emphasis on gene expression in heterologous systems. Experience in site directed mutagenesis and in cDNA cloning would be advantageous.

PROTEIN BIOCHEMIST: Experience in protein purification, characterization and structure-function relationships. Interest in extensive collaboration with other groups for rapid identification of lead molecules is essential.

FERMENTATION SCIENTIST: Expertise in yield optimization and scale up of recombinant proteins from both eukaryotic and prokaryotic systems.

PHARMACOLOGIST: Experience in the pharmaceutical industry to design and carry out pharmacokinetic, biodistribution and other *in vivo* studies of novel cancer therapeutics.

MANAGER FOR DIAGNOSTICS/ASSAY DEVELOPMENT

Candidates who have the following three qualifications are encouraged to apply:

- a) Setting up diagnostics manufacturing processes (according to GMP and FDA guidelines) of reagents for protein based diagnostic kits;
- b) Development of novel assays to support Canji's R & D efforts:
- c) Experience in training and management of laboratory personnel.

RESEARCH ASSISTANT/ASSOCIATES are needed to join the above described research and development groups.

Canji offers an exciting research environment as well as a competitive salary and benefits package. Please send your resume to:

> 3030 Science Park Road Ste 302 San Diego, CA 92121 Attn: Human Resources

RESEARCHAIRDAVE

Support significant new advances in microbial and mammalian mutagenesis assays.

At the Agricultural Research Division of American Cyanamid company, scientists are supported by a research budget that has more than tripled in the last decade. Our 640-acre campus provides an ideal setting, with a new state of the art research laboratory and interdisciplinary environment where the learning process never stops.

Genetic Toxicology

Currently there is an opportunity in our genetic toxicology laboratory for a scientist to design, conduct and interpret microbial and mammalian mutagenesis studies under GLP regulation. You will be expected to develop mutagenesis assays using transgenic mice. In addition, you will participate in conducting other *in vitro* and *in vivo* genotoxicity assays for assessing chromosome and DNA damage.

The successful candidate will have a BS/MS in genetics, microbiology or a related discipline. This must be complemented with 3-5 years' experience in an industrial or contract genetic toxicology laboratory. Familiarity with molecular biology techniques and working with rodents is required. Training in enzymology and *in vitro* toxicology is highly desirable.

Cyanamid offers an excellent compensation and benefits package which includes 401k savings plan, flex-time work schedules and a convenient location one hour from New York City or Philadelphia. We invite you to forward your resume and salary history to: Employment Office, Dept. RS, American Cyanamid Company, P.O. Box 400, Princeton, NJ 08543-0400. An Equal Opportunity Employer M/F/H/V.



INDUSTRIAL TOXICOLOGIST

CYANAMID

National Starch and Chemical Company is recognized worldwide as a leader in specialty chemicals and related products, with sales over \$1.7 billion and annual profits exceeding \$140 million. Currently we have a challenging opportunity for an experienced Industrial Toxicologist at our World Headquarters and R & D center near Somerville, NJ.

Qualified candidates will have an MS or PhD degree in Toxicology or a related science and at least two years experience in chemical industry toxicology or a toxicological contract laboratory.

Your responsibilities will involve the moniforing and evaluating of toxicological information, and providing regulatory assistance on a company wide basis. Duties will also include the performance of hazard assessments on new and existing products as well as addressing other related product safety and hazardous substance issues.

The professional who will succeed in this position will have a unique combination of talents. Accordingly, we offer a unique combination of rewards including an attractive salary, generous company paid benefits and a stimulating work environment providing ample opportunity for professional growth and advancement.

Send resume and salary requirements in strict confidence to Mr. George E. Deodato, Employment Director, National Starch and Chemical Company, Finderne Avenue, Bridgewater, NJ 08807. An Affirmative Action Employer M/F.



POSITIONS OPEN

The College of Medicine of the University of Oklahoma Health Sciences Center invites applications and nominations for the position of **CHAIRPERSON** of the Department of Biochemistry and Molecular Biology. Applicants must have a Ph.D., M.D. or equivalent degree, and recognized success in research, teaching, academic administration and leadership. Any relevant research background will be considered, but the selection committee will support research interests that complement on-going programs and areas of emphasis. The successful candidate will be a catalyst to enhance the national visibility of those research programs through departmental, interdepartmental and interinstitutional participation.

The committee will begin immediately to screen applications until the position is filled. Interested individuals should submit a letter of application, curriculum vitae, a summary of accomplishments and goals, and the names of at least three references to: Robert D. Foreman, Ph.D., Professor and Chairman, Department of Physiology and Biophysics, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, OK 73190. An Equal Opportunity/Affirmative Action Employer.

DIRECTOR OF EXPERIMENTAL THERAPEUTICS DUKE COMPREHENSIVE CANCER CENTER

The Division of Hematology/Oncology at the Duke University Medical Center and the Duke Comprehensive Cancer Center are seeking an established investigator to coordinate a program in experimental therapeutics. Activities would be divided between clinical research, patient care, and teaching. Opportunities would be provided for laboratory research and collaboration with laboratory investigators. This individual would draw upon the resources of the Cancer Center to develop and evaluate novel approaches in the management of cancer. Applicants must be Board-qualified in medical oncology with a proven track record in clinical investigation, drug development and/or clinical pharmacology. Faculty rank for this position would be commensurate with previous experience and scholarly activities. If interested, please forward curriculum vitae to: Russel E. Kaufman, M.D., Director, Division of Hematology/Oncology, Box 3250, Duke University Medical Center, Durham, NC 27710, or call Dr. Kaufman at: 919-684-2657. Duke University is an Equal Opportunity/Affirmative Action Employer.

CYTOGENETIC LABORATORY DIREC-TOR—Vivigen, Inc., in beautiful Santa Fe, New Mexico, is seeking an M.D. or Ph.D. candidate, ABMG certified or -eligible as a clinical cytogeneticist; at least 4 years of experience in human clinical cytogenetics; significant experience in managing the scientific operation of a cytogenetic testing laboratory and technical production staff. Santa Fe is located in northern New Mexico and offers clear skies, no congestion, spectacular sunsets, and a wide variety of social and outdoor activities. Please send curriculum vitae to: Richard L. Neu, Ph.D., Vivigen, Inc., 2000 Vivigen Way, Santa Fe, NM 87505. Vivigen is an Equal Opportunity Employer.

INSTRUCTOR IN PHARMACOLOGY. Responsible for teaching graduate students on both an individual and group basis in the area of the interaction of G proteins, receptors, and phospholipases and their roles in cell proliferation and oncogenesis. The incumbent will also be responsible for the design, execution, and evaluation of in vitro biochemical and molecular genetic experiments in this area. Required: Ph.D. in biochemistry or molecular biology and at least 3 years of postdoctoral experience in the biochemistry and molecular biology of G proteins and associated receptors and effectors, documented by publication. Training or knowledge of relevant G protein physiology, pharmacology or endocrinology documented by graduate or medical training. Send application, curriculum vitae and two letters of reference to: Ms. Cherlyn Lacy, Department of Pharmacology, University of Texas (UT) Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235–9041. UT Southwestern is an Equal Opportuniny Institution.

POSITIONS OPEN



FACULTY POSITION IN PHARMACOLOGY/ TOXICOLOGY, College of Pharmacy and Allied Health Professions, Wayne State University. The Department of Pharmaccutical Sciences is seeking candidates for a tenure-track position available immediately in pharmacology/toxicology. Ongoing projects in the department include work in neuropharmacology, immunopharmacology, heavy metal toxicology, cell matrix interactions, and xenobiotic metabolism. Persons with demonstrated expertise in applied biotechnology are especially urged to apply. Candidates will be expected to establish an active graduate research program in their respective areas and vigorously pursue the support of such programs through extramural funding. Teaching at both the graduate and undergraduate levels is also expected. Applicants should possess a Ph.D. degree in pharmacology, toxicology, immunology, or related disciplines and have postdoctoral experience. *Eligibility is limited to U.S. citizens and permanent residents*. Rank and salary commensurate with experience. Qualified candidates should send curriculum vitae and the names and addresses of three references to: Hanley N. Abramson, Ph.D., Chair, Department of Pharmaceutical Sciences, College of Pharmacy and Allied Health Professions, 528 Shapero Hall, Detroit, MI 48202. Wayne State University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

MOLECULAR BIOLOGIST

The Division of Renal Diseases and Hypertension at the University of Colorado Health Sciences Center is seeking a molecular biologist at a **FACULTY LEVEL** position commensurate with experience. The investigator will be expected to have expertise in the application of molecular biological approaches to the study of signal transduction mechanisms, hormone action and/or gene expression. Candidates should demonstrate a commitment to excellence in research and ability to interact with other members of the department. Candidates will be expected to establish an independently funded research program. Both M.D. and Ph.D. candidates, *particularly women and minorities, are encouraged to apply*. Interested candidates should send curriculum vitae, a brief summary of current and future research interests, and the names of three references to: Dr. Tomas Berl, Renal/Medicine, Box C281, 4200 East 9th Avenue, Denver, CO 80262. The University of Colorado is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

Academic nontenured position for Ph.D. with experience in molecular cellular biology to work in cardiovascular and metabolic disease. Competitive salary and resources. Send résumé to: Dr. Willa Hsueh, Chief, Division of Diabetes, LAC/USC Medical Center, 1200 North State Street, Unit 1, Room 8250, Los Angeles, CA 90033. Equal Opportunity Employer.

POSITIONS IN PHYSIOLOGY AND NEURO-ANATOMY. The Department of Biological Sciences at Idaho State University anticipates having one or two positions in physiology and one position in neuroanatomy available for the fall semester of 1992. Applicants should have completed a doctorate and postdoctoral experience is preferred. The teaching assignments for the successful physiology courses in which health professional students, including physical therapy and pharmacy assignment for the successful neuroanatomy candidate will include gross anatomy and neuroanatomy for physical therapy and dental students. All successful applicants will be expected to develop a research program which complements existing effort in the department and work with graduate students. These anticipated positions will remain open until filled, but applicants should send a letter of application, curriculum vitae, and names of references by 30 April 1992 to: Chairman, Search **S007, Idaho State University, Pocatello, ID 83209.** *Idaho State University is an Equal Opportunity/Affirmative Action Employer.*

27 MARCH 1992



NATIONAL UNIVERSITY OF SINGAPORE

FACULTY OF SCIENCE

Applications are invited for **Faculty positions/appointments** in one of the following departments from candidates who must possess a relevant PhD degree. Preference will be given to those who are able to teach in more than one of the areas listed under the Department they are applying to and with proven ability in research.

CHEMISTRY

High Field NMR Spectroscopy Analytical Chemistry Inorganic Chemistry (main group elements) Physical Organic Chemistry Materials Science (composite materials)

MATHEMATICS

Pure Mathematics Applied Mathematics Operational Research Statistics

PHARMACY

Pharmaceutical Chemistry/Pharmaceutics

PHYSICS

Materials Science Surface Science metals and alloys, electrical and magnetic materials, electronic materials
 conducting polymers, applied catalysis, ionic conducting glasses, ESCA, AES, SIMS

Applied Nuclear Physics — Experimental Solid State Physics Computational Physics

s — — PIXĚ, XRF, RBS, ion channeling, radiation physics e Physics

Computational Physics

Besides appointments on normal 3-year contracts, **visiting appointments** for one or two years will also be considered.

Gross annual emoluments range as follows:

Lecturer	S\$50,390–64,200
Senior Lecturer	S\$58,680–100,310
Associate Professor	S\$88,650-122,870
(US\$1.00 = S\$1.6	3 approximately)

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered.

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance of S\$1,000 or S\$2,000, subsidised housing at nominal rentals ranging from S\$100 to S\$216 p.m., education allowance for up to three children subject to a maximum of S\$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

There are eight faculties in the National University of Singapore with a current student enrolment of some 15,000. All departments are well-equipped with a wide range of facilities for teaching and research.

All academic staff have access to the following computer and telecommunication resources: an individual microcomputer (an IBM AT-compatible or Apple Macintosh); an IBM mainframe computer with 16 MIPS of computing power; an NEC SX supercomputer with 650 MFLOPS of computing power; departmental laser printers; a wide spectrum of mainframe and microcomputer software; voice-mail. A campus-wide network, which is based on the high speed optical fibre based FDDI technology, links up all the academic staff and student microcomputers, UNIX workstations and provides access to the mainframe computer, the supercomputer, UNIX hosts, the on-line library catalogue, Internet and BITNET.

Application forms and further information on terms and conditions of service may be obtained from:

The Director Personnel Department National University of Singapore 10 Kent Ridge Crescent Singapore 0511 The Director North America Office National University of Singapore 55 East 59th Street New York, N.Y. 10022, U.S.A. Tel: (212) 751-0331

Enquiries may also be sent through **BITNET** to: PERPL @ NUS3090, or through **Telefax:** (65) 7783948

PROFESSOR OF MEDICINE

HARVARD MEDICAL SCHOOL/ NEW ENGLAND REGIONAL PRIMATE RESEARCH CENTER

The Harvard Medical School and the New England Regional Primate Research Center are jointly seeking to fill a Professorship of Medicine with an individual whose primary interest is in Immunology. The person to be appointed will serve as Professor of Medicine and Chairman, Division of Immunology, New England Regional Primate Research Center, Harvard Medical School. The Chairman of the Division of Immunology is expected to develop and conduct both an independent research program and participate as an active member of research teams directed by individuals within other Divisions of the Primate Research Center addressing basic research, human health needs and primatology. The research must primarily focus on those areas where the unique characteristics of nonhuman primates most lend themselves to the study of human health and diseases. Applicants must hold M.D. or M.D./PhD. Please submit curriculum vitae and a letter summarizing background and research goals to Karin Wetmore, Assistant Dean for Faculty Affairs, Harvard Medical School, 25 Shattuck St., Bldg. A, Room 206, Boston, MA 02115. Harvard Medical School/New **England Regional Primate Research** Center are equal opportunity/affirmative action employers, m/f/d/v.

TRUDEAU INSTITUTE, INC. BASIC RESEARCH SCIENTISTS

Infectious Diseases Immunologist

A vacancy exists at the assistant professor level for an immunologist interested in employing modern immunological techniques to analyze immunity to infections with microbial pathogens. The successful applicant will be supplied the resources to develop his/her independent research program within the overall infectious disease program of the Trudeau Institute. Persons interested in developing models of immunity to intracellular pathogens are encouraged to apply.

The Trudeau Institute is a not-for-profit, basic research institute. Salaries and benefits are competitive, and working conditions are conducive to a productive research career.

Applications consisting of a curriculum vitae, the names and addresses of three references, and a brief description of research interests, should be addressed to:

Dr. Robert J. North, Director Trudeau Institute, Inc. P.O. Box 59 Saranac Lake, NY 12983

POSITIONS OPEN

BIOLOGY. Hastings College seeks to fill full-time tenure-track position in biology, to begin August 1993. Qualifications include Ph.D. in cell/molecular biology or vertebrate physiology, college teaching experience, and demonstrated ability and commitment to undergraduate instruction. Rank and salary commensurate with qualifications and experience. Application materials available from Dean Dwayne Strasheim, Hastings College, Hastings, NE 68902–0269. Review of applications will begin 30 April 1992, and continue until position is filled. Hastings College is an Equal Opportunity Employer.

FACULTY POSITIONS. MOLECULAR BIOL-OGY-MAMMALIAN GENETICS. Tenure-track faculty positions available in the Program in Molecular Biology & Biotechnology. These will be joint appointments with the Program and a basic science department in the School of Medicine or College of Arts and Sciences. Particular areas of interest include developing animal models of disease and gene therapy using transgenic mice. Apply with a letter of application, curriculum vitae, and names of three references postmarked or faxed by 1 May 1992 to: William F. Marzluff, Ph.D., Director of the Program in Molecular Biology & Biotechnology, University of North Carolina at Chapel Hill, CB# 7100, 101 MBBRL, Chapel Hill, NC 27599– 7100. FAX number: 919-966-6821. The University of North Carolina at Chapel Hill is an Equal Opportunity/ Affirmative Action Employer. Women and minorities are encouraged to apply.

BEHAVIORAL PHARMACOLOGIST/ NEUROSCIENTIST

University of Chicago, Department of Psychiatry, seeks faculty with interests in drug abuse research and/or behavioral neuroscience. Must have strong record of original research demonstrated by publication and grant support. This appointment will be made in conjunction with the Department of Pharmacological and Physiological Sciences, which has active research and training programs in neuropharmacology and psychopharmacology. Applicants must have Ph.D. or M.D. with relevant experience. Send curriculum vitae and letter outlining research interests and plans to: Harriet de Wit, Ph.D., Search Committee Chair, Department of Psychiatry, The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637. Equal Opportunity Employer/Affirmative Action.

FACULTY POSITION EXPERIMENTAL CONDENSED MATTER PHYSICS

The Department of Physics and Astronomy and the Center for Materials Research and Analysis invite applications for position in experimental condensed matter or materials physics. The center is a major component of the Nebraska Research Initiative which is currently funded at \$12 million per year. Requires Ph.D. Postdoctoral research experience preferred. Rank open; preference for person with established program. Start 2 January 1993 (subject to mutual agreement). Must be able to lead significant research program and teach effectively at all levels. Research area open, but will complement existing programs in nanostructured magnetic films and permanent magnets, magneto-optic materials, surface science, high temperature superconductivity. nonlinear optics, and phase transitions Significant setup funds available, and access to excellent Central Facilities of the center. Submit curriculum vitae, statement of research plans, and names of three references by 22 April 1992 (or until suitable candidate hired) to: Professor David J. Sellmyer, Center for Materials Research and Analysis, University of Nebraska-Lincoln, Lincoln, Nebraska 68588–0113. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION. University of Michigan, available immediately to study the role of protein kinases in defective T lymphocyte activation in aging. A strong background in cell biology and/or molecular immunology is desired. Send curriculum vitae, a brief statement of research interests, and names and telephone numbers of three references to: Richard Miller, M.D., Ph.D., Institute of Gerontology, 300 North Ingalis, Ann Arbor, MI 48109–2007. The University of Michigan is a non-discriminatory/Affirmative Action Employer.

POSITIONS OPEN

FACULTY RESEARCH POSITIONS

Three full-time senior level faculty research positions available for experienced basic scientists with expertise in either CARDIOVASCULAR PHARMACOLOGY, CELL BIOLOGY or VIROLOGY/MOLECULAR BIOLOGY to participate in programs of hypertension, diabetes and retrovirology research, respectively. Applicants will become part of a research team consisting of pharmacologists, pharmacokinetics and pharmaceutical chemists. Successful candidates must have the Ph.D. degree and should be capable of independent research. Salaries: competitive. Women and minorities are encouraged to apply. Applicant must have legal proof of authority to work permanently in the United States. Send curriculum vitae and references by 31 March 1992 to: Barbara Hayes, Ph.D., Chairperson, Division of Pharmaceutical Sciences, College of Pharmacy and Health Sciences, Texas Southern University (TSU), 3100 Cleburne, Houston, TX 77004. TSU is an Equal Opportunity/ Affirmative Action Employer.

The Department of Obstetrics and Gynecology at Washington University School of Medicine in St. Louis seeks **TWO TENURE-TRACK BASIC SCIENCE FACULTY**. Candidates must have an M.D. and/or Ph.D. degree plus postdoctoral training. One position is for research focused in the area of reproductive physiology and the other is in the area of cellular differentiation and/or tumor development. Thorough knowledge and application of molecular biology techniques are necessary. A joint appointment in a basic science department is encouraged. Please send curriculum vitae to:

James R. Schreiber, M.D.

Department of Obstetrics and Gynecology, Box 8064 Washington University School of Medicine St. Louis, MO 63110

Washington University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available July 1992 in the Head and Neck Tumor Biology Program. Areas of interest include: cytogenetic analysis, oncogene activation, tumor suppressor gene inactivation, and cellular signaling mechanisms in squamous cell carcinomas of the head and neck. Send curriculum vitae, names of three references and a statement of research interests to: Dr. Kenneth D. Somers, Department of Microbiology/Immunology, Eastern Virginia Medical School, P.O. Box 1980, Norfolk, VA 23501. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL ASSOCIATE—Full time position available in the laboratory of Doctor Anil Kumar Jaiswal in the Department of Pharmacology. Individual will participate in research involving the identification and cloning of transcription factors involved in the regulation of genes encoding enzymes that metabolize drugs and carcinogens. Ph.D. with less than 2 years of research experience required; previous experience in molecular biology preferred. Send résumé to: A.J., c/o Personnel Department, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

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SCIENCE Magazine New Lab Service Department, Rm. 830, 1333 H Street, N.W., Washington, DC 20005 SCIENCE

SCIENCE, VOL. 255

Research Opportunities Drug Metabolism/Pharmacokinetics

The continued expansion of our Central Research facilities at Groton, Connecticut has created a need for qualified PhD research scientists in our Drug Metabolism Department.

We are seeking PhDs with relevant experience in the areas of pharmacokinetics and drug metabolism. You will interact in a project area with a multidisciplinary team including chemists, biologists and clinicians where pharmacokinetics and drug metabolism input is essential to the discovery and development of new drugs. You will work with some of the most advanced equipment and support systems available. Publication of original research encouraged. A PhD or the equivalent in Pharmacology, Pharmacokinetics, Biochemistry, Pharmaceutical Chemistry or related discipline is required. Postdoctoral training or employment including practical experience with bioanalytical methods and biotransformation of drugs is highly desirable. Must be creative and possess superior interpersonal and communication skills.

These positions offer a superb professional environment in an attractive southeastern Connecticut shore area, complemented by a competitive salary/benefit/relocation package. Please send resume and description of research interests to: Lorraine C. Corr, Supervisor Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.



Central Research Bringing science to life.

IMMUNOGEN, INC.

ImmunoGen is a rapidly growing biotechnology company dedicated to the development of immunotoxins and other cancer therapeutics. Three of the company's products are in Phase II or Phase I/II clinical trials. We are seeking talented scientists to join us in exploring new approaches to treating human disease. Research positions are available at the Ph.D. level in our expanding biochemistry, molecular biology and cell biology programs.

Research Scientist in BioOrganic Chemistry

The successful candidate will make essential contributions to our growing antibody-drug conjugate program. The applicant will possess a Ph.D. in Organic Chemistry and two years of postdoctoral or equivalent experience. A strong background in organic synthesis as applied for the transformation of bio-active molecules is required. The applicant's success will depend on being familiar with "wet chemistry" and handling of proteins. Foremost, the successful candidate should enjoy taking the initiative in solving scientific problems in collaboration with biochemists and cell biologists.

Research Scientist in Cell Biology

The successful candidate should hold a Ph.D. in cell biology, immunology or related disciplines and have a strong research background in mammalian cell biology or in-vitro immunology. Recent graduates are welcome to apply.

Research Scientist in Molecular Biology

The Department of Molecular Biology is expanding its antibody humanization program and is seeking applicants with experience in eukaryotic expression systems. The successful candidate must have a Ph.D. in molecular biology with a minimum of two years of postdoctoral training in the design and testing of eukaryotic expression vectors. Applicants with experience in expression of chimeric or humanized immunoglobulins preferred.

ImmunoGen offers an excellent salary and benefits package including 100% paid Health and Dental Insurance and Tuition Assistance. Please send a detailed resume including three references and a statement describing your scientific interests and career goals to: **Jeanne A. Horgan, Personnel Department, Immunogen, Inc., 148 Sidney Street, Cambridge, MA 02139.** An Equal Opportunity Employer.

JEFFERSON CANCER INSTITUTE **THOMAS JEFFERSON UNIVERSITY FACULTY POSITIONS IN** MOLECULAR IMMUNOLOGY

Appointments are available in the Department of Microbiology and Immunology, for a performance of the perform academic rank. Investigators are expected to carry out independent research programs in Molecular Immunology with an emphasis on T cell functions or cell-cell interaction and to participate, as appropriate, in the Institute Graduate Programs in Immunology, Genetics and Molecular Biology. Research interests within the Department include tumor and transplantation immunology, B cell differentiation and autoimmunity, immunogenetics, neuroimmunology, immunoparasitology, immunoregulation, cytokines and leukocyte activation. Interactions with other members of the Institute with research programs in signal transduction, molecular genetics, cell growth regulation, and structural biology are readily available. The Institute is located in a newly constructed building containing state of the art facilities and equipment. The University is located in Center City Philadelphia, within walking distance from many cultural, entertainment and historical attractions. Please send curriculum vitae, research plans, and the names and addresses of three references to: Dr. Bice Perussia, Jefferson Cancer Institute, BLSB Room 750, Jefferson Medical College, 233 S. 10th Street, Philadelphia, PA 19107-6799. Smoke-free environment. Equal Opportunity Employer.





University of Alberta Simon Fraser University University of Victoria University of British Columbia

RIUMF

DIRECTOR OF TRIUMF

TRIUMF is a national research facility located on the University of British Columbia campus, operated with funds from the National Research Council of Canada by a national consortium of universities: the University of Victoria, The University of Alberta, The University of British Columbia, and Simon Fraser University, assisted by the Universite of Montréal, The University of Toronto, The University of Manitoba, and the University of Regina. A TRIUMF 520 MeV H cyclotron provides beam to a large number of experimental facilities. Simultaneous beams, variable in energy, with currents from a few nano-amperes to 250 micro-amperes, are available. TRIUMF employs 390 scientists, engine technicians and general staff, and some 300 scientists visit from institutions worldwide to conduct experiments.

THE DIRECTOR:

- reports to the managing universities through a Board of Management appointed by the universities; advises the Board on policy and carries out policy
- decisions; guides the operation and development of TRIUMF
- facilities with the advice of an Operating Committee appointed by the Board; is responsible for appointment and promotion of TRIUMF
- employees:
- receives advice from a Long Range Planning Committee, whose membership is suggested by
- TRIUMF users: selects and schedules the experimental program with
- Committee; interacts closely with the National Research Council of Canada and the Natural Sciences and Engineering Research Council concerning financial support for

the advice of an international Experiments Evaluation

- operations and development and research grants to experimenters:
- maintains active contact with members of federal and provincial governments;
- conducts close liaison with other laboratories throughout the world having common interests:
- encourages interaction of TRIUMF staff and researchers with industry to promote technology transfer.

The Director also has overall responsibility for the orderly implementation of the KAON Factory whose final funding is anticipated shortly. The KAON Factory will greatly augment the scope of TRIUMF's scientific activities and also the number of employed staff and visiting scientists.

The Director is subject to a five-year initial appointment which is renewable.

The applicant will have manifested leadership qualities in the fields of particle and nuclear physics and in the organization of activities related thereto, with an appropriate doctorate degree combined with high academic standing and experience. The availability of this position is subject to negotiation.

Salary will be commensurate with responsibilities. TRIUMF is an equal opportunity employer

Applications should be addressed to: Dr. Robert C. Miller, Jr., Chairman, Search Committee, c/o Vice President Research, University of British Columbia, 2194 Health Sciences Mail, Vancouver, B.C. CANADA V6T 1Z3.



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Yale UNIVERSITY

Molecular Immunologist

The Department of Biology seeks to appoint a tenure level molecular immunologist with an interest in T-cell differentiation and neoplasia. Applications are invited from individuals using cellular and molecular approaches to study the immune system. The successful applicant is expected to carry on a vigorous, independent research program, supervise the research of graduate students and postdoctoral fellows, and contribute to undergraduate and graduate teaching.

Please send curriculum vitae, description of research interests and the names and addresses of three references by April 30, 1992 to: Immunology Search Committee, c/o Chair, Department of Biology, Yale University, P.O. Box 6666, New Haven, CT 06511– 8112.

Yale University is an Affirmative Action/Equal Opportunity Employer. Women and Minority Group Members are especially urged to apply.

ENDOWED PROFESSORSHIP ORTHOPAEDIC SURGERY RESEARCH

The University of Tennessee-Campbell Clinic Department of Orthopaedic Surgery at the University of Tennessee, Memphis is seeking an orthopaedic surgeon, Ph.D. and/or engineer to fill the George Thomas Wilhelm Endowed Professorship in Orthopaedic Surgery Research. Candidates shall be capable of, or shall have gained, national and international recognition as an authority in orthopaedic research. Academic rank will be commensurate with credentials and experience.

Send Curriculum Vitae and Inquiries to:

T. David Sisk, M.D., Professor and Chairman University of Tennessee-Campbell Clinic Department of Orthopaedic Surgery University of Tennessee, Memphis 800 Madison Avenue Memphis, Tennessee 38163

The University of Tennessee is an EEO/AA/Title IX/Section 504/ADA employer.

Kuwait Institute for Scientific Research (KISR)

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization actively engaged in applied research in the fields of environmental and earth sciences; food resources; engineering; petroleum; petrochemicals and materials and techno-economics.

KISR has vacancies in the following fields:

MARINE BIOLOGY

Major duites: Conducting research on several anticipated projects related to marine biology and fisheries, i.e., ichthyoplankton studies, coral reef ecology, pearl oyster biology.

Qualifications:

Applicant should have a Ph.D. degree with at least five years of experience in marine biology projects and between 30 and 40 years old with knowledge of various data base and statistical PC softwares.

CHEMICAL OCEANOGRAPHY

- Major duties:
 - –Analysing seawater chemicals (nutrients, dissolved oxygen, salinity, etc.) to interrelate with productivity and fisheries data.
 - -Going on oceanographic cruises for sample collection and conducting chemical oceanographic research.

-Providing on-the-job training to junior staff.

Qualifications:

Applicants should have a Ph.D. in Chemical Oceanography or related field with a minimum of 5 years experience.

FISHERIES BIOLOGY

• Major duties:

Conducting research and managing Shrimp Fisheries Management Project.

Qualifications:

Applicants should have a Ph.D. in Fisheries Biology and Management with at least 5 to 6 years of extensive experience in Shrimp Population Dynamics and Fisheries Data Collection Systems.

LIVE-FOOD

• Major duties:

-Managing a Live-Food Unit attached to a Marine Fish Hatchery.

—Involving in large scale production of phytoplankton (Chlorella and other species) and Rotifers.

Qualifications:

Applicants should have a Ph.D. degree and a minimum of five years relevant experience.

FISH PATHOLOGY

• Major duties:

-Diagnosing and treating cultured marine and fresh water fishes; adult and fry, including bacterial and parasitic diseases.

• Qualifications:

Applicants should have a Ph.D. in Fish Pathology with a minimum of five years experience in the same field.

FISH NUTRITION

• Major duties:

Diet formulation, preparation, testing and analysis mainly for marine fishes.

Qualifications:

Applicants should have a Ph.D. in Fish Nutrition with a minimum of 5 years experience preferably in marine larvae diet formulation and application as well as in juveniles and adults.

• Qualifications:

Applicants should have a Ph.D. in Fish Nutrition and preferably have experience in marine larvae diet formulation and application as well as in juveniles and adults.

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

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

Personnel Manager Kuwait Institute for Scientific Research P.O. Box 24885 13109 Safat — KUWAIT.

Drug Metabolism 8

Bristol-Myers Squibb Pharmaceutical Research Institute offers you the opportunity to continue your research in an environment which genuinely encourages creativity and originality.

Within this setting, you will interact with leading researchers in the development of novel therapeutic compounds. Our research teams are actively expanding our understanding of cardiovascular, oncologic, central nervous system, dermatological, infectious and metabolic diseases.

The following positions are immediately available at our state-of-the-art Research Facility in Princeton, New Jersey:

RESEARCH INVESTIGATORS Drug Development

Three positions are available in the Drug Development Section of the Metabolism and Pharmacokinetics Department.

• Pre-Clinical/Clinical - Position 1 will be responsible for providing data from studies on new drug entities, new dosage forms, or dosage regimens in support of IND and worldwide NDA filings. These studies will require the application of basic chemical, biochemical, bioanalytical, and pharmacolog-ical methods. Specific responsibilities will include, but not be limited to, the development and conduct of assays for radiolabeled drugs and their metabolites in biological matrices, design of pharmacokinetic studies, and elucidation of metabolic pathways in animals and man. Excellent oral and written communication skills are essential. Experience in small animal surgery and with Macintosh-based computer programs are desirable. The qualified individual should have a Ph.D. in Pharmaceutical Sciences, Biochemistry, or a related discipline and 2-5 years of relevant experience. Please reply to Dept. 300A-PF.

• **Pre-Clinical/Clinical** - Position 2 is responsible for the design, performance and reporting of metabolism and disposition studies with emphasis on dermal absorption studies in support of regulatory submissions. Candidates should possess a Ph.D. in Pharmaceutical Sciences along with 4 - 7 years experience in the drug metabolism field, preferably in dermal absorbtion area. Experience in the use of radiolabeled compounds and a knowledge of IND, NDA and GLP are necessary. Please reply to Dept. 300B-PF.

• Toxicokinetics - Position 3 will be primarily responsible for providing toxicokinetic/disposition data in support of pre-clinical drug safety evaluation studies of developmental compounds. Responsibilities will include, but not be limited to, the development of analytical assays for the determination of drug/ metabolites in biological fluids. Experience with modern analytical instruments including HPLC, GC, GC/LC-MS, LSC, and computer programs is desirable. Work may involve small animal handling, working with radiolabeled compounds, and applying basic biochemical, pharmacological, and bioanalytical methods. A thorough familiarity with GLP, and excellent oral and written communication skills are essential. The qualified individual should have a Ph.D. in Pharmaceutical Sciences, Biochemistry, Toxicology or a related discipline and up to 3 years of relevant experi-ence. Please reply to Dept. 300C-PF.

RESEARCH INVESTIGATORS Drug Discovery

Two positions are available in the Drug Discovery Section of the Metabolism and Pharmacokinetics Department. These positions involve conducting targeted and innovative drug metabolism research studies in collaboration with medicinal chemists and pharmacologists. The scientists will play a major role in the selection of drug candidates in therapeutic areas that include various classes of cardiovascular agents (e.g., cholesterol-lowering drugs and ion channel modulators) and anti-infective agents (e.g., HIV and herpes). Responsibilities for Position 1 include, but are not limited to, development of analytical methods for drugs and their metabolites in biologic fluids, design of pharmacokinetics studies, and elucidation of metabolic pathways in animals. Excellent written and oral communication skills are essential. Proficiency in computers is desirable. The qualified individual should have a Ph.D. in pharmacology, pharmaceutical science, biochemistry, or related discipline and 0-4 years of relevant experience. Please reply to Dept. 300D-PF.

• Responsibilities for Position 2, include but are not limited to, conduct of in vitro metabolic studies of drugs in tissues from animals as well as humans, development of analytical methods for drugs and their metabolites in biologic fluids, and design of pharmacokinetics studies. Excellent written and oral communication skills are essential. Experience on the isolation and identification of microsomal cytochrome P-450 isozyme is a plus. Proficiency in computers is desirable. The qualified individual should have a Ph.D. in biochemistry, medicinal chemistry, pharmaceutical science or related discipline and 0-4 years of relevant experience. Please reply to Dept. 300E-PF.

PRINCETON

Please forward your resume, with appropriate Dept. code, to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department, P.O. Box 4000, Princeton, NJ 08543-4000. An Equal Opportunity Employer, M/F/D/V.

Pharmacokinetics

Drug Discovery Research

Metabolism and Pharmacokinetics Scientists will play a novel role in the selection of IND candidates through research collaborations with medicinal chemists and pharmacologists.

The following positions are immediately available at our state-of-the-art Research Facility in Wallingford, Connecticut:

SENIOR RESEARCH

Candidates will be responsible for establishing a program to integrate metabolism and pharmacokinetics into dermatology and anti-infective drug. discovery programs. Responsibilities include leading a group of Ph.D., M.S. and B.S. scientists in providing innovative metabolic and pharmacokinetic solutions to drug discovery issues. Will work closely with chemists and biologists to provide data to facilitate selection of appropriate IND candidates. Requirements include a Ph.D. in a pharmaceutical, chemical or biological area and at least 5-10 years direct experience using various in vitro and nonclinical in vivo techniques in drug metabolism and pharmacokinetics. Supervisory experience essential. Please reply to Dept. ATZ-MAP:92-0178.

SENIOR RESEARCH INVESTIGATORS/ RESEARCH INVESTIGATORS

Candidates will be responsible for providing innovative metabolic and pharmacokinetic solutions to drug discovery issues. Will work closely with chemists and biologists to provide data to facilitate selection of appropriate IND candidates in CNS and cancer therapeutic areas. Requirements include a Ph.D. and a minimum of two years postdoctoral experience in developing bioanalytical methodologies and in performing nonclinical metabolism and pharmacokinetics studies. One of these positions will also require the ability to develop in vitro and in vivo models to rapidly evaluate blood-brainbarrier penetration of drug candidates. Supervisory experience highly desirable. Please reply to Dept. ATZ-MAP:92-0179 or ATZ-MAP:92-0182.

RESEARCH INVESTIGATOR/ BIOCHEMIST/BIOLOGIST

Candidates will be responsible for initiating and developing capability to support metabolic and pharmacokinetic investigations of biologically derived molecules as applied to drug discovery efforts in CNS, cancer, anti-infective and dermatology therapeutic areas. Requirements include a Ph.D. and capability to develop chemical, immunological and biochemical/ biological based assays for quantitation of intact biological molecules and active fragments in biological fluids and tissues. Must bring state-of-the-art in vitro techniques, as well as capability to develop in vivo models, to examine metabolic stability and pharmacokinetics of proteins, peptides, nucleic acids and other biologics. This position will also assume supervisory responsibility as the function grows. Please reply to Dept. ATZ-MAP:92-0183.

ASSOCIATE RESEARCH SCIENTIST II BIOANALYTICAL SCIENTIST/ MASS SPECTROSCOPIST

Candidates will be responsible for developing innovative approaches for quantitating novel drug and biological molecules in biological fluids and tissues using quantitative LC/MS. Requirements include some experience in use of mass spectroscopy for quantitation of drug molecules in biological fluids. This scientist will interact extensively with other scientists in the department in a collaborative approach to problem solving as applied to drug discovery. Please reply to Dept. ATZ-MAP:92-0180.

ASSOCIATE RESEARCH SCIENTISTS

Candidates will work as part of a team with senior research investigators to provide metabolic and pharmacokinetic data to drug discovery programs. Responsibilities include performing non-clinical metabolism and phar-macokinetics studies and developing bioanalytical assay methods for quantitation of new drugs and their metabolites in biological fluids. Requirements include a B.S./M.S. degree and relevant research experience. Knowledge of analytical techniques (HPLC, GC, etc.), laboratory data analysis and computer based data handling systems is essential. Familiarity with in vivo and in vitro models used in metabolism and pharmacokinetics studies is desirable. Please reply to Dept. ATZ-MAP:92-0181.

WALLINGFORD

Please send resume and salary history, along with appropriate Dept. code, to: Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 5101, Wallingford, CT 06492-7661. An Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

University of Illinois College of Medicine at Urbana-Champaign Assistant/Associate Professor of Pathology

The Department of Pathology at the University of Illinois College of Medicine at Urbana-Champaign (UICOM-UC) invites applications for an academic pathologist at the Assistant/Associate Professor level. Applicants should preferably be Board certified or Board eligible in anatomic and/or clinical pathology. The successful applicant will be expected to develop an independent research program and participate in medical student pathology education. Opportunities are also available for service work at the affiliated hospitals.

The University of Illinois at Urbana-Champaign (UIUC) has excellent research facilities which include electron and confocal microscopy; genetic engineering; hybridoma and flow cytometry; molecular graphics; a National Center for Supercomputing Applications; and an NSF Science and Technology Center for Magnetic Resonance Technology for Basic Biological Research. The Beckman Institute for Advanced Science and Technology emphasizes integrated research in the neural, cognitive and computational sciences. The successful candidate will have the opportunity to obtain a joint appointment in another discipline and graduate students would be available.

A dominant feature of UICOM-UC is the Medical Scholars Program in which students study for an M.D. and another degree, normally the Ph.D., in one of forty different disciplines.

The location of Urbana-Champaign in east-central Illinois gives easy access to Chicago and St. Louis.

Applicants are requested to send a curriculum vita, a summary of research interests, and three letters of reference to:

Patricia J. O'Morchoe, M.D., Search Committee Chair College of Medicine at Urbana-Champaign University of Illinois 190 Medical Sciences Building 506 South Mathews Avenue Urbana, Illinois 61801 Telephone (217) 333-4883

Starting date and salary are negotiable. In order to ensure full consideration, applications should be received by April 30, 1992.

The University of Illinois is an AA/EOE.

RESEARCH SCIENTISTS

The Bristol-Myers Squibb Pharmaceutical Research Institute is continuing to expand our extensive research efforts in the areas of cardiovascular, infectious, oncologic and metabolic diseases.

DRUG DISCOVERY

Our Department of Molecular Biology has an immediate opening for a Ph.D. with a strong background in biochemistry/molecular biology. This individual will direct a newly initiated program in the development of novel biological assays for cell regulatory proteins including oncoproteins, cytokines and their receptors that is compatible with the drug discovery efforts within the company. The successful applicant must be committed to an applied research program leading to drug discovery. Candidates must be highly motivated with an aptitude for pharmaceutical research and have demonstrated leadership, communication, research and supervisory skills. Please reply to **Dept. 297A-BM**.

TRANSGENIC MOUSE UNIT

The newly established Transgenic Mouse Unit is seeking individuals with a BS or MS degree with extensive experience in the generation of transgenic mice via microinjection. The Transgenic Unit is equipped with state-of-the-art microinjection equipment and an excellent animal facility which includes a pathogen-free barrier area. The ideal candidate should possess excellent microinjection skills, and have good knowledge of mouse embryology and basic molecular biology. Experience with embryonic stem cells and with computer databases is desired but not essential. Please reply to **Dept. 297B-BM**.

Please forward your resume and salary history (indicating appropriate dept.#) to: Bristol-Myers Squibb Pharmaceutical Research Institute, P.O. Box 4000, Princeton, NJ 08543-4000. Equal Opportunity Employer, M/F/D/V.



Bristol-Myers Squibb Company

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately in plant pathogen ecology and epidemiology. Focus of research is biological control of weeds, including quarantine tests of exotic plant pathogens in a containment greenhouse facility in Frederick, Maryland, and field evaluations of approved exotic rust fungi in California. Applicants should be trained in plant pathology, or in ecology with experience in plant pathology. Position is GS-11 (\$42,150), and research is funded through a cooperative agreement between the California Department of Pesticide Regulation and the USDA-ARS. Contact: David M. Supkoff, California Environmental Protection Agency, 1220 N Street, Room A149, Sacramento, CA 95814 (telephone: 916-654-0522), or William L. Bruckart, USDA-ARS-FDWSRU, Ft. Detrick, Building 1301, Frederick, MD 21702 (telephone: 301-619-7344).

POSTDOCTORAL PROGRAM IN DIABETES RESEARCH AT WASHINGTON UNIVERSITY SCHOOL OF MEDICINE ST. LOUIS, MISSOURI

Postdoctoral positions are available in the use of modern cellular, molecular and immunological techniques to investigate diabetes and related endocrine diseases. Trainees will be offered opportunities in the following areas of diabetes research: cellular mechanisms in insulin secretion from β -cells, lipid-derived mediators and signal transduction processes including ionic events regulating β -cell cytosolic [Ca²⁺]_i, islet transplantation, autoimmunity and effects of IL-1 and other cytokines, and vascular and neurological complications. A position is currently open to study the role of IL-1, other cytokines and nitric oxide in the pathogenesis of insulindependent diabetes mellitus. U.S. citizenship or permanent resident status is required. Salary on NIH scale. For information, please contact: Dr. Michael L. McDaniel, Box 8118, Washington University School of Medicine, Department of Pathology, St. Louis, MO 63110. Telephone: 314-362-7435. Washington University is an Equal Opportunity Employer. We are particularly interested in minority applicants.

POSTDOCTORAL POSITIONS. Targeted homologous recombination and emphysema. Applications are invited from investigators with experience in molecular biology to study targeted homologous recombination in human cells. Work involves targeting recombination to the alpha-1-antitrypsin gene and selecting successful recombinants with the aim of correcting the PIZ gene defect. Send curriculum vitae and names of three references to: Dr. Edward M. Johnson, Department of Pathology and Brookdale Center for Molecular Biology, Box 1194, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029–6574. An Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study cellular and molecular biology of natural interferon producing cells, their interaction with NK cells, and mechanisms of deficiency in viral infection. A Ph.D. in immunology or a related field required. Send curriculum vitae and names of three references to: Dr. P. Fitzgerald-Bocaraly, Department of Pathology, UMDNJ-New Jersey Medical School, 185 South Orange Avenue, Newark, NJ 07103; telephone: 201-456-7293. The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.

A POSTDOCTORAL POSITION is available to study proteins involved in regulation of calcium fluxes in skeletal muscles of fish, reptiles and birds. Focus will be on molecular and biochemical properties of isoforms of the ryanodine receptor, dihydropyridine receptor or the calcium ATPase. Experience in molecular biology, biochemical or structural biology required. Position is associated with unique opportunities to work in marine environs. Salary commensurate with qualifications and experience. Please send curriculum vitae, research interests, and the names of references to: Dr. Barbara Block, Department of Organismal Biology and Anatomy, University of Chicago, 1025 East 57th Street, Chicago, IL 60637. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION IN GASTROIN-TESTINAL/HEPATOBILIARY RESEARCH. Available immediately (NIH-funded, 2 to 3 years). Research training by outstanding faculty in programs such as vesicular transport, mucosal immunology, pathobiology of pancreatic disease, collagen metabolism, hepatic fibrosis, biliary physiology, immune-related secretion, liver-specific gene expression, or bile acid pathochemistry. U.S. citizenship or U.S. permanent residency required; candidates should plan academic career. Send curriculum vitae, bibliography and three letters of recommendation by 1 May 1992 to: Professor Alan F. Hofmann, Department of Medicine, 0813, University of California, San Diego (UCSD), La Jolla, CA 92093– 0813. UCSD is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN VASCULAR BIOLOGY

Multidisciplinary training in anti-oxidant mechanisms, cell-cell interactions, endothelial barrier, endothelial-derived mediators, vascular injury, and adhesion molecules. Contact: A. B. Malik, Ph.D. (A-66), The Albany Medical College, 47 New Scotland Avenue, Albany, NY 12208.

POSTDOCTORAL. RFLP/RAPD linkage mapping systematics. Preference given to candidates with experience in RFLP or RAPD maker-based analyses. Interested candidates with experience in genetics, botany, plant breeding, etc., are encouraged to apply. Available immediately. Send résumé and names and addresses of three references to: Dr. R. L. Jarret, USDA/ARS, 1109 Experiment Street, Griffin, GA 30223–1797. Telephone: 404-228-7303 or FAX: 404-229-3323. The University of Georgia is an Equal Opportunity/Affirmative Action Institute.

EXERCISE PHYSIOLOGY THE UNIVERSITY OF IOWA COLLEGE OF MEDICINE

A **POSTDOCTORAL POSITION** is available to study the mechanisms of circulatory insufficiency in heat stroke. Candidates having a Ph.D. degree with experience in exercise physiology, thermoregulation, and biochemistry/molecular biology are encouraged to apply. Please send curriculum vitae and names of three references to:

Professor Carl V. Gisolfi, Ph.D. Department of Physiology 6-452

The University of Iowa, College of Medicine Iowa City, IA 52242

The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.





TRIPLEX PHARMACEUTICAL CORPORATION, a

rapidly growing, well financed, biotechnology company focused on the design and commercial development of triple helix forming therapeutics for human use, has immediate employment opportunities available for highly motivated senior and research scientists on its viral and cancer therapeutic research and development teams.

MOLECULAR BIOLOGIST

Opportunities are available for PhDs with 2–5 years experience in the area of transcription control mechanisms including expertise using *in vitro* transcription systems and who have a proven publication record. The positions will require use of *in vitro* systems to determine activity and mechanism of action in triple helix forming oligonucleotides.

VIROLOGIST

Opportunities are available for PhDs with 2–5 years experience in molecular virology. Responsibilities will include the design and development of methodologies for screening oligonucleotides directed at HSV and CMV. Additional responsibility will include studying the molecular mechanism and action of triple helix forming oligonucleotides. [Experience in drug development, in the biotechnology or pharmaceutical industry is preferred.]

BIOCHEMIST

An opportunity is available for a PhD with 1–3 years experience in the study of nucleic acids interactions. Experience with novel bases and computer modelling of nucleic acids would be an advantage. Primary responsibility will be designing and testing oligonucleotide modifications that improve triple helix formation.

OLIGONUCLEOTIDE CHEMISTS

Opportunities are available for PhDs in Organic or Biochemistry with 3–5 years of experience in solid and solution phase synthesis of oligonucleotides. Preference will be given to candidates who demonstrate proven experience with large scale methodologies and a working knowledge of GMP regulations. Responsibilities will include initiating and implementing small and large scale oligonucleotide synthesis and purification as well as developing novel chemistries.

TRIPLEX is located in an attractive community north of Houston offering access to research centers such as Baylor College of Medicine, Texas Medical Center, Rice University, Texas A&M and the University of Houston. We offer competitive salaries and benefits, including equity participation, as well as opportunities for publication and rapid career growth in an exciting research program. For immediate consideration send C.V. to:

TRIPLEX PHARMACEUTICAL CORPORATION Director of Administration 9391 Grogan's Mill Road The Woodlands, Texas 77380 Fax: 713/363-1168

SCIENCE Presents:

Pharmaceutical/Biotechnology Careers in Industry, A Special SCIENCE Recruitment Advertising Section

The May 8 issue of *SCIENCE* features a *special* section on careers in industry. This first-time supplement to *SCIENCE* is custom-made for your recruitment advertisement and the perfect place to tell *SCIENCE's* readership of science professionals about career opportunities at your pharmaceutical or biotechnology firm.

This *first-time special section* will explore these and other important questions:

•What challenges and incentives does a career in a pharmaceutical or biotechnology firm offer?

- •What qualifications are needed?
- How do scientists in the industry view their own careers?

Take advantage of greater exposure by placing your full page ad in this special section. The traditional recruitment section is also available.

Your recruitment ad will receive even more visibility in this issue which will be distributed at the American Society for Microbiology (ASM) meeting in New Orleans, May 26-30.

Don't miss this opportunity, contact Janis Crowley at (212) 496-7704 to reserve your space.

SPACE RESERVATION DEADLINE: TUESDAY, APRIL 21, 1992



Promising new researchers may win fellowships for visits to Japan of six months to two years. The fellowships, which support both American and Canadian researchers at Japan's national laboratories and certain non-profit R&D institutes, are provided by the Research Development Corporation of Japan (JRDC).

To qualify, researchers should hold a recent doctoral degree in a field of science or engineering. In the fields of engineering, candidates without the doctorate will be considered if they can demonstrate equivalent professional experience.

The STA fellowships provide the following allowances (in Japanese yen):

Round-trip, economy-class air transportation (for the researcher only, not for dependents)	one ticket
International relocation allowance	¥200,000
Monthly living allowance	270,000
Monthly housing allowance up to	100,000
Monthly family allowance	50,000
Annual travel allowance in Japan	115,000

In all, more than 100 Japanese government research institutions are potential hosts for STA postdoctoral fellows. They include such well known laboratories as the Institute of Physical and Chemical Research (RIKEN), Electrotechnical Laboratory, National Institute for Environmental Studies, National Institute of Health, Mechanical Engineering Laboratory, National Institute of Agrobiological Resources, Communications Research Laboratory, and the National Research Institute for Metals.

Potential candidates are responsible for finding the Japanese research institute which will best match their field of professional interest. Each applicant should begin correspondence with his or her prospective Japanese host well before submitting a proposal.

In the United States

To obtain an application, United States citizens, nationals, or permanent residents should request NSF publication 90-144, *Japan Program Announcement*, from the following address:

Forms and Publications Unit, Room 232 National Science Foundation Washington, D.C. 20550

Publications may also be ordered electronically through either Internet (**pubs@nsf.gov**) or BitNet (**pubs@NSF**). Please include the NSF publication number and title, number of copies needed, your name, and a complete mailing address.

The NSF application deadline is November 1, 1992, for positions starting in April 1993 or after. In addition, there are opportunities for individuals wishing to start sooner. Further information is available from the following address: Japan Program, Room V-501 National Science Foundation Washington, D.C. 20550 or, by electronic mail: NSFJinfo@nsf.gov (Internet) or NSFJinfo@NSF (BitNet)

In Canada

For further information, Canadian candidates may contact the following:

Ms. Dawn Conway

Director, International Programs Natural Sciences and Engineering Research Council of Canada 200 Kent Street Ottawa, Ontario K1A 1H5 Canada Tel: (613) 995-1818 Fax: (613) 992-5337 **GENSIA PHARMACEUTICALS, INC.** is a publicly-traded biopharmaceutical company located in San Diego. Our mission is focused on the discovery, development and commercialization of innovative products for the acute-care hospital sector, specifically in the cardiovascular and cerebrovascular areas. Our progressive research has created a demand for talented scientists to join our multi-disciplinary research groups.

Cardiovascular Pharmacology

Sfaff Scientist—The successful candidate will have a PhD in Pharmacology/Physiology or other relevant medical science plus 5 years post-doctoral training and experience in surgical techniques, cardiovascular diseases, experimental design and analysis. Some managerial experience is required and demonstrated independence and productivity in research. CODE: KM

Research Associates—Experienced candidates are needed to perform *in vitro* and *in vivo* testing of new therapeutic agents for use in cardiovascular diseases, including studies of novel purines in isolated heart models, isolated tissues, platelet function assay and cell culture. BS/MS with direct experience in *in vitro/in vivo* pharmacology, cardiac preparations and familiarity with computers. CODE: JW/LM

Gensia is a rapidly growing company that offers a stimulating research environment with competitive salaries and generous benefits, including a stock option plan. Please send CV to: Human Resources, Gensia Pharmaceuticals, Inc., 11025 Roselle St., San Diego, CA 92121-1204 EOE.





axter Diagnostics Inc., a worldwide leader in supplying diagnostic reagents, currently has opportunities due to an expansion of the Clinical Laboratory Controls Group and the Paramax Research & Development Department.

Successful candidates for the Clinical Laboratory Controls Group will have a Ph.D. in biochemistry or other relevant field. Previous clinical and/or industrial R&D or Postdoctoral experience in the area of mammalian enzyme/protein purification and stabilization is a plus. Preference will be given to candidates with demonstrated ability to effectively supervise and provide leadership for successful product development.

Successful candidates for the Paramax Research & Development Department will be a Project Leader for development of new diagnostic immunoassays and have a Ph.D. in Biochemistry or in a related Life Science. Previous experience in immunoassay development, excellent verbal and written communication skills, as well as the ability to function successfully in a team environment is required.

We offer an excellent scientific environment supported by a highly competitive salary and benefits package. Please send your resume in confidence to: Baxter Diagnostics Inc., Controls R & D, Ad #201, MS 384, P.O. Box 520672, Miami, FL 33152-0672. An Equal Opportunity Employer. We conduct pre-employment drug screening.

Baxter Diagnostics Inc.





Research Officer in the Institute of Molecular Biology (Ref. 91/92-81)

Applications are invited for a post of Research Officer in the Institute of Molecular Biology on a fixed-term contract for 3 years in the first instance, tenable from as soon as possible. Applicants should have Ph.D. degree in related fields, post-doctoral research experience in molecular genetics or cell biology related to diabetes is helpful but not necessary. The appointee will be responsible for carrying out research in molecular biology or cell biology to study the mechanism of diabetic complications.

Annual salary (non-superannuable but attracting 25% (taxable) terminal gratuity) is on a 9-point scale: HK\$191,760–350,700 (approx. US\$1=HK\$7.80 as at February 20, 1992). Starting salary will depend on qualifications and experience. At current rates, salaries tax will not exceed 15% of gross income. Children's education allowances, leave and medical benefits are provided; housing or tenancy allowances are also provided in most cases at a charge of 7.5% of salary.

Enquiries should be directed in the first instance to Dr. Stephen Chung (Principal Investigator) by Fax (852) 8551254. Further particulars and application forms may be obtained from Appointments (40404), Association of Commonwealth Universities, 36 Gordon Square, London WC1H OPF UK, or from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax 852) 5592058; E-mail:APPTUNIT@HKUVM1.HKU.HK). Closes: *8 May 1992*.



Let the free Science product information service put you in touch with the vendors whose products you will need.

Simply write us a letter stating the specifics about your proposed lab and the instruments and supplies you need. We will do the rest. Write to:

SCIENCE Magazine New Lab Service Department, Rm. 830, 1333 H Street, N.W., Washington, DC 20005

This is the place

where the best

ideas in research

have a real

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development.



There are numerous obstacles standing between medical research and practical application. With over 17% of our annual sales revenues dedicated to R&D, Syntex continues to show its commitment to helping our Scientists overcome those obstacles. Exciting career challenges await talented, motivated professionals at our Research Headquarters in the San Francisco Bay Area for the following positions.

- Director, Systemic Pharmacology Direct senior staff efforts in the area of cardiovascular and peripheral pharmacology.
- Senior Staff Researcher, Pharmacology Direct efforts in the area of peripheral pharmacology.
- Staff Researchers, Pharmacology Conduct basic research in cardiovascular pharmacology.
- Biologists, Neuroscience Conduct research in the area of neurodegenerative disease.

Syntex offers competitive salaries, an incentive bonus program and a comprehensive relocation package. We also offer a child care facility and an on-site health club. For immediate consideration, please send your resume to: Syntex, Professional Staffing Dept. KH, 3401 Hillview Avenue, Palo Alto, CA 94304 or see us at the FASEB meeting in Anaheim. Syntex is an equal opportunity employer.

HUMAN GENOME RESEARCH POSTDOCTORAL POSITION

Roswell Park Cancer Institute has postdoctoral positions available in several areas concerning the molecular genetics of human chromosome 11. A major focus is the physical mapping and organization of genes on chromosome 11 using a chromosome 11 YAC library. Analysis includes contig assembly, fluorescent *in situ* hybridization (FISH) and direct isolation of genes from YACs.

Background must include training in molecular genetics.

Roswell Park is a National Cancer Institute-designated comprehensive cancer center. The Department of Human Genetics is an active research department with extensive interactions with researchers in other departments with modern molecular biology programs.

Buffalo, a Western New York city between Lakes Erie and Ontario, has the cultural amenities of a large city within minutes of a rural setting. Please send a curriculum vitae, a brief description of research interests and three references to: Thomas B. Shows, Ph.D., Chairman, Department of Human Genetics, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, New York 14263.



An Affirmative Action/Equal Opportunity Employer

Career Opportunities in Japan

The Corporate Research Division of The Procter & Gamble Company has career opportunities for Japanese scientists to work on research programs in P&G's basic research organization. Candidates should have a Ph.D. or postdoctoral training in protein chemistry, biochemistry, cell biology, molecular biology or a related discipline.

Applicants must be fluent in Japanese and must also have a good practical understanding of the English language. They will begin their careers working in Cincinnati, Ohio at our Miami Valley Laboratories. Additional English language training can be provided during their stay in Cincinnati. After about two years in Cincinnati, the scientists will transfer to P&G's new technical center in Japan, which is currently under construction on Rokko Island, Kobe.

P&G is a multinational, technically based company with \$27 billion

in worldwide sales. We are engaged in the research, development, manufacture, and sale of consumer products in the pharmaceutical, health and beauty care, paper, laundry, and food and beverage areas. Last year our R&D budget was \$786 million.

If you meet these criteria and would like to explore career opportunities in a strong, growing international company, send your resume and publication list to:

Dr. N. G. Howell Box DSL1, Japanese Research Positions The Procter & Gamble Company P.O. Box 398707 Cincinnati, Ohio 45239-8707 An Equal Opportunity Employer

If you are in Japan and need more information, mail your phone number to: Dr. H. Kitado, 19-206 Nishihimuro, Kamitakano, Sakyo-ku, Kyoto 606: or call (075) 702-7650 and leave your phone number in Japanese.

Procter&Gamble

FACULTY POSITIONS PHARMACOLOGY AND TOXICOLOGY MEDICAL COLLEGE OF WISCONSIN

The Department of Pharmacology and Toxicology is seeking highly qualified applicants to fill full-time, tenure-track positions for Assistant Professor. Applicants must have a doctoral degree in a relevant area and a minimum of two years of post-doctoral experience. They should have a strong record of research accomplishments, be committed to developing an independent, extramurally funded research program and be willing to participate in graduate and medical team teaching. Preference will be given to applicants applying modern methods of biochemistry, molecular biology and cell biology to problems of pharmacological or toxicological interest. Facilities are modern and include core laboratories for peptide/DNA synthesis and analysis, LC/ GC/MS, NMR and cell culture. Competitive salaries, space and start-up funds are available. Applicants should send a curriculum vitae, statement of research interest and plans, three relevant publications and names of three references to William B. Campbell, Ph.D., Chairman, c/o Adrianne Cisler, Department of Pharmacology and Toxicology, Medical College of Wisconsin, 8701 Watertown Plank Rd., Milwaukee, WI 53226. MCW is an Affirmative Action/Equal Opportunity Employer.

Calendar of Upcoming Meetings

SCIENCE will be distributed to scientists attending the following meetings:

FASEB

5 to 10 April 1992, Anaheim Issue dates: 27 March 1992 3 April 1992

Analytica 5 to 8 May 1992, Munich Issue Date: 24 April 1992

American Society for Microbiology 26 to 30 May 1992, New Orleans Issue date: 8 May 1992

Biotechnology/Pharmaceutical Careers Special Issue of Science Issue date: 8 May 1992

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JEFFERSON MEDICAL COLLEGE and the JEFFERSON CANCER INSTITUTE of THOMAS JEFFERSON UNIVERSITY

is beginning the recruitment of up to six new assistant professor. tenure track appointments. These faculty researchers will maintain a primary appointment in one of the basic science departments of Jefferson Medical College but have a secondary appointment and laboratory located in one of the clinical departments including, but not limited to, medicine; neurosurgery; obstetrics and gynecology; otolaryngology, head and neck surgery; surgery; or urology. Candidates will be expected to develop an active, funded research program in a clinically relevant area of molecular or cell biology. Interested candidates should forward a curriculum vitae, statement of research interest and the names of 3 references to: Renato Baserga, M.D., Chair Interdepartment Search Committee, 624A Bluemle Life Sciences Building, 233 S. 10th Street, Philadelphia, PA 19107. Thomas Jefferson University is an equal opportunity employer committed to a smoke-free environment. Females and minorities are encouraged to apply.



National Institutes of Health RESEARCH SCIENTIST/ POSTDOCTORAL FELLOW

(CELL AND MOLECULAR BIOLOGIST)

The Bone Research Branch, National Institute of Dental Research seeks an outstanding candidate with graduate education and/or clinical experience in Cell Biology, Biochemistry or Molecular Biology for a senior postdoctoral fellowship position. Applicants should have at least 4 years postdoctoral training and research experience in connective tissue research, primarily in chondrogenesis and osteogenesis. Additionally, the applicant should be familiar with: tissue culture techniques including biological assays for metabolism and structure of matrix macromolecules such as proteoglycans and collagen; DNA recombination techniques including construction of cDNA libraries and cDNA probes for matrix macromolecules and osteogenic/chondrogenic growth factors; protein chemistry techniques including peptide mapping and sequencing. A substantial record of publications of original work in these areas is required. Starting salary will be commensurate with qualifications and experience. Interested candidates should submit a curriculum vitae, several reprints, summary of research interests and names of three references no later than May 15, 1992. Material should be sent to:

Faye M. Harbrant, Personnel Management Specialist, National Institute of Dental Research, Building 31, Room 2C23, 9000 Rockville Pike, Bethesda, Maryland 20892.

NIH is an Equal Opportunity Employer

SCIENTIST I

The Environmental and Societal Impacts Group (ESIG) at the National Center for Atmospheric Research (NCAR) is seeking a Scientist I to (1) initiate and support research on the societal aspects of the impacts of climate, with emphasis on the rates and processes of environmental change that affect atmospheric processes, such as in arid and semi-arid areas, forested regions and coastal zones; (2) conduct studies related to the interactions among climate, environment and society and devise appropriate methodology for performing these studies; (3) interact with ESIG and NCAR staff and represent ESIG in the broader community.

Requirements include: PhD in social sciences (e.g., geography, sociology, public policy) or environmental sciences (e.g., ecology, forestry, limnology) or the equivalent combination of education and experience; education sufficient to perform original research in some of the following areas: rates and processes of environmental change, land use practices and socioeconomic impact assessment; skill in applying a variety of methodologies to environmental problems; familiarity with research in both the natural and social sciences; demonstrated interest in climate and climate-related impacts assessment; interest in and commitment to multidisciplinary research; and skill in undertaking collaborative research. Salary Range: \$3,193 - 4,790/mo. NOTE: Scientist I positions are for terms of up to three years and are equivalent to the assistant professor level at universities. Appointments to the next higher level of scientist are not automatic and are made in accordance with the UCAR Scientific Appointments Policy.

Submit resume and cover letter, referring to Job Number 1579, to Anna Reyna-Arcos, Human Resources Department, P.O. Box 3000, Boulder, CO 80307. Applications for this position will be accepted until 5:00 p.m. on June 1, 1992.

NCAR has a strong commitment to the principle of diversity in all areas. In that spirit, we are interested in receiving applications from a broad spectrum of people, including women, minorities and disabled individuals.



National Center for Atmospheric Research

ST. JUDE CHILDREN'S RESEARCH HOSPITAL

DIRECTOR

Qualified applicants and nominations are being sought for the position of Director of St. Jude Children's Research Hospital, a private, non-profit pediatric research institute with a special emphasis on cancer. The faculty of over 130 outstanding basic and clinical scientists conduct research in the areas of biochemistry, biostatistics, immunology, pharmacology, tumor cell biology, virology and molecular biology, hematology-oncology, diagnostic imaging, infectious diseases, radiation oncology, pathology and pharmacokinetics. A new state-of-the-art 240,000 gross square feet research facility opened in August, 1991. It provides new laboratory space for existing basic science programs with 80,000 gross square feet of shell space available for future expansion. A new 48 bed, 150,700 square feet patient care facility will be completed in 1994 which will provide comprehensive care for 2,000 active pediatric cancer patients.

The University of Tennessee Medical Center provides opportunities for clinical and basic science affiliations.

Suitable candidates must have internationally recognized achievement in research and have demonstrated experience in effectively managing complex multidisplinary programs.

Inquiries and nominations (preferably with a curriculum vitae), which will be treated in confidence, should be sent to Edward D. Soma, M.D., St. Jude Children's Research Hospital, 332 N. Lauderdale, P.O. Box 318, Memphis, TN 38101.

SJCRH is an affirmative action, equal opportunity employer.



TECHNICAL SERVICES MANAGER

Kemin Industries, Inc., a manufacturer of mold inhibitors, antimicrobial compounds, marigold pigmenters, antioxidants, flavors and surfactants for animal feed seeks a Technical Services Manager for its North and South America operations. Based in Des Moines, Iowa, the successful candidate will have a Ph.D. in Biochemistry or related field and possess excellent oral presentation skills. The Technical Services Manager will provide technical product information and consulting for customers, organize university efficacy trials, provide technical training for salespeople and distributors, and supervise two technical service laboratory personnel. A background in animal agriculture as well as commercial experience is preferred. Frequent overnight travel is typical during the work week. Only non-smokers need apply. Pre-employment physical with drug screen required. Please submit a resume as well as other relevant information to Dr. C. E. Nelson, Kemin Industries, Inc., Box 70, Des Moines, IA 50301.

Equal Opportunity Employer.

NANOTECHNOLOGY Reprint Engineering a Small World:

From Atomic Manipulation to Microfabrication

This 42-page special section, reprinted from the 29 November issue of **Science**, is your entry to the expanding world of small-scale engineering. It's a field that spans microelectronics, materials science, chemistry, molecular biology, and microscopy. In this special section, ten illustrated articles by research leaders and by science journalists present the full scope of this small world.

For each copy, send \$4.00 plus \$.50 for postage to: Science Attention: Corrine Harris 1333 H Street, N.W. Washington, DC 20005 Telephone: 202-326-6527 Visa and MasterCard orders accepted by FAX: 202-682-0816 All orders must be prepaid. Payment in U.S. dollars only. Bulk rates available.

POSITIONS OPEN

POSTDOCTORAL POSITION. Available immediately for 2 years to study cell cycle regulation by circadian oscillators in *Euglena*. Experience with cAMPdependent kinases and cyclins, and/or in the areas of cell signaling and molecular biology is desirable. Send curriculum vitae and names, addresses, and telephone numbers of references to: Dr. Leland Edmunds, Division of Biological Sciences, SUNY Stony Brook, Stony Brook, NY 11794. SUNY at Stony Brook is an Affirmative Action/Equal Opportunity Employer and Educator.

TWO POSTDOCTORAL POSITIONS in physiological ecology of nitrogen excretion in fish and population genetics of fish available to start anytime before the end of 1992. Initial appointment will be for 1 year but it is anticipated that funding will be available for up to 3 years. Send curriculum vitae, selected reprints, and names, addresses and telephone number of referees to: Dr. Patrick J. Walsh, Division of Marine Biology and Fisheries, University of Miami, 4600 Rickenbacker Causeway, Miami, FL 33149. The University of Miami is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION. Position available spring/summer 1992 for recent Ph.D. or M.D.-Ph.D. with training in cell and molecular biology to study the regulation and expression of β -glucan receptors on mammalian cells. Send curriculum vitae, reprint of one publication, and names of three references to: Dr. Joyce K. Czop, Department of Rheumatology and Immunology, Harvard Medical School, LMRC, 221 Longwood Avenue, Boston, MA 02115. Equal Opportunity/ Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP

The Department of Obstetrics & Gynecology's Division of Reproductive Endocrinology at Cedars-Sinai Medical Center is recruiting for a postdoctoral trainee, Ph.D. or M.D. This position will investigate the mechanism by which growth factors regulate ovarian thecainterstial cell differentiation and steroidogenesis. Regulation of transcription and translation of steroidogenic enzyme genes and the intracellular signaling mechanisms employed will be the major focus. Interested candidates may apply by submitting curriculum vitae and three letters of recommendation to:

> Cedars-Sinai Medical Center Rebecca Chandler, SR Human Resource Representative for Research Brown Building 8700 Beverly Boulevard Los Angeles, CA 90048 An Affirmative Action Employer.

POSTDOCTORAL FELLOW. Participate in an NIH-funded study of the structure of intermediates in genetic recombination, particularly multi-stranded DNA structures formed by recA protein. Frequently used techniques include plasmid construction, sequencing, and chemical and enzymatic probing of DNA. Related projects include investigating triplex DNA, designing DNA and peptide-based nucleic acid cleaving agents, and researching anti-HIV agents. We require a Ph.D. in a field related to the above areas, and familiarity with standard molecular biology techniques. Experience in analysis of DNA structure is desirable. Salary: \$27,000 per annum. Send full curriculum vitae to: Brian Johnston, SRI International, M/S 20519, 333 Ravenswood Avenue, Menlo Park, CA 94025. An Equal Opportunity Employer.

SRI International

POSTDOCTORAL FELLOWSHIP, MOLECU-LAR IMMUNOLOGY. Immediate opening for postdoctoral position in laboratory focused on pathogenesis of autoimmune skin diseases [PNAS 88, 5056 (1991) and PNAS 88, 11579 (1991)]. Training and experience in T cell clones, functional assays and TcR essential. Knowledge of MHC important. Background in molecular biology preferred. Salary and Harvard appointment commensurate with qualifications and experience. Send curriculum vitae and the name and telephone number of three references to: Dr. A. R. Ahmed, Center for Blood Research, Harvard Medical School, 800 Huntington Avenue, Boston, MA 02115. Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS to study the role of FGF receptors in the response to vascular injury. Required: Ph.D. in molecular or cell biology or biochemistry; experience in quantitative PCR, in situ hybridization, and MAb development helpful. One position available 1 June 1992 (to join PI on sabbatical at address below), another to start 1 September (at Texas Heart Institute and University of Texas Medical School at Houston). Contact: Mary Harlan, Texas Heart Institute, Cardiology Research (MS 1-191), P.O. Box 20345, Houston, TX 77225, 713-791-3710. Interviews available with Dr. Ward Casscells (Lab Director) at FASEB in Anaheim, 5 to 9 April or at Laboratory of Molecular Cell Biology, Whitter Institute, Scripps Institutes, La Jolla, California until 1 July 1992.

POSTDOCTORAL FELLOWSHIP

Position available to Ph.D. or M.D. to study the molecular basis of T cell tolerance. Please send curriculum vitae and names of three references to: Dr. Claudio Anasetti, Immunogenetics Program, Division of Clinical Research, Fred Hutchinson Cancer Research Center, 1124 Columbia Street, Seattle, WA 98104. FAX: 206-667-4648. We are an Equal Opportunity Employer. Smoke-free environment.

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR BIOLOGY OF AGING AND BIOCHEMISTRY OF PHOSPHOLIPID TRANSFER PROTEINS

Postdoctoral positions are available immediately for work on: (1) cardiac gene expression during stress and aging; and (2) molecular biology and biochemistry of phospholipid transfer proteins. A Ph.D. degree in biochemistry, molecular biology, or cellular biology is required. Experience in recombinant DNA methodology is desirable but not required. Curriculum vitae and the names of three references should be sent to: Dr. Lynwood R. Yarbrough, Department of Biochemistry, University of Kansas Medical Center, Kansas City, KS 66160–7421.

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

POSTDOCTORAL FELLOW RESEARCH ASSOCIATE

Position available to join a group studying interactions of antiviral agents with host at a molecular level. Experience in biochemistry and molecular biology is essential. Molecular studies will require Southern and Northern blot analysis, CAT assays, gel mobility shift assays, transfection, etc. A Ph.D. in biochemistry or equivalent with experience in gene expression regulation is desirable. Stipend is highly competitive. Forward curriculum vitae and names of three references to: Dr. J. P. Sommadossi, AIDS Pharmacology Program—VH 113, 1700 University Boulevard, University of Alabama at Birmingham (UAB), Birmingham, AL 35294–0019. UAB is an Affirmative Action/Equal Opportunity

Employer.

POSTDOCTORAL ASSOCIATE, U.S. Department of Agriculture (USDA). Research position to study gene transfer techniques using electroporation and pollen transformation. Genes related to amino acids and plant defensive responses will be utilized in alfalfa, corn, and tobacco. Position requires background in plant molecular biology and biochemistry. Available immediately at a GS-11 (\$32,423) salary. Contact: Dr. James A. Saunders, USDA, Building 9, Room 5, Beltsville, MD 20705. Telephone: 301-504-7477. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATES. Two NIH-funded positions available from June 1992 to study, in malaria parasites, one of the following topics: mechanisms of drug resistance, chromosome structure and organization, or vaccine antigen development. Experience in either gene cloning and sequencing or in immunological techniques related to hybridoma development and epitope analysis preferred. Send curriculum vitae and the names, addresses and telephone numbers of three references to: Dr. J. Inselburg, Dartmouth Medical School, Department of Microbiology, Hanover, NH 03755–3842. Call or FAX: 603-650-1666.

CHIEF, LABORATORY OF MYCOBACTERIA DIVISION OF BACTERIAL PRODUCTS CENTER FOR BIOLOGICS EVALUATION AND RESEARCH DHHS/PHS/FOOD AND DRUG ADMINISTRATION

The Food and Drug Administration (FDA), Center for Biologics Evaluation and Research (CBER), Division of Bacterial Products, invites applications for the position of Chief, Laboratory of Mycobacteria, located in Bethesda, Maryland. The Laboratory is responsible for conducting research related to cellular immune responses to mycobacteria. This is a supervisory interdisciplinary position appropriate for a physician, chemist, microbiologist, or biologist with post-graduate training. The Laboratory Chief is responsible for originating, developing, conducting and leading a research program related to the biology of mycobacteria and/or the human cellular immune response to these and related organisms. An extensive background in immunology and demonstrated experience in conducting research is required. Clinical and academic opportunities are available.

Salary range for chemist, microbiologist, and biologist is \$54,607 to \$70,987 at the GM-14 level and \$64,233 to \$83,502 at the GM-15 level. Salary range for physician is \$63,707 to \$80,087 at the GM-14 level and \$68,515 to \$87,784 at the GM-15 level. Physicians may also be eligible for a Physician's Comparability Allowance up to \$20,000 per year. Salary is commensurate with education and experience. The grade of the position depends upon the research qualifications of the candidate as determined by the CBER Peer Review Board. **U.S. citizenship is required.** FDA is an equal opportunity employer and has a smoke free environment.

Application for Federal Employment (SF-171) must be received no later than April 23, 1992. For further information on where and how to apply, and to obtain appropriate forms, call Ms. Wilcox on (301) 496-5394.

National Institutes of Health National Heart, Lung, and Blood Institute

HEALTH SCIENTIST ADMINISTRATOR Respiratory Sciences Bethesda, Maryland

Airways Diseases Branch, Division of Lung Diseases, is seeking an experienced pulmonary physiologist, biochemist, cell/molecular biologist, or immunologist to provide administrative scientific support in the management and development of the branch's extramural grant program.

Candidates must have a M.D., Ph.D. or equivalent, postdoctoral research experience and a strong desire to pursue an administrative non-laboratory career track. Excellent written and verbal communication skills required.

The candidate selected will provide leadership for established national programs and develop new programs in his/her area of expertise. Areas of primary interest include chronic obstructive pulmonary disease (COPD), environmental lung diseases, and asthma. Other program areas include cystic fibrosis, respiratory neurobiology and sleep.

Applicants must be U.S. citizens. Appointment at a GS/12-14 level (\$38,861 to \$69,167) anticipated. Send curriculum vitae or Application for Federal Employment (SF-171) to:

Personnel Officer, NHLBI, National Institutes of Health, Building 31, Room 5A28, 9000 Rockville Pike, Bethesda, MD 20892; (301) 496-6477.

NIH is an Equal Opportunity Employer

SECTION HEAD Toxicology

Fisons Pharmaceuticals, an international pharmaceutical research-based organization, is looking for a person to lead a group of scientists studying the safety of candidate compounds at its research facility in Rochester, NY.

The group is involved with both research and development projects, including mechanistic studies, with special emphasis on drugs affecting the nervous system. The ideal candidate will have a PhD in Toxicology or a related discipline, and be Board Certified in Toxicology or eligible for board certification. He or she will have a sound knowledge of Toxicology and ability to lead in an interactive and collaborative setting. Strong interpersonal and communication skills and knowledge of GLP requirements, together with an innovative scientific approach are required.

For confidential consideration, please send resume to: Employment Office, Ref. Ad # RSC909, Fisons Pharmaceuticals, P.O. Box 1710, Rochester, NY 14603.



M.D./Ph.D. Research Pharmacologist

The ICI Pharmaceuticals Group is dedicated to the challenge of discovering and developing important new therapeutic agents for the treatment of asthma and other pulmonary diseases. Expansion of our research programs has resulted in the creation of a new opportunity in our Pulmonary Pharmacology Group at our Wilmington, DE research center.

Here, you will explore the role of the eosinophil and eosinophil proteins in the pathophysiology of asthma. The successful candidate will have an M.D., Ph.D. or M.D./Ph.D. with 2-3 years postdoctoral experience with adhesion molecules, cytokines and inflammatory cells. Good communication and interpersonal skills necessary for effective work in an interdisciplinary environment are essential. A strong biochemical pharmacologic background is a plus.

We offer an excellent salary and benefits program, including relocation assistance, and the opportunity to build a career with one of the world's leading pharmaceutical research organizations.

Please send C.V., in confidence to: **Ron Martin, ICI PHARMACEUTICAL GROUP, Wilmington, DE 19897.** Equal Opportunity Employer, M/F.



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EXPLORING INTRACELLULAR PATHWAYS TO CREATE THE NEXT GENERATION OF BIOPHARMACEUTICALS

At ARIAD Pharmaceuticals, we are combining the most recent breakthroughs in molecular cell biology with advanced applications of structure-based drug design, peptide synthesis, and medicinal chemistry to create a new generation of biopharmaceutical products. These products, primarily small organic and hybrid molecules, will be designed to target intracellular signaling and protein trafficking pathways to alter the course of disease.

We are actively recruiting scientists at all levels with experience in molecular cell biology, molecular genetics, cellular immunology, pharmacology, biochemistry, and organic and computational chemistry. Each position offers an excellent salary and benefits package, incentive stock participation, and the opportunity to work in a stimulating environment and make a major contribution to our organization. If you would like to work with the leading company in this new and exciting area of drug discovery, we would like to receive your CV and a summary of your research experience. Please respond to:

> ARIAD Pharmaceuticals, Inc. Human Resources Office 26 Landsdowne Street Cambridge, MA 02139

We are an equal opportunity and affirmative action employer.

Magainin Pharmaceuticals Inc. Molecular Biologists

Magainin Pharmaceuticals Inc. is a rapidly developing biopharmaceutical company engaged in the research and development of a new class of therapeutic products for the treatment of infections and certain cancers and the promotion of wound healing. With the success of our recent stock offering, we are seeking scientists with commitment, excellent training and communication skills to expand our drug research and development efforts in the following key areas:

Scientist, E. coli gene expression – Ph.D. with 3+ years industrial experience constructing gene expression vectors for production of therapeutic proteins or peptides in E. coli. Must also be familiar with E. coli strain improvement using classical or molecular genetic techniques. Will lead a molecular genetic group focused on production of recombinant proteins. Demonstrated record of accomplishment in molecular genetic research required. Experience in supervising Ph.D. and non-Ph.D. staff is desirable.

Scientist, Protein Purification – Ph.D. with 3+ years industrial experience processing therapeutic proteins or peptides by chemical or enzymatic means. Experience with standard purification methods for recombinant proteins isolated from E. coli is required. Will lead group effort in the post-synthesis processing and purification of recombinant proteins. Experience supervising Ph.D. and non-Ph.D. staff preferred.

Scientist, Gene Construction – Ph.D. with 2+ years post-graduate experience in molecular cloning and/or gene expression in procaryotes, principally in E. coli. Demonstrated competency and expertise in molecular gene constructions.

Scientist, Fermentation – Ph.D. with 2+ years post-doctoral experience in bioprocessing, bioengineering or an equivalent discipline and experience in the fermentative production of recombinant proteins.

Assistant/Associate Scientist, Gene Constructions/Gene Expression – B.S. or M.S. level scientist with a degree in a biochemical or molecular biological discipline.

For consideration, please submit curriculum vitae (indicate position desired), description of research interests and salary requirements to: Director of Human Resources, MAGAININ PHARMACEUTICALS INC., 5110 Campus Drive, Plymouth Meeting, PA 19462. Magainin Pharmaceuticals Inc. is located in new, state-of-the-art facilities in suburban Philadelphia. We offer excellent salaries, benefits, outstanding scientific interactions and the opportunity to change the future of therapeutics. An Equal Opportunity Employer.

Postdoctoral Positions

TOGETHER, the people of Boehringer Ingelheim Pharmaceuticals, Inc. have achieved a respected position in the health care industry by pushing back the boundaries of science through innovative pharmaceutical research. We now have these postdoctoral positions available in our drug discovery group.

Gene Expression

We are seeking a highly motivated and innovative candidate to join an ongoing research program in gene expression regulation of cellular adhesion molecules. Candidates should have a background in eukaryotic molecular biology. Knowledge of transcriptional regulation and cell biology is desirable.

Signal Transduction and Immune Function

This is an opportunity to conduct basic research on the mechanisms of cell activation in an environment dedicated to the identification of new intracellular targets for drug discovery including the investigation of mechanisms of signal transduction in human lymphocytes and neutrophils. Candidates should have a Ph.D. in Biochemistry or Cell Biology; experience studying protein kinases and phosphatases as they relate to cell activation would be a plus.

We offer a highly competitive compensation and benefits package and relocation assistance to qualified individuals. Please send curriculum vitae, indicating position of interest, to: Dept. JC-PD-1S, Boehringer Ingelheim Pharmaceuticals, Inc., 900 Ridgebury Road, P.O. Box 368, Ridgefield, CT 06877. As a progressive health care company, we have a nonsmoking environment. We are an equal opportunity employer m/f/h/v.



POSITIONS OPEN

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POSTDOCTORAL RESEARCH ASSOCIATE STRUCTURE-FUNCTION RELATIONSHIP OF ION CHANNELS COLUMBIA UNIVERSITY DEPARTMENT OF PHARMACOLOGY

A postdoctoral position is available to participate in an ongoing program using the techniques of molecular biology and electrophysiology to study the structurefunction relationship of ion channels, by characterizing the interactions between channels and ions and drug molecules and the modulation of channel function by phosphorylation. Candidates should have a Ph.D. degree in molecular biology. Research experience in site-directed mutagenesis is highly preferred. Interested candidates should send their curriculum vitae and names of three references to: Dr. Gea-Ny Tseng, Department of Pharmacology, Columbia University, 630 West 168th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE. Position available immediately to join a multidisciplinary group dedicated to the study of parkinson's disease and basal ganglia function. Specific research will examine cognitive and motor aspects of parkinsonism in nonhuman primates and will utilize techniques of behavioral pharmacology, chronic single unit electrophysiology, neurochemistry, and receptor autoradiography. A Ph.D. in neuroscience or a related discipline is required as well as an interest in systems or behavioral neurobiology. Send curriculum vitae, a letter stating research interests and the names of three references to: Jay S. Schneider, Ph.D., Hahnemann University, Department of Neurology, Broad and Vine Streets, Mail Stop 423, Philadelphia, PA 19102. An Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE

Highly motivated postdoctoral researcher sought to study the molecular mechanism of action in brain (receptor characteristics; effects on oncogene expression) and/ or regulation of synthesis of neuropeptides that influence addiction to alcohol. Necessary expertise includes PCR, RNA/DNA isolation and quantitation, in situ hybridization, receptor binding, autoradiography and cell culture. Salary commensurate with training and experience. Send curriculum vitae and four letters of recommendation to: Dr. Paula Hoffman, Department of Pharmacology C236, University of Colorado Health Sciences Center, 4200 East Ninth Avenue, Denver, CO 80262. The University of Colorado is an Equal Opportunity/ Affirmative Action Employer.

MOLECULAR BIOLOGY POSTDOCTORAL/RESEARCH ASSOCIATE

Position available to study the regulation of gene expression during differentiation of male germ cells. Possible research projects include but are not restricted to: trans acting factors that regulate meiotic and postmeiotic transcription; RNA-binding proteins that regulate translation; defining the functions of testis-specific isozymes; and gene expression changes in male germ cells during aging. Salary will be commensurate with applicant's experience. Training and experience in molecular biology or protein biochemistry is desirable.

Please send curriculum vitae and names and addresses of three references to: Norman B. Hecht, Department of Biology, Tufts University, Medford, MA 02155.

POSTDOCTORAL ASSOCIATE/RESEARCH SCIENTIST. Positions available immediately for two molecular biologists to join a group dedicated to understanding the structure-function relationship and interaction of human salivary molecules at the molecular level. Projects involve cloning, sequencing and expression of genes and their mutant forms in *E. coli*, and/or baculovirus and mammalian expression systems, purification and analysis of recombinant proteins by functional assays, NMR spectroscopy and x-ray crystallography. A strong background in molecular biology is required. Ph.D. or equivalent with 0 to 3 years of postdoctoral experience required. Send curriculum vitae and three letters of reference to: Michael J. Levine, D.D.S., Ph.D., Professor, Department of Oral Biology, 109 Foster Hall, State University of New York, Buffalo, NY 14214.

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE. To investigate effects of injury on pharmacological and pathophysiological response of endothelial cells and endothelium/smooth muscle interaction. Send résumé and two letters of recommendation to: C. N. Gillis, Ph.D., Department of Anesthesiology, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06510. FAX: 203-737-2765. Yale University is an Affirmative Action Employer and provides Equal Opportunities to all applicants.

RESEARCH ASSOCIATE POSITION UNIVERSITY OF MARYLAND

Available immediately to study the regulation of human neuroblastoma cell growth, differentiation, and metastasis, focusing on the regulation of expression of the amplified N-myc oncogene. Ph.D. and experience in molecular techniques are required. Send curriculum vitae and three letters of reference to: Christopher N. Frantz, M.D., Director, Division of Hematology/Oncology, Department of Pediatrics, School of Medicine, University of Maryland, 22 South Greene Street, Baltimore, MD 21201. The University of Maryland is an Affirmative Action/Equal Opportunity Employer.

RESEARCH COORDINATOR

The University of Georgia Research Services Unit has a full-time vacancy for a person to manage and operate the university's Flow Cytometer Facility. We are seeking a person with a master's degree with major course work in a scientific field. Preference will be given to applicants experienced in the operation of flow cytometry and image analysis. To apply, send résumé to: Lisa Cowart, The University of Georgia, Employment Department, Athens, GA 30602. An Equal Opportunity Employer/Affirmative Action Institution.

ASSISTANT SPECIALIST. Position is available in Molecular and Cell Biology, Division of Biochemistry and Molecular Biology. Duties are to conduct research on the mechanism(s) of both human and bovine pappiloma virus replication, including the cloning, expression, and isolation of proteins involved in replication and the characterization of these proteins using in vivo and in vitro assays. Ph.D. degree in molecular biology is required. The applicant should be proficient in techniques used to study protein-DNA interactions, mammalian and baculovirus cell culture, polymerase chain reactions, molecular cloning and in vitro translation. A working knowledge of animal viruses is necessary. Salary range is \$30,540 to \$34,968, depending on qualifications. Approximate start date: 1 May 1992. Initial appointment is for 24 months; reappointment subject to availability of funds. Application deadline: 26 April 1992 or 30 days from publication date. Qualified candidates should send a letter of application, résumé, names of three references, and copies of relevant publications to: Dr. Michael Botchan, University of California (UC), Division of Biochemistry and Molecular Biology, Berkeley, CA 94720. UC Berkeley is an Equal Opportunity/Affirmative Action Employer.

AEROSPACE RESEARCH ENGINEER. Job duties: development and extension of Implicit-Explicit, directionally unsplit approach to hi-order Godunov-type numerical schemes for unsteady 2D and supersonic steady 3D Navier-Stokes simulations in Eulerian coordinates; incorporate nonequilibrium chemistry into above schemes. Direct, manage, coordinate and execute multifaceted and complex aerospace R&D programs of wind tunnel and flight testing (WT & FT) of airborne systems, and integrate sophisticated computational fluid dynamics (CFD) research programs with practical application in aerospace engineering (AE). Required: Ph.D. in AE, including grad-level coursework in hi-temp. gas dynamics and numerical analysis; 2 years of experience in developing hi-resolution CFD schemes for chemical reacting flows, including 9 months in developing flux functions for 2D, unsteady Eulerian Godunov-type schemes; and 2 years of experience in WT & FT of airborne systems. Salary: \$5720 per month; 40 hours per week. Send résumé and copy of ad to: DEED, 1100 North Eutaw Street, Room 212, Baltimore, MD 21201, J.O. #9049143. Job location: Silver Spring, Maryland.

27 MARCH 1992

Amylin Pharmaceuticals, Inc. in San Diego, CA is a rapidly growing company developing novel pharmaceutical products for diabetes and other metabolic disorders initially based on the discovery of amylin, a pancreatic beta cell hormone (see *Cooper et al.*, *Biochemica et Biophysica Acta (1989) 1014:247-58*).

RESEARCH SCIENTISTS Immunochemistry

The Immunochemistry department has an opening for a Research Scientist, reporting to the head of assay development, with a Ph.D. in immunology, biology, or a related area and direct experience in immunoassay development for plasma analytes. This individual will work closely with the assay development group to develop specific, sensitive immunoassays for research, clinical studies, and diagnostic product development. In addition, openings for research assistants are available working on immunoassay development and validation.

The Immunochemistry department has a second opening for a Research Scientist, reporting to the department director, with a Ph.D. in biochemistry, chemistry, or a related area and demonstrated expertise in analytical protein/peptide chemistry. The selected candidate will be responsible for purification and characterization of amylin from human plasma as well as characterization of amylin-like immunoreactive material from human plasma. Experience in purification of both polyclonal and mono-clonal antibodies is desired.

Amylin Pharmaceuticals, Inc., which recently completed its initial public offering, offers a stimulating and challenging opportunity to participate in a new area of biomedical science, as well as an excellent benefits package which includes equity ownership participation. Please send your curriculum vitae and names and addresses of three references to: Ms. Audrey McGovern/JK, Human Resources Administrator, Amylin Pharmaceuticals, Inc., 9373 Towne Centre Drive, San Diego, CA 92121 or Fax (619) 552-2212. Amylin Pharmaceuticals, Inc. is an Equal Opportunity Employer.



SENIOR/PRINCIPAL RESEARCH SCIENTIST Drug Delivery

Join Sterling Winthrop and be part of a team dedicated to the enhancement of scientific discovery. Sterling Winthrop Pharmaceuticals Research Division is the worldwide pharmaceutical research and development organization of Sterling Winthrop Inc. We currently seek a Principal Research Scientist for the Drug Delivery Department of our Great Valley, Pennsylvania facility.

Responsibilities include providing *in vivo* support for formulation optimization and application of novel oral delivery technologies. Will also provide biological data to allow development and validation of mathematical models for predicting oral bioavailability of drugs from physicochemical properties.



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POSITIONS OPEN

ASSISTANT RESEARCH SCIENTIST POSITION DEPARTMENT OF PSYCHOBIOLOGY UNIVERSITY OF CALIFORNIA IRVINE (UCI)

Applications are invited for a research position in the area of neuroplasticity and Alzheimer's disease. We seek a scientist, preferably a neurochemist, with expertise in receptor binding assays and receptor autoradiography for excitatory amino acids, brain lesioning techniques, and neuroanatomy of rodent and human brain with an emphasis on the limbic system. Applicants must have a Ph.D. or M.D., at least 3 to 5 years of postdoctoral training, and publications in related areas. Knowledge of enzyme kinetics, histological techniques, human brain pathology, and previous experience with computer-assisted imaging systems are highly desirable. Applicants must be strongly motivated toward creative research. Salary range begins at \$41,600. Please submit by 30 April 1992 curriculum vitae, description of research interests, selected reprints, and names and addresses of three references to: Kathy Gerakos, Search Coordinator, Department of Psychobiology, University of California, Irvine, CA 92717–4550.

UCI is an Affirmative Action/Equal Opportunity Employer. The Department of Psychobiology welcomes applications from women and minority candidates.

MICROBIOLOGIST

B.S./A.A. in microbiology/biochemical engineering with 1 to 4 years of industrial GMP experience. The selected candidate will be responsible for bacterial fermentation inoculum development, seed fermentation and culture maintenance. Must have industrial experience. For immediate consideration, please send résumé to: AMVAX, Inc., Personnel (Dept. RN), 12040 Indian Creek Court, Beltsville, MD 20705, or FAX to: 301-470-6198. An Equal Opportunity Employer.

NEUROBEHAVIORAL PHARMACOLOGIST/ TOXICOLOGIST. The Neuroscience Department, under the direction of Dr. Gordon T. Pryor, is seeking a qualified neurobehavioral pharmacologist/toxicologist to join our staff. The candidate selected will be expected to lead and develop our neurotoxicity testing program according to FDA/EPA/FIFRA guidelines under GLP standards. An opportunity to develop an ancillary research program of the candidate's choice that is in the context of the goals of the department is also possible. SRI International is a nonprofit research institute located about 30 miles south of San Francisco in Menlo Park, California. It was founded in 1946 and currently employs about 2500 people on the main campus doing research and consulting in the life and physical sciences, engineering, and economics. Send full curriculum vitae to: Dr. Gordon T. Pryor, SRI International, M/S LA123, 333 Ravenswood Avenue, Menlo Park, CA 94025. *An Equal Opportunity Employer*.

SRI International

LIFE SCIENTIST

Syracuse Research Corporation (SRC), a leader in the field of chemical risk assessment, has openings in its Atlanta, Georgia, office for scientists with expertise in one or more of the following disciplines: mammalian toxicology, epidemiology, pharmacology, carcinogenesis/mutagenesis, teratogenesis. These nonlaboratory positions involve scientific evaluation of published experimental data concerning the adverse effects of chemical pollutants on laboratory animals and humans. Applicants must have excellent technical writing skills and a willingness to work cooperatively on large multidisciplinary projects; Ph.D., M.S. or other advanced degree is preferred. SRC offers competitive salaries and benefits and a creative and challenging work environment. Send résumé to:

Syracuse Research Corporation Human Resources Department Merrill Lane, Syracuse, NY 13210 An Equal Opportunity Employer.

POSITIONS OPEN

NMR AND COMPUTATIONAL CHEMISTRY SCIENTISTS

Several positions are available immediately in the following areas: (1) solution NMR spectroscopy of macromolecules; (2) NMR imaging and in vivo NMR spectroscopy; (3) computational chemistry of macromolecules; (4) NMR laboratory manager. The minimum qualification is an earned Ph.D. with demonstrated record. The NMR Center currently has two modern NMR spectrometers, a Bruker AMX600, a Bruker AMX400WB with solid-state and microscopic imaging accessories. An animal imaging system (BIOSPEC BMT47/40) will be installed soon. Excellent in-house molecular modeling and computational facilities are available. The rank and salary will be commensurate with qualification. Successful candidates will be provided with excellent funding for laboratory setup, two technicians, and generous research support (current level of support for material alone is U.S. \$75,000 per year). Applicants should send curriculum vitae, list of publications, summary of research interests, a research proposal, and the names and addresses of at least three references to: Dr. Tai-huang Huang, Institute of Biomedical Sciences, Academia Sinica, Nankang, Tajpei 11529, Taiwan, R.O.C. Telephone: (02) 789-9039, FAX: (02) 785-3569. E.mail: BMTHH@TWNAS886.BITNET.



Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota. The USDA, Agricultural Research Service, is seeking a person with a Ph.D. or M.D. to fill a lead scientist position with research leadership opportunities at the Human Nutrition Research Center located in Grand Forks, North Dakota, where a multidisciplinary research approach is used to develop recommended intakes of mineral element nutrients for humans. The research assignment is to study factors affecting the bioavailability, retention and utilization of trace elements from food, and homeostatic regulation of trace element metabolism, thus ascertaining how these factors affect human nutrient requirements. Research will emphasize the use of stable and radio isotope methods to study trace element metabolism in human volunteers in an established, modern and well-equipped laboratory. *Must be U.S. citizen*. Salary is commensurate with experience, GS-12–GM-14 (\$38,861 to \$65,527). For information on research, contact: Dr. Forrest H. Nielsen at 701-795-8456. For application procedures/forms contact: Julia A. Murchison, USDA, ARS, Personnel Division, 6305 Ivy Lane, Suite 318, Greenbelt, MD 20770–1435. Telephone: 301-344-3138. Applications in response to this advertisement should be marked ARS-D-2-W-0020. Applications must be received by 20 April 1992. ARS is an Equal Opportunity Employer; women and minorities are encouraged to apply.

VIROLOGIST-CELL CULTURIST

PRI/DynCorp's Biomedical Services Division has a position available for an individual to work in the field of animal virology and cell culture with the intended outcome of producing and safety testing experimental live virus vaccines. Studies include but are not limited to those viral agents responsible for diarrheal diseases and lower respiratory diseases in newborns and infants. Your qualifications should include a Ph.D., M.D. or equivalent degree with related experience or an interest pursuing a career in this research arena. If you are interested in pursuing this career opportunity, please send curriculum vitae, a description of research experiences and the names of three references to:

PRI/DynCorp Biomedical Services Division 1 Taft Court, Suite 200 Rockville, MD 20850 Attention: Dr. Louis Potash

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Qualifications: Candidates for the Staff Fellowship Program must have completed all requirements for a Medical Degree from an accredited institution. Additional speciality training is desirable. Graduates of foreign medical schools must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification. Candidates must be either U.S. citizens or resident aliens eligible for citizenship within four years.

Duration: Appointments are for an initial two-year period and may be extended up to a total of seven years.

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Salary: Salary range for the Staff Fellowship Program is from \$28,000 to \$70,850. Salary, research support, and level of responsibility are commensurate with education and experience.

Positions may also be filled by appointment in the U.S. Public Health Service, Commissioned Corps, Research Officer Group, Research Associate, with commensurate salary and benefits. Candidates for this program need to meet Commissioned Corps appointment standards.

How To Apply: Candidates should send a current Curriculum Vitae, bibliography, and statement of research interest to:

FDA/Center for Biologics Evaluation and Research Building 29, Room 104.MO51 8800 Rockville Pike Bethesda, Maryland 20892

Applications are accepted throughout the year, and candidates should indicate when they will be available for employment. However, to receive full consideration under this announcement, applications must be received by Wednesday, September 30, 1992. For further information, call Ms. Boyer or Ms. Blumenthal on (301) 496-5394.

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To apply for this immediate opening, mail/fax your resume to Human Resources, at Biogen, Inc., Ref. SCI0327, 14 Cambridge Center, Cambridge, MA 02142. Fax: (617) 252-9617. Biogen is an Equal Opportunity Employer, M/F/D/V.



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Deadline for Registration and Abstract Submittal - April 15, 1992 Registration fee (including housing and meals) - \$500.00

For further information, please contact Margaret L. Fanning, P.O. Box 249, 12120 Main Street, Libertytown, Maryland 21762 • 301/898-9266 or FAX 301/898-9173.

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We have an additional opportunity available for an individual to be responsible for powder formulation, aerosolization of proteins, assay or protein/excipients, designing and testing aerosol equiptment and devices.

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This position will provide stability data collection as well as perform analysis related to protein characterization. Responsibilities will also include data analysis, summary scheduling for stability and sample submission. The selected candidate will have lab experience and computer knowledge.

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The selected candidate must have a BS or MS in Biochemistry and 2 years related experience in the purification and characterization of proteins. Familiarity with conventional chromotography, HPLC, and SDS PAGE is essential.

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POSITIONS OPEN

PHARMACOLOGIST. To plan, organize and perform investigation of drug bioavailability, distribution, penetration, and excretion of drugs used in research penetration, and excretion of drugs used in research projects. Duties include design and development of research projects, interpreting data, and recommending products re IND (Investigational New Drug) Applica-tion and NDA filing for Regulatory Affairs. Position requires a Ph.D. in pharmacy and 2 years of experience in research activities with drug bioavailability and pharma-cokinetics, with skills in use of biopharmaceutic princi-ples and concepts plus working knowledge of biochem-istry and pharmaceutical chemistry. Salary. \$5000 per istry and pharmaceutical chemistry. Salary: \$5000 per month; 40 hours per week. Place of employment and interview: Irvine, California. Send this ad and résumé to: Job# MLM #15407, P.O. Box 9560, Sacramento, CA 95823-0560, no later than 17 April 1992.

RESEARCH SCIENTIST: Integrate biomedical and clinical studies of anterior cruciate ligament reconstruction and rehabilitation. Statistical survey and analysis of long-term anterior cruciate ligament-related inju-ries. Requires Ph.D. in mechanical engineering and knowledge of biomechanics of lower extremities, gait analysis; knowledge of CAD; Ph.D.; work in fields of biomechanics with mechanical engineering and experience in experimental biomechanics, mathematical modeling and analysis and computer simulation in biome-chanics. Experience in clinical analysis and evaluation. Forty hours per week, 9:00 a.m. to 5:00 p.m.; \$24,000 per year. Respond by résumé only to: Bethlehem Job Center, 55-61 West Walnut Street, Bethlehem, PA 18018. Job Order #4454924.

VISION RESEARCH. A joint appointment with the Robert S. Dow Neurological Sciences Institute and the Devers Eye Institute of Good Samaritan Hospital and Medical Center is available for a scientist with research interests in the biochemistry or molecular biol-ogy of the eye. Generous start-up funds, equipment and laboratory space are available. M.D. or Ph.D. and post-doctored experience verified doctoral experience required. Level of appointment will depend upon research accomplishments. Please submit curriculum vitae and the names of three references by 15 May 1992 to: Vision Research Search Committee, R. S. Dow Neurological Sciences Institute, 1120 N.W. 20th Avenue, Portland, OR 97209–1595. An Equal Opportunity Employer.

COURSES AND TRAINING

NIH/NIAID AIDS TRAINING GRANT PROGRAM

University of California, Los Angeles (UCLA), is seeking candidates for NIH/NIAID AIDS Training Grant Program. Must have M.D. and/or Ph.D. Must be U.S. citizen/permanent resident. Start date: 1 July 1992. Contact: Cecilia Grijalva at 310-206-2966. FAX: 310-206-2966.

CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND PHYSICAL SCIENTISTS

A 1-week intensive course sponsored by the Massachu-setts Institute of Technology (MIT), 15 to 19 June 1992, Cambridge, Massachusetts. Dr. Richard J. Cohen, Program Director. Basic Principles of Cardiovascular Phys-iology, Cardiovascular Medicine, Diagnostic and Thera-peutic Technologies. Contact: Director of the MIT Summer Session, 617-253-2101.

ANNOUNCEMENTS

NEUROTRAUMA: CONCEPTS, CURRENT PRACTICE AND EMERGING THERAPIES, 11 and 12 June 1992, Detroit, Michigan. Basic science, and 12 June 1992, Detroit, Michigan. Basic science, research, management and special topics will be covered. Speakers include: B. Siesjo, J. Povlishock, D. Becker, D. Anderson, J. Muizelaar, E. Hall, T. McIntosh, R. Walls, B. Green, F. Geisler, M. Walker and B. White. Thirteen CME and ACEP credit hours. Registration fee \$350, early discount of \$295 by 1 May 1992. Contact: Crystal Reed, Wayne State University, 4-H UHC 4201 St. Antoine, Detroit, MI 48201. Telephone: 313-577-1180. 1180

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To apply, send a résumé and a supporting letter from your department chairperson. Include information about degree of student contact, courses being taught, and student advising. Send your application before 22 April 1992 to: Dean Of Graduate Studies, Woods Hole Oceanographic Institution, Woods Hole, MA 02543. Telephone: 508-457-2000, ext. 2200, FAX: 508-2188. Part of an education program to enhance student opportunities, especially for minorities and women, sponsored by the Environmental Sciences Directorate of the Office of Naval Research.

MEETINGS

ALFRED P. SLOAN FOUNDATION SABBATICAL AWARDS IN MOLECULAR STUDIES OF EVOLUTION

Molecular or evolutionary biologists at U.S. and Ca-nadian institutions are invited to apply for sabbatical awards for academic year 1993 to 1994, for development of interdisciplinary knowledge needed for molecular studies of evolution. Awards include matching funds for sabbatical salary and expendables allowance. Deadline: 26 June 1992. Contact: Dr. Michael S. Teitelbaum, 630 Fifth Avenue, Suite 2550, New York, NY 10111. Telephone: 212-649-1649.

10th INTERNATIONAL NEUROTOXICOL-OGY CONFERENCE. Theme: Mechanisms of Devel-opmental Neurotoxicology; 28 September to 1 October 1992/Little Rock, Arkansas; \$1000 in Student Awards/ Abstract Deadline: 1 August 1992. A group of inter-national experts will address mechanistic questions of developmental neurotoxic injury using rapidly advancing concepts in neurochemical, cellular and molecular neuroconcepts in neurochemical, cellular and molecular neuro-biological fields. Volunteer papers invited! Contact: Dr. Joan Cranmer, Conference Chair, Department of Pediatrics #512, University of Arkansas for Medical Sciences, Little Rock, AR 72205. Telephone: 501-320-2986; FAX: 501-320-1564.

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