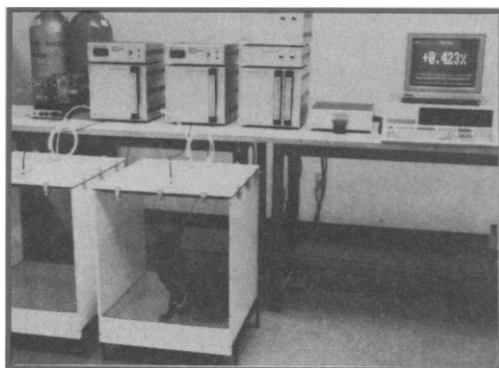


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Sample of "Oxymax" Printout

Sample #	Cage #	VO_2 ml/Kg/Hr	VCO_2 ml/Kg/Hr	RER	O_2 %O ₂	CO_2 %CO ₂	Heat Kcal/Hr	Temp degC	Food g	Resp Vol	----- HorzActv	Counter HeartBPM	Interface RespRate	----- BodyTemp	Time hh:mm:ss
1	1	801	638	0.796	-0.399	+0.332	+1.61	+26.1	+0.2	7.70	213	345	187	37	16:23:25
2	1	772	624	0.808	-0.385	+0.324	+1.56	+26.1	+0.0	8.36	210	330	167	37	16:27:25
3	1	783	646	0.825	-0.392	+0.336	+1.59	+26.0	+0.4	9.33	212	398	153	37	16:31:25

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Microplate Reader

The EL 311 is a scanning microplate reader. It has four plate-reading formats, including formats for multiple-well reading and continuous single-well monitoring. The EL 311 can provide a profile of absorbance changes within each well, set up ratio or threshold controls, and report the results as deviations from the control values. Results may be printed, displayed on the monitor, or sent to a computer for analysis. An optional bar code reader is available. Bio-Tek Instruments. Circle 642.

Spectrophotometer

The UV2100U is an ultraviolet-visible light recording spectrophotometer. Its features include double-beam optics, an absorbance range of -4 to $+5$ Å, and a resolution

of 0.1 nm between 190 and 900 nm. The instrument comes with a color video display, a color x - y plotter, and a 3.5-inch floppy disk drive. Menu-driven software performs quantitative analyses by means of first-, second-, and third-degree calibration curves and time-course studies. Shimadzu Scientific Instruments. Circle 645.

Glucose, L-Lactate Analyzer

The model 2000 measures glucose and L-lactate concentrations in fermentation broths and cell cultures by means of a biosensor. Dangerous reagents are unnecessary, and color, turbidity, density, and temperature do not distort the readings. The user positions the sample and presses a key; the



model 2000 aspirates the sample and then displays and prints the concentrations in less than a minute. Glucose concentrations between 0 and 20 g/liter and L-lactate concentrations between 0 and 2 g/liter may be measured. The maximum sample size is 500 μ l. \$6600. Fisher Scientific. Circle 617.

Automated Protein, Enzyme Separation

The REP System automatically separates proteins and enzymes by a technique based on electrophoretic migration. The user dispenses a drop of each sample into a specimen cup, places the reagent vial in its holder, sets the REP gel into the central compartment, and selects the test. Robots do all remaining steps. Separation of 1 to 30 samples requires less than 5 minutes of the user's time. Accuracy is enhanced in automated separations compared to manual methods because of robotic precision. In contrast to manual separations, automation permits precise volume dispensing, reagent application, and temperature and time control. Helena Laboratories. Circle 647.

Electrophoresis Solution

AccuGel 40 is a ready-to-use 40% (19:1) acrylamide:bisacrylamide solution for preparation of gels of 0 to 40% monomer. Users save the time required to weigh, mix, and filter reagents and reduce their exposure to neurotoxic acrylamide dust. For stability, AccuGel 40 incorporates a gaseous inhibitor that prevents the initiation of the acrylamide and bisacrylamide. When the gel-casting solution is deaerated, this gaseous inhibitor is removed. National Diagnostics. Circle 622.

Protein Kinase Inhibitors

Staurosporine and K-252a are inhibitors of phospholipid- Ca^{2+} -dependent and cyclic nucleotide-dependent protein kinases. These two microbial alkaloids were isolated from the culture broths, Staurosporine from that of *Nocardia* species and K-252a from that of *Streptomyces* species. Inhibition constants are between 0.7 and 25 nM. The reagents are soluble in dimethyl sulfoxide and dimethylformamide. Stored in the dark at 2° to 8°C , the solution is stable for 1 year. Kamiya Biomedical. Circle 623.

Literature

The 1988 *Short Form Catalog* features scientific video instruments, including analyzers, positioning and measuring devices, and stand-alone video-frame storage devices. Colorado Video. Circle 628.

Discover the STAC Advantage describes technology transfer and technical assistance services available to scientists and engineers in both the public and the private sectors. NASA-Southern Technology Applications Center. Circle 629.

Selected Resources—A Catalog of Accessories, Supplies and References for Materials Analysis features accessories, supplies, and reference materials for and publications about microanalysis techniques and x-ray fluorescence spectroscopy. Kevex. Circle 631.

Teflon Labware is a catalog of beakers, flasks, reaction vessels, autoclaves, etching vats, distillation equipment, tubing, fittings, and valves that are made of inert polymers and are chemically resistant, thermally stable, contaminant-free, and nonadsorptive. Tegal Scientific. Circle 632.

Modular and Expandable Technical Laboratory Furniture is a booklet that describes modular cabinets, sinks, shelves, fume hoods, faucets, gas cocks, and electrical receptacles for laboratories. LabX System. Circle 653.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

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- **Laminin Fragment YIGSR** — a fragment of Laminin shown to exhibit cellular attachment activities
- **Hypercalcemia of Malignancy Factor** — a PTH-like protein derived from tumor cells
- **Acyclic Vasopressin Antagonists** — novel Vasopressin antagonists which exhibit a high level of activity in the linear form
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Personnel Placement

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

LINE CLASSIFIED ADVERTISING DEADLINES:

Thursday, 10 a.m., 2 weeks prior to issue date (mailed on issue date).

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

LINE CLASSIFIED (POSITIONS OPEN, COURSES, FELLOWSHIPS, MARKETPLACE, and so forth): \$38.00 per line; \$380 minimum, per week (minimum charge covers one inch on a single column; one inch equals 10 lines of 52 characters and spaces per line). No charge for use of box number. No agency commission for ads less than 4 inches. No cash discount. Prepayment required for all foreign ads. Purchase orders and/or cover letter including billing address required for all other advertising.

To ESTIMATE ad cost:

Structure ad copy on a separate page, on lines of 52 characters and spaces. Include any desired heading. Each line of heading, and/or extra line spaces, and all partial lines (including centered reply information) are counted as full lines. Ad titles located within the text are printed in boldface caps and are only 32 characters per line. In ESTIMATING the cost, multiply total lines \times \$38.00 = approximate cost of ad. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and the resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment.)

CANCELLATION POLICY:

NOTE: Ad cancellations made after Thursday, TWO weeks prior to issue date incur a 10% production charge. Final deadline for cancellations is 12 p.m. Tuesday, ONE week prior to issue date. Cancellations must be in writing.

Send copy for all **Positions Wanted** ads and **Line Classified** ads less than 1/6 page in size (39 lines) to:

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Washington, DC 20005
Telephone: 202-326-6555

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

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1515 Broadway
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Telephone: 212-730-1050

Blind ad replies should be addressed as follows:

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POSITIONS WANTED

Anatomist/Electrophysiologist: Teaching experience in human gross anatomy/neuroscience, seeks research/teaching position. Respond via electronic mail, CompuServe Easyplex number 71211,507. Or Telex: Machine number 3762848. In the first non-blank line of message include: To: Easyplex: 71211,507.

Biochemist, Ph.D. Protein chemistry, purification, characterization, modification; enzymology; biotechnology; immunology, cell culture; FPLC, affinity chromatography. Years of research experience and publications. Seek industrial or academic position in Canada. Box 34, SCIENCE.

Immunologist, Ph.D. Highly qualified scientist currently directing immunology/tissue culture laboratory. Experience in hybridoma technology, large-scale cell culture, tumor-specific immunotherapy, lymphokine-activated killer cells, and biological response modifiers. Seeking academic cancer research position on West Coast. Box 35, SCIENCE.

POSITIONS WANTED

Biochemist/Molecular Biologist, Ph.D. Broad experience in various techniques: Gene isolation, Southern, Northern, and Western analyses, restriction mapping, protein and nucleic acid sequencing, expression of cloned genes, soluble and membrane-bound protein purification and enzyme kinetics. Worked with plant, bacterial and yeast systems. Many publications in reputed journals. Enjoys teaching and group interaction. Permanent resident in U.S. Seeking challenging research position in industries located near big cities. Box 33, SCIENCE.

Biomedical Engineer, Ph.D., M.S.E.E. Seeks research position. Good physiology background with research experience mainly in the visual, vestibular and neural systems, but quite flexible. Clinical postdoctoral and teaching experience. Box 37, SCIENCE.

Pharmacologist/Toxicologist/Immunologist, Ph.D. Experienced in cell culture, hybridoma technology, preparation and evaluation of immunotoxic conjugates, antibody and protein purification, immunoassays. Seeks industrial research position. Box 36, SCIENCE.

Ph.D. in Phosphoinositide Metabolism: Well experienced in all aspects of PI cycle including enzyme assays and HPLC of isomers of inositol phosphates. Also experienced in leading a group of researchers. Seeks challenging research/postdoctoral position in PI cycle, preferably in BRAIN: metabolism of the newer isomers of inositol phosphates/IP₄, IP₃, IP₂ metabolism, calcium mobilization, PKC, PI cycle in brain cell cultures, fatty acid, arachidonic acid metabolites, oncogene products, receptor studies. Available immediately. Box 30, SCIENCE.

Physiologist, M.D. Research experience in nephrophysiology (hemodynamics, endocrinology). Clinical experience in general internal medicine. Teaching experience in medical physiology. Box 31, SCIENCE.

POSITIONS OPEN

ANATOMISTS—Applications are solicited for two tenure-track positions (rank open) to teach microscopic anatomy, beginning July 1988. Candidates for a senior level position (professor or associate professor) will also be considered as Director of the Electron Microscopy Facility of the Medical Sciences Campus. Candidates must have appropriate teaching experience and a strong commitment to research. Strengths of the Department lie in the areas of Primate Biology and Neurobiology. *The Medical School is fully accredited in the U.S. and is an Affirmative Action/Equal Opportunity Employer.* Applicants should send curriculum vitae, the names of three references, and a brief statement of research interests, to: Dr. W. P. Luckett, Department of Anatomy, University of Puerto Rico Medical Sciences Campus, GPO Box 5067, San Juan, PR 00936.

ASSISTANT AGRONOMIST: The Department of Agronomy and Range Science, University of California, Davis, invites applications for an 11-month research position as assistant agronomist in the California Agricultural Experiment Station. The successful candidate will develop a strong research program on rice cropping systems considering, for example, modern approaches to rice/weed interactions. Facilities at both the Davis Campus and the Rice Experiment Station in Biggs, California, are available. A modern understanding of basic plant sciences with a Ph.D. in agronomy, plant physiology, soil science, or a related discipline is required. Submit curriculum vitae, list of publications, statement of research interests, transcripts, and names and addresses of three references by 1 April 1988, to: Dr. J. E. Hill, Department of Agronomy and Range Science, University of California, Davis, CA 95616. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR, Cell/molecular biology 2-year term appointment, Ph.D., fall 1988; to teach cell and molecular biology, microbiology, possibly physiology and advanced courses in area of specialty with commitment to research participation in master's program. Send résumé, transcripts, brief statement of research interests, and three letters of recommendation to: Dr. Thomas G. Froiland, Chairman, Department of Biology, Northern Michigan University, Marquette, MI 49855-5341. *Northern Michigan University is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

GEORGETOWN UNIVERSITY WASHINGTON, D.C. DEPARTMENT OF BIOCHEMISTRY

The Department of Biochemistry of the Georgetown University School of Medicine is recruiting to fill tenure-track positions at the level of **ASSISTANT PROFESSOR**. We are seeking outstanding candidates with research interests in biochemistry and/or molecular biology. Successful applicants will be expected to establish an independent research program and participate actively in graduate and postdoctoral training.

Applicants should submit, prior to 1 May 1988, curriculum vitae, statement of research goals and the names of three references to:

Chairman, Search Committee
Department of Biochemistry
Georgetown University School of Medicine
3900 Reservoir Road, NW
Washington, DC 20007

Georgetown University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGICAL ANTHROPOLOGY. Tenure-track position beginning September 1988. Applicants should have a focus on human adaptability and evolution. Send letter of application, résumé and names of three references to: Gregory A. Johnson, Chair, Department of Anthropology, Hunter College (CUNY), 695 Park Avenue, New York, NY 10021. *Hunter College is an Equal Opportunity/Affirmative Action Employer. Minority candidates are especially encouraged to apply.*

ASSISTANT PROFESSOR OF BIOLOGY. A full-time faculty position is available August 1988 in the Department of Biological Sciences, St. Mary's University, San Antonio, Texas. St. Mary's is a private school of 3,800 students, founded in 1852 and operated by the Catholic order of The Society of Mary. The Department of Biological Sciences specializes in the undergraduate education of students pursuing careers in the health professions, especially medicine. Candidates are required to have a Ph.D., and be qualified to teach courses in introductory biology for majors and nonmajors, and to develop two upper-division courses such as: cell biology, histology, endocrinology, virology or radiation biology. Important factors are: a strong commitment to teaching, advising students, and aiding in their professional development. The faculty is encouraged to apply for grants, through which release-time can be obtained to conduct research involving undergraduates. *All qualified candidates are welcome; minorities and women are encouraged to apply.* Applicants should submit a letter of application, a complete curriculum vitae, typical publications, undergraduate and graduate transcripts, and the names, addresses, and telephone numbers of three former supervisors who will provide references, to: Dr. Rosemarie Wahl Synke, Chair, Department of Biological Sciences, St. Mary's University, One Camino Santa Maria, San Antonio, TX 78284-0400. Application deadline: 15 April 1988.

ASSISTANT PROFESSOR OF MEDICAL ONCOLOGY

The University of Texas Health Science Center at San Antonio, Department of Medicine, will fill a tenure-track position in 1988. The successful candidate will be Board-certified or eligible in medical oncology, and have a strong postdoctoral research record. Preference will be given to candidates with molecular approaches to oncology problems. Applicants should submit curriculum vitae, a letter discussing current and future research plans, and three letters of reference to: Dr. William L. McGuire, Department of Medicine, Division of Oncology, University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7884. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR—NEUROCHEMIST. The Department of Pharmacology, Texas College of Osteopathic Medicine (TCOM), anticipates opening a 3-year, non-tenure-track position for an advanced Ph.D. neurochemist, with interests in behavior and plasticity of receptors. Rank at research assistant professor or research associate, depending upon experience. Salary and benefits very competitive. Send credentials to: Dr. John Lane, TCOM Pharmacology, 3516 Camp Bowie Boulevard, Fort Worth, TX 76107-2690.

POSITIONS OPEN

Clarke College, a Catholic coeducational liberal arts college in Dubuque, Iowa, seeks an

ASSISTANT PROFESSOR OF BIOLOGY

for a tenure-track position. Ph.D. required. Responsibilities include teaching introductory level lecture and laboratory courses and upper level courses in plant ecology and/or biotechnology and plant science. Computer literacy preferred. Send application, resume and three letters of recommendation by 21 March 1988 to: Mary Alice Muellerleile, Ph.D., Academic Dean, Office of Academic Affairs, Clarke College, 1550 Clarke Drive, Dubuque, IA 52001. *Affirmative Action/Equal Opportunity Employer.*

Tulane University School of Medicine is seeking two full-time ASSISTANT PROFESSORS of Medicine in the Endocrine Section of the Department of Medicine. The individuals selected must be Internal Medicine Board-certified or Board-eligible with Endocrine/Metabolic Board or eligibility. The positions involve teaching, patient care, and research responsibilities. Apply to: C. Y. Bowers, M.D., Tulane School of Medicine, 1430 Tulane Avenue, New Orleans, LA 70112. Include updated curriculum vitae. Deadline is 18 March 1988. *Tulane University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT SCIENTIST— MOLECULAR BIOLOGY

Position available for a highly motivated Ph.D. to join our research and development staff studying basic mechanisms of pathogenesis as well as developing novel means of detection of mycoplasma. Expertise in recombinant DNA construction, expression and analysis required. Prior experience with mycoplasmas, cultivation and membrane biology, is desirable. Salary commensurate with experience. Send curriculum vitae and names of three references to: Dr. Steven J. Geary, Director of Research and Development, Bionique Laboratories, Inc., Bloomingdale Road, Saranac Lake, NY 12983. Bionique Laboratories is located in the Olympic region in the Adirondack Mountains.

ASSISTANT/ASSOCIATE PROFESSOR DIRECTOR METABOLIC DISEASE CLINIC

Cincinnati Children's Hospital Medical Center seeks a Board-certified pediatrician, Board-certified or eligible in genetics. Responsibilities: care of patients with inborn errors of metabolism and development of a related independent research program with approximately 80% protected research time. The position will include faculty appointment in a tenured-track, Department of Pediatrics, University of Cincinnati College of Medicine. Send curriculum vitae and names of references to: John J. Hutton, M.D., Children's Hospital Medical Center, Elland and Bethesda Avenues, Cincinnati, OH 45229.

Equal Opportunity Employer

The Department of Pathology at the Medical College of Wisconsin is seeking applicants for a tenure-track position at the ASSISTANT OR ASSOCIATE PROFESSOR level to develop and direct a cytogenetics program. Publication and experience in human genetics is required. Applicants must be Board-certified/Board-eligible by the American Board of Medical Genetics. Opportunities exist currently for collaborative efforts with an active bone marrow transplant program and a future program in molecular genetics. Please send curriculum vitae and names of three references to: Dr. Susan Koethe, Department of Pathology, Medical College of Wisconsin, 8700 West Wisconsin Avenue, Milwaukee, WI 53226. *Equal Opportunity Affirmative Action Employer M/F/H.*

BIOLOGICAL AND/OR PHYSICAL SCIENCES—ASSISTANT PROFESSOR, Ph.D. in the natural sciences—Teaching in freshman-sophomore general education program. Research required. Position available September 1988. Deadline for applications: 1 April 1988. Tenure-track, salary negotiable. Send résumé and at least three recommendations. Application will not be reviewed until recommendations are received. Mail to: Professor Charles P. Fogg, Chairman, Division of Science, College of Basic Studies, Boston University, 871 Commonwealth Avenue, Boston, MA 02215. *An Equal Opportunity/Affirmative Action Employer.*

4 MARCH 1988

SCIENTISTS/ POSTDOCTORAL FELLOWS

Genencor, Inc., a dynamic and growing biotechnology company in South San Francisco, California which specializes in the research, development and manufacture of industrial enzymes and enzyme processes is looking for permanent and postdoctoral scientists to fill vacancies in our Research Department.

The successful candidate will have demonstrated excellence through a successful research and publication record in heterologous gene expression, *in vitro* mutagenesis and/or heterologous protein structure in bacteria or fungi. Imaginative and creative people with outstanding leadership abilities yet able to work within a multi-disciplinary project framework will be selected.

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GENENCOR

GENETIC TOXICOLOGIST

The Parke-Davis Pharmaceutical Research Division of Warner-Lambert seeks a genetic toxicologist to join its Pathology and Experimental Toxicology Department. Parke-Davis, a world leader in drug discovery and development, is located in Ann Arbor adjacent to the University of Michigan campus.

The responsibilities of this position are: to supervise *in vitro* mammalian mutagenicity testing of drugs, design and conduct follow-up mechanistic studies when needed, participate in the conduct of other genetic toxicology tests of drugs, assist the Section Director in dealing with any genetic toxicology issues that become a concern of Parke-Davis, and participate in the management of the Genetic Toxicology Section.

The requirements for this position include: Ph.D. in Toxicology, Pharmacology, Biochemistry, Microbiology, Cell Biology or Molecular Genetics; specific training in genetic toxicology preferred.

Experience desired: two years experience with cell culture. Specific experience with *in vitro* mammalian mutagenesis, with additional genetic toxicology experience preferred. Excellent oral and written communication skills.

Join our dynamic scientific team working in new modern laboratories and enjoy excellent compensation, and living and working environment. Qualified candidates are encouraged to send resume, salary requirements, and reference list in confidence to: Ms. M. Wolin, Parke-Davis Pharmaceutical Research Division, 2800 Plymouth Rd., Ann Arbor, MI 48105.

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To find out how you may fit into this exciting, intellectually stimulating environment, please send your resume and letter outlining area of interest to: **CODON, Human Resources Dept. 572, 213 E. Grand Ave., South San Francisco, CA 94080.** Equal Opportunity Employer

Our location, just south of San Francisco, California, places us in one of the major biotechnology centers in the country and affords close contact with prime educational institutions such as Stanford University, The University of California, San Francisco, and The University of California, Berkeley.

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RESEARCH SCIENTISTS

Enzon, Inc., a pharmaceutical company involved in the development of modified peptides and polypeptides with enhanced therapeutic performance, is seeking three doctoral level scientists for research in the following areas:

HEMOGLOBIN scientist to participate in the development of whole-blood substitutes which are based on modified hemoglobins. Applicants should have a background in the purification and laboratory evaluation of hemoglobin solutions plus the ability to carry out studies in animals on the effectiveness of modified hemoglobins as substitutes for whole blood.

ANALYTICAL scientist. Duties will include analysis of modified peptides and proteins for homogeneity and stability, development of analytical methodology for these products, consultation with quality control and production personnel, and other duties that are consistent with the position.

SCIENTIST with a background in peptide hormones. The candidate who is selected will participate in the preparation of modified hormones and the evaluation of their in vitro and in vivo performance.

Candidates should have a PhD in biochemistry or a closely related discipline. Some postdoctoral experience is desirable, though not essential. Enzon, Inc. offers an excellent salary and benefit package. There will be ample opportunity for personal growth in a young, rapidly expanding company. Please send resumé to: Frank F. Davis, Enzon, Inc., 300C Corporate Court, South Plainfield, NJ 07080. An equal opportunity employer.



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DEPARTMENT HEAD

Department of Neurosciences

The Roche Institute of Molecular Biology invites applications and nominations for Head—Department of Neurosciences. This Department is one of four in the Institute; the others are Biochemistry, Cell and Developmental Biology and Molecular Oncology. When fully staffed, this Department will consist of 9 independent investigators, 25 postdoctoral fellows and a support staff of approximately 15.

Applicants should have world class research programs in areas of neuroscience such as Developmental Biology, Molecular Pharmacology, Transduction or Regulation of Gene Expression. The major role of this individual is to carry on a vigorous and meritorious research program. This will be fully supported by the Institute, including laboratory assistants and several postdoctoral fellows. As Department Head, the individual will, with the assistance of departmental members and other Institute staff, be responsible for the administrative affairs of the Department. In the absence of grants and teaching responsibilities, these are not burdensome. The position is ideally suited for a Scientist whose primary goal is to carry out innovative research in a stimulating environment with minimal interference by administrative responsibilities.

Our convenient location facilitates participation in New York City's rich cultural and intellectual life. Adjunct appointments at metropolitan area universities and participation in their graduate programs are encouraged. For consideration, please submit your curriculum vitae and bibliography, statement of research interests and names of three professional references to: **Dr. Frank L. Margolis, Neuroscience Search Committee, Roche Institute of Molecular Biology, Nutley, New Jersey 07110.** We are an equal opportunity employer.



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An *Uncommon* Opportunity

Marion Laboratories, Inc., headquartered in Kansas City, Missouri, is involved in the development, manufacturing and sales of pharmaceutical, hospital and laboratory products. For the fourth consecutive year, net earnings for Marion Laboratories, Inc. increased more than 50% with net sales of \$500 million. Our continued growth and expansion allows us to seek experienced individuals for the following positions in Kansas City.

PHARMACOLOGY TEAM LEADER

Primary responsibilities will be to lead a group of Pharmacologists and Biochemists in a drug discovery effort. The associate will participate in the identification and development of product candidates in the treatment of gastrointestinal, respiratory and metabolic diseases. The successful candidate will have a Ph.D. in Pharmacology or Biochemistry with at least 3 years of experience in drug discovery within the pharmaceutical industry. Strong interpersonal, communication skills and a proven ability to effectively supervise others is required.

BIOCHEMIST

Marion is looking for a Biochemist to participate in drug discovery and development. The laboratory is involved with the investigation of disease mechanism and therapeutic approaches to resolve them. The successful candidate should have a Ph.D. in Biochemistry or a related scientific field. The position involves direct laboratory involvement. Strong interpersonal, communication skills are essential.

CARDIOVASCULAR PHARMACOLOGISTS

Primary responsibilities will include performing pre-clinical pharmacological research necessary for the development of cardiovascular pharmaceuticals. The successful candidates should have a Ph.D. in Pharmacology, Physiology or a related biological science with 1-3 years post-doctoral experience in cardiovascular physiology/pharmacology. Research experience in the area of hypertension is desirable. Good oral and written communication skills are essential.

We offer a complete compensation and benefits package including bonus, profit sharing, stock options, comprehensive group health, dental and life insurance. Qualified candidates should submit a detailed resume including salary history to: **Recruiting & Placement, Dept. CJL, P.O. Box 9627, Kansas City, MO 64134.** Equal Opportunity Employer.

**Marion
Laboratories, Inc.**

The *Uncommon* Company



Saudi Arabia

The **King Faisal Specialist Hospital and Research Centre** in Riyadh is a 500 bed tertiary referral center for the Kingdom of Saudi Arabia. The Research Centre for the King Faisal Specialist Hospital and Research Centre has fully equipped research labs and a cyclotron CS 30 which produces radionuclides for research and distribution.

The Hospital and Research Centre are currently seeking candidates for the following positions:

Consultant for radionuclide Production & Distribution (Ph.D)
Section Head for Radionuclide Production & Distribution (Ph.D)
Chief Research Tech for Radionuclide Production & Distribution
Hotcell Radiochemist
Section Head, Cyclotron Operations
Cyclotron Engineer
Medical Physicist II (Ph.D)
Medical Physics Tech

There are substantial tax savings and attractive benefits including:

- Relocation allowance and free furnished housing
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- Free medical and dental care and emergency leave
- Educational assistance for eligible dependent children

For further information and/or to apply, please send a detailed resume to: **HCA International Company, Dept. S-3488, P.O. Box 550, Nashville, TN 37023-0550** or call toll free **1-800-251-2561**. HCA is an equal opportunity employer.

HCA International
Company

POSITIONS OPEN

BIOCHEMISTRY—FACULTY POSITIONS.

Applications are invited for tenure-track appointment to the rank of assistant or associate professor of biochemistry at the Albany Medical College. Preference will be given to candidates with research experience in contemporary molecular biology, especially recombinant DNA techniques, although scientists qualified in other areas of biochemistry will also be given serious consideration. Current major foci of research interests in the Department include molecular endocrinology, complex carbohydrates and glycolipids, protein chemistry, and neurochemistry. A commitment to excellence in teaching medical and graduate students as well as evidence of accomplishment or scientific potential is required. The Albany area offers the advantages of a cosmopolitan life-style in a suburban-rural setting. Starting date is open. If interested, please forward curriculum vitae, outline of research interests, names of three references, and indication of when available to: **Dr. Leo E. Reichert, Jr., Professor and Chairman, Department of Biochemistry, Albany Medical College, Albany, NY 12208.**

An Equal Opportunity/Affirmative Action Employer.

BIOLOGIST, ASSISTANT PROFESSOR:

We seek a Ph.D. molecular biologist, preferably with dissertation and/or postdoctoral work in immunology and/or virology, for a tenure-track faculty position to begin in August 1988, contingent upon final approval of funding. Duties will include teaching in our freshman-level courses, developing an advanced course in immunology or virology, and maintaining an active research program in molecular biology. Please send letter describing future teaching and research interests, curriculum vitae, all academic transcripts, and three letters of reference by 15 April 1988 to: **Dr. Bruce McKee, Department of Biology, University of Wisconsin—Eau Claire, Eau Claire, WI 54701.** *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer. Qualified minorities and women are encouraged to apply.*

BIOLOGY, DEPARTMENT CHAIRER, Wright State University (WSU). Department with 22 full-time faculty, 350 undergraduate majors and 25 graduate students seeks applications and nominations for Chairer. The starting date is July 1988, but may be negotiated. Department offers bachelor's degrees in biological sciences, medical technology and environmental health as well as M.S. in biological sciences. In addition, many faculty participate significantly in the interdisciplinary Biomedical Sciences Ph.D. Program. Candidates must have: earned doctorate, capability of providing strong leadership in research and undergraduate/graduate education, qualifications for appointment at the professor level. Administrative experience is desirable. Research and teaching areas are open but molecular/cellular biology, environmental/organismic biology, medical technology, toxicology, and environmental health, as well as cross-disciplinary areas, are preferred. Opportunities for collaboration with four other life science departments (anatomy, biochemistry, microbiology/immunology, and physiology/biophysics) as well as with the WSU School of Medicine are plentiful. Salary and teaching load competitive. Send letter, résumé, and three letters of reference to: **Dr. Wayne Carmichael, Chairer, Biological Sciences Chairer Search Committee, Department of Biological Sciences, Wright State University, Dayton, OH 45435.** Deadline for application: 25 March 1988 or until position is filled. *Equal Opportunity/Affirmative Action Employer.*

CHAIR IN BIOCHEMISTRY

The University of South Dakota School of Medicine invites nominations of and applications from independent scholars. We are looking for a person with a commitment to excellence in teaching and graduate education. A research record that inspires and promises vigorous support and participation in research and the pursuit of extramural funds is expected. Preference will be given to applicants with demonstrated expertise in molecular biology. The successful candidate will direct the faculty of six, and have the opportunity to influence the development of this institution. Initial review of applications will begin 15 April 1988, and continue until the position is filled. Candidates should send curriculum vitae, publication list, and the names of at least three references to: **Biochemistry Chair Search Committee (Attn: R. J. Peanasky, Ph.D.), University of South Dakota School of Medicine, Vermillion, SD 57069.** *The University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CELLULAR AND MOLECULAR PHARMACOLOGY

Applications are invited for two positions available 1 July 1988:

- 1) **INSTRUCTOR** to participate in research on molecular events of mitosis in *Aspergillus nidulans*.
- 2) **POSTDOCTORAL FELLOW** to participate in research on the regulation of gene expression or on translational control mechanisms.

Inquiries to: **Dr. Bruce McL. Breckenridge, Department of Pharmacology, UMDNJ—Robert Wood Johnson Medical School, 675 Hoes Lane, Piscataway, NJ 08854-5635.** *An Equal Opportunity/Affirmative Action Employer M/F/H/V.*

CHAIRPERSON DEPARTMENT OF PSYCHIATRY UNIVERSITY OF ALABAMA SCHOOL OF MEDICINE, UAB

The University of Alabama School of Medicine, UAB, is seeking a person to fill the position of Chairperson, Department of Psychiatry. The department is responsible for teaching medical students, residents, and graduate students in psychiatry and relevant areas of the neurosciences, as well as conducting multidisciplinary research on psychiatric disorders and related topics in the neurosciences. Patient care responsibilities include a comprehensive mental health center, inpatient and outpatient services, as well as substance abuse programs. A certificate of need for a new 90-bed psychiatric hospital has recently been obtained, and it is anticipated that construction of this facility will begin shortly.

UAB is strongly committed to research. Its medical research programs are undergirded by excellent basic science departments, facilities and state-of-the-art equipment and shared resources.

Inquiries and application should be received by 30 June 1988, and should be addressed to:

**Mrs. A. D. Hyche
Office of the Dean
University of Alabama School of Medicine
UAB Station
Birmingham, AL 35294**

An Affirmative Action/Equal Opportunity Employer

CHEMIST—Ph.D. in chemistry. Three years of experience as a researcher in chemical dynamics. Research experience should include the use of laser diagnostics for measuring the rates of chemical reactions, computerization of experiments, statistical theories of chemical reactions and high vacuum techniques. The above evidenced by a minimum of eight publications in refereed journals. Will participate in a new program in chemical dynamics to characterize elementary chemical processes for individual quantum states of the colliding species as a function of scattering angle, collision energy and orientation. Requires (i) the design and construction of a pulsed, supersonic, crossed molecular beam machine in collaboration with others and (ii) the design and construction of a laser system for both the production of the molecular species to be studied and the detection of the reaction products. Must interact with staff members in theoretical chemistry in defining systems to be studied. Salary: \$4400 per month; 40 hours per week; 8:30 a.m. to 5:00 p.m. Send résumé to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605; Attention: Robert S. Felton, Reference #V-IL 7587-f.** *An Employer paid ad.*

DEAN OF SCIENCES

Trinity University invites applications for the position of Dean of the Division of Sciences, Mathematics, and Engineering. The Division consists of 7 departments and 55 faculty. The University is a private liberal arts and sciences institution with 2600 undergraduate students. Along with directing curricular matters, the Dean is expected to provide leadership in the recruitment of outstanding faculty and to maintain an environment that is conducive to scholarly productivity. Candidates should submit a letter of application, curriculum vitae, and names, addresses, and telephone numbers of four references. Applications should emphasize achievements in classroom teaching, research scholarship, academic leadership, and community service. Deadline for receipt of applications is 1 April 1988. The appointment may begin as early as 1 June 1988. Mailing address: **Dr. Lawrence Espey, Trinity University, San Antonio, TX 78284.**

An Equal Opportunity/Affirmative Action Institution.

POSITIONS OPEN

CELL BIOLOGIST—PROTEIN CHEMIST: The Section of Cardiology, Northwestern University Medical School, seeks an individual experienced in muscle cell culture and analysis of myofibrillar protein turnover. Rank and salary commensurate with experience for this tenure-eligible position. Respond to: **Dr. Michael Lesch, Chief, Section of Cardiology, Northwestern Memorial Hospital, 250 East Superior Street, Chicago, IL 60611.**

CHAIRMAN, DEPARTMENT OF CELLULAR AND MOLECULAR PHYSIOLOGY

Yale University School of Medicine invites applications and nominations for the position of Chairman of the School's Department of Cellular and Molecular Physiology. Candidate must be qualified for faculty appointment at the rank of professor and must be a recognized leader in the field with proven ability as a scholar, teacher, and administrator. Appointment is to be effective September 1988, or as soon thereafter as possible. Applications should be submitted prior to 31 March 1988. *Qualified women and minority group members are encouraged to apply.* Curriculum vitae and bibliography should be sent to: **The Chairman of the Search Committee: Dr. John P. Perkins, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, P.O. Box 333, New Haven, CT 06510.** *Affirmative Action/Equal Opportunity Employer.*

CHAIRPERSON, BIOMEDICAL INSTITUTIONAL REVIEW BOARD

The University of Pittsburgh School of Medicine is conducting a search for Chairperson of the Biomedical Institutional Review Board of the University of Pittsburgh. Competitive candidates will have strong preparation in the areas of study design, drug action and medical ethics. Experience in administration is desirable, but not a prerequisite. An appropriate academic appointment will be offered. Recommendations and inquiries (including curriculum vitae) should be directed to: **Barbara A. Levey, M.D., Head, Search Committee for Chairperson of Biomedical I.R.B., Admissions Office, M-245 Scaife Hall, University of Pittsburgh School of Medicine, Pittsburgh, PA 15261.** *The University of Pittsburgh is an Equal Opportunity/Affirmative Action Employer.*

DIRECTOR ARECIBO OBSERVATORY

The National Astronomy and Ionosphere Center (NAIC), Cornell University seeks Director for the Arecibo Observatory in Puerto Rico. The facility is a NSF-funded National Observatory for research in radio and radar astronomy and in atmospheric sciences. The main observing activity is centered on the 308-m reflecting telescope operating for radio astronomy in the frequency range 25 MHz to 3 GHz, and as a radar astronomy instrument and an atmospheric probing radar at 430 MHz and 2.3 GHz. A number of support research facilities are available, as are Harris and DEC main-frame digital computers with array processors and special purpose correlators for data-taking and data analysis. Plans for major upgrades of the observing facilities have been developed and are expected to be implemented during the next few years.

The main research topics include the properties of distant galaxies and our own, the interstellar medium, pulsars, flare stars, planetary surfaces, asteroids, comets, the solar wind, the earth's ionosphere, the mesosphere, the stratosphere and the troposphere. Each year 150 to 200 visiting scientists conduct their research at the Observatory in addition to the investigations carried out by the staff.

The applicant should be an active radio astronomer with a record of leadership in major radio science projects. Salary and benefits are competitive and attractive and will depend on the applicant's qualifications. Closing date for applications is 1 June 1988. Please submit the application with complete resume of academic, professional and personal data, including references, to:

**Dr. Tor Hagfors, Director
NAIC
Space Sciences Building
Cornell University
Ithaca, NY 14853-6801**

Cornell University is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN GENETICS

The Department of Genetics at the Southwest Foundation for Biomedical Research has postdoctoral positions available in several areas of genetic research. Our multidisciplinary research programs utilize human subjects, unique pedigreed colonies of baboons (n = 3000) and marsupials (n = 1000), and laboratory mice and rats.

MOLECULAR AND BIOCHEMICAL GENETICS

Several postdoctoral positions are available for individuals with molecular, biochemical, or cell culture expertise to collaborate with Drs. James Hixson and John VandeBerg. Ongoing projects include studies of the structure, function, regulation, and linkage relationships of specific genes involved in cholesterol metabolism and atherosclerosis, hypertension and cardiac hypertrophy, alcoholism and alcohol metabolism, and X-chromosome inactivation.

QUANTITATIVE GENETICS OR GENETIC EPIDEMIOLOGY

One position is available for an individual with a strong background in quantitative genetics, human population genetics, or genetic epidemiology to collaborate with Drs. Candace Kammerer, Jean MacCluer, and Bennett Dyke. Ongoing projects include evaluations of methods of genetic analyses using computer simulated data and investigations of genetic factors contributing to atherosclerosis (using data from our pedigreed baboon and marsupial populations) and Long QT Syndrome (using data from human subjects).

Applicants must have a Ph.D. or M.D. degree or expect to obtain one by the end of 1988. Send curriculum vitae, and names, addresses, and telephone numbers of at least three references to: **Personnel Manager, Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, Texas 78284-2500. Equal Opportunity Employer, M/F.**

G.D. Searle is a worldwide leader in the pharmaceutical industry. Outstanding opportunities exist for qualified researchers in the following areas:

BIOCHEMISTRY RESEARCH SCIENTIST MOLECULAR & CELL BIOLOGY

Directs the laboratory responsible for the preparation of enzymes and substrates for connective tissue protease projects, and supervises assay of test substances for anti-protease activity. Designs and conducts experiments to describe inhibitor kinetics, and provides biochemical support for appropriate in vivo or ex vivo experiments on test substances of interest. Requires Ph.D. in Biochemistry or related with postdoctoral experience in connective tissue protease/enzymology of proteases.

RESEARCH SCIENTIST IMMUNOPHARMACOLOGIST

Participate in the development of new animal models of immune dysfunction and inflammation to support drug discovery activity. Design, conduct and report results of in vivo experiments to identify efficacy of test substances in infectious disease models. Requires Ph.D. in Immunopharmacology or appropriate biological science with 3-5 years postdoctoral experience with animal models of immune dysfunction/infectious disease.

MEDICAL & SCIENTIFIC AFFAIRS ANALYST

Responsible for writing clinical reports, clinical summaries and other documents for clinical studies conducted under the auspices of Corporate Medical and Scientific Affairs. Requires Ph.D. in life science, preferably in Biology/Pharmacology and 2-5 years experience in pharmaceutical writing of clinical reports of clinical studies.

These positions offer an excellent salary, high visibility, and comprehensive benefits package. Searle is located in a northern suburb adjacent to Chicago. Our location offers access to a variety of cultural and recreational facilities, several fine universities, and an active science community. Qualified candidates may respond in strictest confidence to: **G. D. Searle & Co., R&D Professional Staffing, Dept. GF, 4901 Searle Parkway, Skokie, IL 60077. Equal Opportunity Employer.**

SEARLE



ONCOGEN

Scientist

Oncogen, a division of Bristol-Myers and a leader in biotechnology, performs research dedicated to pursuing novel approaches to the development of therapeutic products in the areas of immunology, infectious diseases and cancer.

We are currently recruiting for a PhD with post-doctoral experience for a position that will involve eukaryotic expression with emphasis on mammalian cell expression. Job responsibilities would require construction of expression vectors for the production of growth modulating molecules, transfer of the recombinant molecules into an appropriate cell host and selection of cell lines and cell clones synthesizing large amounts of the desired molecule.

Qualified candidates should possess experience in cDNA cloning, recombinant DNA manipulations, prokaryotic and eukaryotic cell culture, DNA transfections, immunological detection of recombinant products, and protein purification.

Oncogen offers a creative work environment, competitive salaries and an excellent benefit package. For consideration, please send your curriculum vitae to: **Personnel, Oncogen, 3005 First Avenue, Seattle, WA 98121. EOE/AA.**

IDEC Pharmaceuticals Corporation, the leader in the therapeutic application of anti-idiotype antibodies, has scientific positions available at its La Jolla and Mountain View, CA research facilities. IDEC offers full benefits, stock participation and growth potential commensurate with technical and managerial accomplishments. Qualified applicants are sought for:

Senior Scientist and Scientist:

Positions available for molecular/cellular immunologists and biologists to help lead the company's new product discovery efforts in cancer and diseases/disorders of the human immune system. Successful candidates will display record of research accomplishment and innovation. Ph.D. and postdoctoral training required.

Postdoctoral Fellow and Research Associate:

Company and NIH-supported positions available for candidates with experience in molecular/cellular immunology and molecular biology. Preference for individuals with experience in at least one of the following: retroviral research, human T-cell cloning, molecular biology of T-Cell receptors, and transformation of human PBLs by EBV. B.S. or M.S. required for Research Associate position.

Research Associate Hybridoma Development:

Applicants must be familiar with state-of-the-art hybridoma technology. Proficiency in protein purification and/or lymphocyte separation and characterization is preferred. B.S. or M.S. required.

Send resume and references to: **Heinz Kohler, M.D., Ph.D., Director of Research, IDEC Pharmaceuticals Corporation, 11099 North Torrey Pines Road., Suite 160, La Jolla, CA 92037.**

IDEC

PHARMACEUTICALS
CORPORATION

IDEC is an Equal Opportunity Employer

University of Illinois at Urbana-Champaign

DEAN

COLLEGE OF APPLIED LIFE STUDIES

The University of Illinois at Urbana-Champaign invites nominations and applications for the position of Dean of the College of Applied Life Studies.

The Dean is the chief executive officer and academic leader of the College, responsible to the Chancellor for its administration, and is the agent of the College faculty for the execution of educational policy. The College supports and encourages disciplinary and interdisciplinary research, teaching, and service. The College has a special interest in developing research and training programs which integrate disciplines involving health and human development. The College includes six administrative units: Campus Recreation, Health and Safety Studies, Kinesiology, Leisure Studies, Rehabilitation Education, and Institute for Research in Human Development.

Strong preference will be given to a person with the following qualifications:

- demonstrated excellence in scholarship in a relevant discipline;
- administrative experience;
- ability to recognize and support excellence and balance in research, teaching, and service activities;
- commitment to both undergraduate and graduate education;
- demonstrated commitment to affirmative action;
- ability to relate to groups internal and external to the university, and ability to serve as an effective advocate for the College;
- an earned doctorate in a discipline related to the mission of the College; and
- demonstrated leadership in the acquisition of external funding.

Qualification for rank of professor is required.

Salary and starting date are negotiable.

To be assured of full consideration, nominations and applications (including vita) should be submitted by April 1, 1988, to:

Professor John A. Milner, Chair
Search Committee for Dean of the
College of Applied Life Studies
University of Illinois at Urbana-Champaign
214 Swanlund Administration Building
601 East John Street
Champaign, Illinois 61820

Attention: Lawrence R. Mann (217/333-4523)

THE UNIVERSITY OF ILLINOIS IS AN AFFIRMATIVE
ACTION/EQUAL OPPORTUNITY EMPLOYER.

RESEARCH SCIENTISTS

CANGENE, the Canadian Genetic Engineering Company, is seeking outstanding Ph.D.'s to join our expanding research program. Both permanent and post-doctoral opportunities are available. Successful applicants should have relevant experience in isolation and purification of recombinant **proteins**; **cloning** and **expression** of heterologous genes; nucleic acid **hybridization** and practical **enzymology** of nucleic acid polymerases.

Candidates are invited to submit a full curriculum vitae including the names, addresses and telephone numbers of three knowledgeable referees to:

Director, Technical Recruiting



The Canadian Genetic Engineering Company

3403 American Drive

Mississauga, Ontario

Canada L4V1T4

POSTDOCTORAL ASSOCIATE

MIT's Department of Applied Biological Sciences seeks an individual to work in a newly organized laboratory studying pro- and eucaryotic cell behavior, specifically the mechanisms of energy-level sensing. Ph.D. degree required and strong background in one or more of the following areas: (1) one and two-D electrophoresis, protein purification, (2) isolation of mutants, mapping of E. coli genes recombinant DNA methods, and (3) establishing and maintaining cell cultures. MIT is a non-smoking environment.

Interested candidates should send two copies of both cover letter and resume referencing Job No. C88-001 to: Prof. Kim Lewis, c/o Ken Hewitt, MIT Personnel Office, 400 Main Street (Bldg. E19-239), Cambridge, MA 02139.

MIT is an Equal Opportunity/Affirmative Action Employer

A COMMUNITY AT WORK

The MIT logo, consisting of the letters "MIT" in a large, bold, serif font. The letters are white with a thick black outline, set against a dark background. The logo is flanked by horizontal lines on both sides.

RESEARCH ASSOCIATES IN CELL BIOLOGY

Amgen is a dynamic and growing organization that is a recognized leader in advanced biotechnology. Our leadership in the development of Erythropoietin has placed us firmly at the forefront of the industry. Our continued growth has created immediate opportunities for Research Associates in Cell Biology.

Qualified applicants should have a BS or MS in Cell Biology, or a related discipline, and 2-4 years of experience in mammalian cell culture. Responsibilities for these positions will include maintaining mammalian cell lines as well as performing a variety of IN VITRO bio-assays to support on-going exploratory research projects. Some familiarity with molecular biological techniques is highly desirable.

Amgen offers a stimulating and challenging research environment as well as an attractive location one hour northwest of Los Angeles. **Amgen** also offers an excellent compensation and benefits package. Qualified applicants should send a resume and a list of 3 references, in confidence, to:

Recruitment, Dept. #29

AMGEN

1900 Oak Terrace Lane

Thousand Oaks

CA 91320

Equal Opportunity Employer



MICROBIOLOGISTS

ICI Pharmaceuticals Group, which includes Stuart Pharmaceuticals and ICI Pharma, is one of the fastest-growing producers of quality pharmaceuticals in the U.S. Current research activities are focused on the development of new products for the treatment of cardiovascular diseases, arthritis, cancer, infectious diseases and pulmonary diseases.

We have immediate openings for microbiologists in the following areas:

PHARMACEUTICAL DEVELOPMENT

Responsibilities will be to plan, coordinate, and implement studies on microbiological and related aspects to support the development and small-scale manufacture of parenteral products.

We require an M.S. in microbiology with a minimum of 2 years' experience (or B.S. degree with 5 years' experience) in microbiological development/testing to support pharmaceutical development.

Direct experience in the development of sterility tests, LAL endotoxin test methods, preservative challenge tests and sterile product area operation/validations is required. Experience in stock culture maintenance, organism identification, sterilization and depyrogenation technology, non-viable/viable particulate monitoring and media fills is highly desirable.

ANTIBIOTIC DEVELOPMENT/EVALUATION

Will plan, coordinate and implement studies to support international microbiological development of new antibiotics, as well as participate in the pre-clinical/clinical microbiological development program needed for regulatory submissions.

Position requires a Ph.D. in microbiology or M.S. degree with several years' experience in the development and evaluation of new antimicrobial agents and/or in the development of technology related to antibiotic development.

Applicants should be thoroughly familiar with the current/standard methodology as well as be able to develop new/novel methods in the areas of susceptibility testing, bioassays, antibacterial evaluations, and study of resistance development/potential.

These positions are located at our corporate headquarters, a campus-like complex in suburban Wilmington, DE. We offer an excellent salary and benefits program and opportunities for professional growth.

Please send your resume including salary requirement, in confidence, to:

Paul S. Flynn
ICI Pharmaceuticals Group
Wilmington, DE 19897



ICI Pharmaceuticals Group

An Equal Opportunity Employer M/F.

Opportunities in Biotechnology

Repligen is a leader in the application of biotechnology to the health care and personal care markets. We are currently developing an AIDS vaccine, products for the treatment of infectious diseases, cancer therapies, and novel biocompatible personal products. We take pride in the high caliber of our scientific staff and collaborations with major research institutions and corporate partners in Europe and the United States. The expansion of several of our R&D efforts has created the following opportunities:

Immunology

Principal Investigator (400-5), Ph.D. with a post-doctorate and 5-7 years' experience. Successful candidate will possess an exceptional record of achievement and have proven management skills and milestone planning.

Research Scientist (300-30), Ph.D. + 2-5 years' experience in immunology. Experience in cell mediated immunity and/or lymphokine research preferred.

Successful candidates will participate in research on therapeutic and vaccine products for AIDS. They will assist in planning and coordinating preclinical development of several recombinant therapeutic products.

Protein Chemistry

Associate Scientist (375-01), Ph.D. + 0-2 years' experience in protein chemistry.

Successful candidate will be a recent Ph.D., with experience in microscale protein isolation and characterization as well as an excellent working knowledge of analytical HPLC.

Protein Purification

Associate Scientist (385-02), Ph.D. + 0-2 years' experience in protein isolation and purification.

The successful candidate will be a recent Ph.D. with extensive experience in protein isolation, purification and characterization.

Research Technician (100-20), B.S. in Biology, Chemistry or related science. 0-1 year's experience. We seek a highly motivated individual to do scale-up of protein purification. Knowledge of chromatography, gel electrophoresis, protein determination and HPLC preferred.

Repligen Corporation offers a competitive salary, excellent benefits and equity participation. Please submit a cover letter, resume and references to the **Director of Human Resources, Repligen Corporation, One Kendall Square, Bldg. 700, Cambridge, MA 02139. (Please refer to job code when applying).** An Equal Opportunity Employer.

RepliGen

POSITIONS OPEN

**DIRECTOR
GERIATRIC RESEARCH, EDUCATION
AND CLINICAL CENTER (GRECC)
GAINESVILLE VA MEDICAL CENTER
PROFESSOR OR
ASSOCIATE PROFESSOR
UNIVERSITY OF FLORIDA
COLLEGE OF MEDICINE**

We seek a distinguished academic physician with the background and potential to foster, as Director of the GRECC, the development of outstanding investigative, educational and clinical programs in gerontology. Although we welcome applications from any academic physician, ongoing programs would relate best to an internist, especially one with interest in geropharmacology. Salary negotiable; anticipated start date as early as 1 September 1988. Please send curriculum vitae and the names of three references by 22 April 1988 to:

**Dr. Allen H. Neims
Box J-267, JHMHC, University of Florida
Gainesville, FL 32610**

An Affirmative Action/Equal Opportunity Employer.

DIRECTOR OF RESEARCH

The Children's Memorial Institute for Education and Research of Children's Memorial Medical Center, Chicago, seeks a Director of Research. Qualified individuals must hold an M.D. and/or a Ph.D. degree and have a demonstrated record of accomplishment in basic research. The Director will have primary responsibility for the overall administration of research programs for the Institute. It is expected that the Director will have an active research program which may be in the area of, but not limited to, basic immunology, medical genetics, or metabolism. The Directorship is associated with an academic appointment to Northwestern University Medical School; depending on qualifications, an appointment to the Graduate School is possible. Interested individuals should submit their curriculum vitae to: **Alan Schriesheim, Ph.D., Chairman, Search Committee, c/o President's Office, Children's Memorial Hospital, 2300 Children's Plaza, Chicago, IL 60614** by 4 April 1988. *Children's Memorial Hospital and the Northwestern University Medical School are Equal Opportunity Employers.*

EMBRYOLOGISTS IN VITRO FERTILIZATION (IVF) IN BOSTON

IVF Australia's proven team of professionals is establishing a new IVF program in Metropolitan Boston. This creates a unique opportunity for infertility specialists to participate at the leading edge of their fields. We are immediately recruiting for the following positions:

SENIOR EMBRYOLOGIST/ LABORATORY DIRECTOR

Ph.D. or equivalent qualification in human or animal reproductive physiology, endocrinology, anatomy or embryology. Primary responsibility is to maintain a high and consistent pregnancy rate.

EMBRYOLOGIST

B.S. or master's degree in biological science or related field. Experience in area of reproductive physiology or anatomy, as well as some laboratory experience preferred.

We are offering competitive salaries, a comprehensive benefits package, and unique opportunity to be part of a highly professional team. Send résumé with salary history and requirements, in confidence to: **IVF Australia Program in Boston, c/o Beverly Freeman, Executive Director, 2 Avon Road, Watertown, MA 02172.** *Equal Opportunity Employer M/F.*

ENVIRONMENTAL SPECIALIST IV

In Palatka, Florida. Salary: \$26,400 to \$39,600. Expertise in estuarine ecology, emphasis on benthic habitats and communities required. Bachelor's degree in biology, chemistry, limnology, or ecology, plus 6 years of experience in environmental studies required. Advanced degree preferred. Benefits: paid leave, Group Health/life/dental insurance and education assistance. Send résumé by: 24 March 1988 to: **St. Johns River Water Management District, Employee Relations, P.O. Box 1429, Palatka, FL 32078-1429.** *Equal Employment Opportunity/Affirmative Action Employer.*

Enzytech of Cambridge, MA is a second generation biotechnology company engaged in developing food ingredients, specialty chemicals and pharmaceuticals. The company's core technology allows it to stabilize, modify, use and deliver both therapeutically and catalytically active proteins.

Enzytech is seeking motivated independent self-starters who, through their individual contributions, will help build Enzytech into a major company. These individuals will be responsible for planning R&D activities, screening projects, coordinating between R&D and business development and initiating and generating new products and processes.

Enzymologist/Microbiologist

Ph.D. with 2-5 years of postgraduate experience in enzymology and microbiology. A thorough background in the physical characterization of enzymes and experience in enzyme kinetics and thermodynamics are essential. Experience in the food industry is a plus.

Bio-organic Chemist/ Biochemical Engineer

Ph.D. with 2-5 years of industrial experience in biocatalysis. Knowledge of and experience in applied enzymology, organic chemistry or bioprocessing are essential. Research experience in carbohydrate chemistry is a plus.

Drug Delivery Scientist

Ph.D. with 0-4 years postgraduate experience in drug delivery systems. Applicants must have skills in one or more of the following areas: protein chemistry, physiology, and polymer chemistry.

Enzytech offers rapid career development, a stimulating atmosphere, excellent salaries and benefits, and equity participation. For confidential consideration, please send a resume to: Enzytech Inc., 763D Concord Ave., Cambridge, MA 02138.

ENZYTECH INC.

An Equal Opportunity Employer

SENIOR SCIENTIST Peptide/Protein Delivery

The LILLY RESEARCH LABORATORIES, a division of Eli Lilly and Company, is seeking candidates for a senior scientist position in peptide/protein delivery.

Applicants must have a doctoral degree. Postdoctoral or industrial experience is desirable.

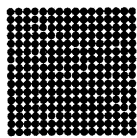
Primary responsibilities will be to participate in a research team directed toward the discovery and development of unique systems for controlled delivery of peptides/proteins in animals. These research activities would include protein stabilization, protein/excipient interaction, conformational analysis, delivery system design, and biopharmaceutical assessment of delivery.

This position represents a unique challenge to a qualified scientist interested in contributing to multidisciplinary research aimed at the development of new animal health products. Candidates having knowledge of physical biochemistry, protein conformational analysis, or controlled released protein delivery are invited to send their curriculum vitae to:



**Ms. Carol Zapapas
Personnel Representative
Eli Lilly and Company
P.O. Box 708
Greenfield, Indiana 46140**

Equal Opportunity Employer



CHIRON
CORPORATION

VIROLOGY, IMMUNOLOGY, VACCINE DEVELOPMENT POSTDOCTORAL POSITIONS

Chiron Corporation, a recognized leader in the biotechnology industry, has several postdoctoral positions available in the areas of virology, immunology and vaccine development. Successful candidates will join an ongoing research program for viral vaccine development including a study of the natural host immune response, identification and production of key viral antigens and the role of adjuvants and other immunomodulators in vaccination.

These positions offer an excellent opportunity for professional growth and recognition. Publication of important findings will be encouraged. We offer a competitive compensation and benefit package and the opportunity to live in an attractive Bay Area community.

Send curriculum vitae and two names of references to the **Human Resources Dept. Code 2, Chiron Corporation, 4560 Horton Street, Emeryville, CA 94608.**

Postdocs/Research Associates Pharmacological Sciences

Genentech, Inc., a leader in the field of biotechnology, currently has the following openings:

Postdoctoral Scientist

Our Pharmacological Sciences Department seeks an individual to participate in Research projects examining the molecular mechanisms of the effects of cytokines, immunosuppressive and anti-inflammatory agents, and recombinant proteins on cell function.

The successful candidate will have 1-3 years training with experience in one or more of the following areas: cell biology, protein chemistry, or signal transduction. Experience in working with animal model systems helpful.

Research Associate

In this position you'll perform in vitro testing of cytokines, immunosuppressive peptides, and anti-inflammatory proteins using a variety of assay systems. In addition, the

position requires maintenance of cell cultures and characterization of protein samples.

The qualified candidate will have experience with cell culture, polyacrylamide gel electrophoresis and preparation of human leukocytes for in vitro testing. B.S. with 3-5 years' experience, or M.S. with 2 years' experience in related areas required.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. Please send resume to George Cianciolo, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. An equal opportunity employer.

Genentech, Inc.
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Genentech, Inc.
Genentech, Inc.

DIRECTOR ANALYTICAL SERVICES

MANAGER LABORATORY SERVICES

MANAGER MICRO- BIOLOGICAL SERVICES

Fermenta Animal Health, a recognized industry leader, is seeking experienced ANALYTICAL CHEMISTS to manage and direct an expanded pharmaceutical laboratory at its Elwood, Kansas manufacturing facility.

Fermenta Animal Health offers an excellent compensation package with comprehensive benefits and a unique environment that places emphasis on individual contribution.

If you are interested in a challenging position in a contemporary laboratory, send your resume and salary requirements to: **Human Resources Manager, Dept. LAB, P.O. Box 901350, 7410 NW Tiffany Springs Parkway, Kansas City, MO 64190-1350.** Equal Opportunity Employer



PROGRAM LEADER Division of Educational Programs ARGONNE NATIONAL LABORATORY

The Division of Educational Programs of Argonne National Laboratory invites nominations and applications for the position of PROGRAM LEADER FOR STUDENT PROGRAMS.

Description: The Program Leader for Student Programs is responsible for the development, operation and evaluation of programs which enable honors quality undergraduate students to participate in research programs. A major new academic year program, the Science and Engineering Research Semester, which combines research experience with supplementary academic work so as to receive academic credit was initiated this year. Significant growth in this program is expected over the next few years, and leadership of this program is a major responsibility of this position.

In addition, Program Leaders in the Division of Educational Programs are responsible for liaison with one or more of the research divisions of the Laboratory for the purpose of identifying opportunities for special interactions with the academic community and facilitating their development. Program Leaders are encouraged and expected to maintain some research or other technical activities for the purpose of maintaining professional competence and currency.

Qualifications: Applicants should have a Ph.D. (or equivalent) in a basic physical science discipline (preferably physics or biology or a closely related field), successful research experience, and considerable interest and capability in working with a broad range of scientific and engineering research programs. Experience in an academic or national research environment is highly desirable.

Salary is competitive, and commensurate with qualifications and experience.

Additional information about this position and the activities of the Division can be obtained by writing to the Director, Division of Educational Programs, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, IL 60439.

Applications consisting of a current resume and a list of three professional references should be sent by **April 15, 1988** to:



Rosalie L. Bottino
Box J-DEP-31783-55
Employment and Placement
ARGONNE NATIONAL LABORATORY
9700 South Cass Avenue
Argonne, IL 60439

Argonne is an equal opportunity/affirmative
action employer

POSITIONS OPEN

ENVIRONMENTAL SPECIALIST III

In Palatka, Florida. Salary: \$22,000 to \$33,000. Experience in estuarine water and sediment chemistry required. Bachelor's degree in biology, chemistry, limnology, or ecology, plus 4 years of experience in environmental studies required. Advanced degree preferred. Benefits: paid leave, Group Health/life/dental insurance and education assistance. Send résumé by: 24 March 1988 to: **St. Johns River Water Management District, Employee Relations, P.O. Box 1429, Palatka, FL 32078-1429. Equal Employment Opportunity/Affirmative Action Employer.**

ENVIRONMENTAL TOXICOLOGIST

Applications are invited for a tenure-track position in environmental toxicology, starting 1 September 1988, at Governors State University (GSU). Candidates must have a Ph.D. with a major in toxicology or biology with a toxicology emphasis and be able to teach courses for a B.S. in biology and an M.S. in environmental biology. Courses will include toxicology, environmental toxicology, human physiology, basic biology and a liberal education course in science. Ability to teach in one or more of the following areas is desirable: anatomy, genetics, histology, or embryology. Candidates must be dedicated to excellence in teaching as well as to continuing their research efforts with master's thesis students. Salary is competitive. Send résumé, transcripts and the names and telephone numbers of three references with your letter of application to: **Dr. Peter Gunther, Chairperson, Search Committee, Science Division, Governors State University, University Park, IL 60466.** Applications will be accepted until 30 April 1988, or until the position is filled. GSU, located 35 miles south of Chicago, has an enrollment of 5500 upper division and graduate students in the Colleges of Arts and Sciences, Business and Public Administration, Education, and Health Professions. *An Affirmative Action/Equal Opportunity University.*

EVOLUTIONARY BIOLOGIST

Redpath Museum, McGill University, seeks to sponsor a qualified applicant (Ph.D.), for a NSERC University Research Fellowship. (Eligibility is limited to Canadian Citizens and Landed Immigrants). These 5-year awards (renewable) carry an appointment and salary of assistant professor as well as grant support for research. The museum is looking for a systematic or evolutionary biologist who will establish a vigorous research program. The museum has important collections in the areas of paleontology, malacology and vertebrate zoology and laboratory facilities for morphological and biochemical studies. The museum is affiliated with McGill's large and active Department of Biology and the successful applicant may expect to teach in his or her field of expertise. Send curriculum vitae, representative reprints and three letters of reference by 30 July 1988 to: **Dr. R. L. Carroll, Redpath Museum, McGill University, Montreal, Canada, H3A 2K6.**

WEST VIRGINIA UNIVERSITY FACULTY POSITIONS IN PHARMACOLOGY/TOXICOLOGY

West Virginia University invites applications for two tenure-track positions at the assistant professor level. Applicants should have a doctoral degree in pharmacology, toxicology, or related discipline, and postdoctoral research experience. Research accomplishments and evidence of ability to develop independent, externally funded research will be prime considerations in the selection process. The positions will begin on or about 1 July 1988. Applicants should submit curriculum vitae, including complete bibliography, and request three letters of reference be sent to: **Dr. Robert E. Stitzel at the Department of Pharmacology and Toxicology, West Virginia University Medical Center, Morgantown, WV 26506** by 1 April 1988.

TOXICOLOGIST: Preference will be given to applicants whose research expertise focuses on the cellular, biochemical, and/or molecular events of toxicity. Teaching responsibilities require a broad knowledge of toxicology.

PHARMACOLOGIST: Preference will be given to those applicants whose research expertise focuses on the cellular, biochemical, and/or molecular aspects of pharmacology. Teaching responsibilities require a broad knowledge of pharmacology.

West Virginia University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

The Department of Pathology, New York State College of Veterinary Medicine, seeks an **EXPERIMENTAL PATHOLOGIST** to be appointed within the section of clinical pathology. The successful candidate will be expected to emphasize development of a strong, independent research program in an area appropriate to the section, such as the biochemical pathogenesis of disease, to assist in the professional teaching program and to contribute to the service responsibilities of the section in an area appropriate to his/her expertise. D.V.M., Ph.D. or equivalent degree, and appropriate research training and experience essential. Position available 1 September 1988.

Appointment will be at the assistant, associate, or full professorial level. Rank and salary will be commensurate with background and experience. Informal initial enquiries are invited. Applicants should send curriculum vitae, five letters of reference, and a statement of research and career goals to: **Barry J. Cooper, B.V.Sc., Chairman, Clinical Pathology Search Committee, Department of Pathology, Box 60, New York State College of Veterinary Medicine, Cornell University, Ithaca, NY 14853-6401. Telephone: 607-253-3350.**

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

FACULTY POSITION: Cornell College, an undergraduate liberal arts college of 1100 students and 70 faculty in Mount Vernon, Iowa, plans to make a full-time appointment for 1 or 2 years, starting in the fall of 1988, for someone who can teach biochemistry and organic chemistry, and who can help with general chemistry. The candidate for this position should have the Ph.D. degree and enthusiasm for teaching and working with undergraduate students. A letter of application, a résumé, transcripts of both undergraduate and graduate education, and names and addresses of three persons from whom letters of reference can be obtained should be sent to: **Dr. Addison Ault, Department of Chemistry, Cornell College, Mount Vernon, IA 52314.** Formal consideration of applications will begin 23 March 1988. Applications received until position is filled. *Cornell College is an Affirmative Action/Equal Opportunity Employer and actively seeks applications from women and minority candidates.*

FACULTY POSITION DEPARTMENT OF SURGERY DUKE UNIVERSITY MEDICAL CENTER

The Department of Surgery at Duke University seeks applicants with postdoctoral experience for a position at the level of assistant professor. Research will concern solid tumor biology with emphasis on oncogene and growth factor networks. Applicants must have experience in molecular biology, virology, or oncogene research, and must be well versed in all phases of recombinant DNA technique and in basic protein chemistry. Ample laboratory space and funding are available for this program.

Curriculum vitae and the names and addresses of three references should be sent to:

**J. Dirk Iglehart, M.D.
Box 3873**

**Duke University Medical Center
Durham, NC 27710**

or contact: Dr. Iglehart at 919-684-6133

*Duke University is an Equal Opportunity/
Affirmative Action Employer.*

FACULTY POSITIONS BIOMEDICAL ENGINEERING

The University of Southern California invites applications for two tenure-track faculty positions available 1 September 1988. Applicants must have a Ph.D. or an M.D. degree with experience in sensory physiology, biosensors, or medical imaging. Duties include both teaching and research; appointee will be expected to establish his or her own research program. Rank and salary will be commensurate with qualifications.

Send résumé and the names of three references to:

**H. K. Chang, Chairman
Department of Biomedical Engineering
University of Southern California
Los Angeles, CA 90089-1451**

An Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

ANTICIPATED FACULTY POSITION IN PLANT GENETICS

The Department of Botany and Range Science, Brigham Young University, invites applications for a full-time tenure-track position for a Ph.D. in plant genetics. The anticipated starting date is January 1989. Salary is dependent upon qualifications. Before applying correspond with: **Dr. Ralph Andersen, Chair, Faculty Search Committee, Department of Botany and Range Science, Brigham Young University, Provo, UT 84602. Brigham Young University is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS IN CELLULAR AND MOLECULAR PHYSIOLOGY

The Department of Physiology of The Pennsylvania State University College of Medicine is seeking applications for two full-time, tenure-track positions at the assistant/associate professor rank to begin in summer or fall 1988. The Department presently has eight full-time, well-funded faculty who are working in the general area of cellular and molecular physiology. We are seeking candidates with substantial postdoctoral experience in one or more of the following areas: metabolic regulation, mechanisms of hormone action, membrane receptors, cytoskeletal-membrane interactions, intracellular membrane trafficking, signal transduction, ion channels, control of growth and differentiation, and gene regulation. Special attention will be given to candidates who are able to relate molecular concepts and information to the cell and tissue levels of the organism. Significant research accomplishment and ability to obtain independent funding are essential. Excellent opportunities exist for research collaboration, teaching in a medical school curriculum, and participation in one or more graduate programs. Competitive salaries and start-up funding are available.

Applicants should submit, prior to 1 May 1988, curriculum vitae, reprints, statement of current and planned research interests and letters from at least three references to: **Dr. Leonard S. Jefferson, Chairman, Department of Physiology, College of Medicine, The Pennsylvania State University, P.O. Box 850, Hershey, PA 17033. The Pennsylvania State University is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS MOLECULAR AND CELL BIOLOGY PENN STATE

Applications are invited for faculty positions at any rank in the Department of Molecular and Cell Biology. We seek exceptional candidates whose research interests encompass any area of molecular and cell biology but special consideration will be given to those whose research complements our areas of strength and future interest including (i) prokaryotic molecular genetics, regulation, development, and pathogenesis; (ii) structure/function of proteins, and macromolecular interactions; and (iii) eukaryotic cell proliferation, differentiation, interactions, immune mechanisms, and regulation of gene expression.

Candidates are expected to have exceptional research credentials and a commitment to teaching at the graduate and undergraduate levels in one or more of the disciplines represented by the Department. The Department is contemporary and vigorous and is responsible for research and teaching programs in biochemistry, microbiology and molecular and cell biology. The Department has 30 research faculty and 80 graduate students. We maintain an aggressive research environment and encourage cooperative and interdisciplinary projects within and outside of the Department. Strong interactions exist with the Chemistry Department, the College of Agriculture, and the newly established Biotechnology Institute with which joint appointments may be possible. Applications will be reviewed starting 1 May 1988 and continue until the positions are filled. Candidates should submit a résumé including a statement of research interests and goals, copies of no more than three recent publications and the names, addresses, and telephone numbers of at least three references to: **Dr. Robert W. Bernlohr, Chairman of the Search Committee, Department of Molecular and Cell Biology, 108G Althouse Laboratory, The Pennsylvania State University, University Park, PA 16802.**

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

POSTDOCTORAL SCIENTIST EXPLORATORY RESEARCH

Amgen is a dynamic and growing organization that is a recognized leader in recombinant DNA technology. Our leadership in developing erythropoietin and other products for human therapeutics, human diagnostics, animal health care and specialty chemicals has placed us firmly in the forefront of the industry. We currently have an opportunity for a Postdoctoral Scientist to contribute to our Exploratory Research Group.

Qualified candidates will have a Ph.D. in the avian molecular biology of growth physiology or disease resistance or a Ph.D. in the mammalian molecular biology of lipid metabolism, hematology, endocrinology or immunomodulators.

Amgen offers a stimulating and challenging research environment as well as an attractive location (about an hour northwest of Los Angeles). **Amgen** also offers a competitive compensation and benefits package. Qualified applicants should send a resume, in confidence, to:

Recruitment, Dept. #113
AMGEN
1900 Oak Terrace Lane
Thousand Oaks
CA 91320

Equal Opportunity Employer



LOOKING FOR A CAREER CHANGE?

Editorial position at *Science* available for a PhD biochemist or molecular biologist with two or three years of research experience and specific capability in one or more of the following areas: protein structure and function, enzymology, cell biology, or immunology. We are seeking someone with wide general interest in quantitative aspects of the life sciences and publications in the refereed literature. Editors have wide responsibilities in manuscript selection ranging from solicitation to editing for clarity. Previous editorial experience is not required. This is a full-time position in our Washington offices.

Please send resume with cover letter including salary requirements to:

Ms. Carolyn Bell
AAAS
1333 H Street, NW
Washington, DC 20005

EOE

Research Scientists

Synergen, a leading biotechnology company in Boulder, Colorado, offers the opportunity to build scientific careers in a stimulating intellectual environment. We seek recent Ph.D.s with postdoctoral experience, technicians, and more senior people interested in becoming part of a rapidly expanding company. There are currently openings for the following persons:

Molecular Biologists to study the expression of eukaryotic genes encoding growth factors, neurotrophic factors, and proteins that modulate inflammatory processes. We also seek molecular biologists interested in developing high-level expression systems in eukaryotes.

Protein Chemists and Biochemists to participate in the isolation and characterization of specific cell receptors and neurotrophic factors and to develop large-scale purification procedures for proteins.

Cell Biologists to develop cell-based models of pathophysiological processes, to aid in the development of *in vitro* assays for bioactive proteins, and to study endothelial cell biology.

Neurobiologists to assay and study neurotrophic factors and neuronal receptors, and to study nerve and glial cell biology.

Synergen offers competitive salaries, generous benefits, and the financial stability required for future development. Please send a **CV**, **bibliography**, and **references** to:



SYNERGEN

Recruitment Director
1885 33rd Street
Boulder, CO 80301

POSTDOCTORAL TRAINEESHIPS IN CANCER BIOLOGY AT MICHIGAN CANCER FOUNDATION

As part of a continuing commitment to excellence in cancer research, MCF is offering postdoctoral training in the following areas:

BREAST CANCER BIOLOGY	Dr. Sam Brooks
MOLECULAR BIOLOGY	Dr. Judith Christman
CANCER IMMUNOLOGY	Dr. Gloria Heppner
CARCINOGENESIS	Dr. Charles King
METASTASIS	Dr. Avraham Raz
CELL TRANSFORMATION	Dr. Jose Russo
CANCER EPIDEMIOLOGY	Dr. G. Marie Swanson
GENETICS	Dr. Sandra Wolman

Trainees will be selected on potential for achievement in cancer research. Salaries are \$20,000-\$24,000 depending upon experience and are funded through individual MCF research departments or the Meyer L. Prentis Comprehensive Cancer Center* of Metro. Detroit.

Submit CV, summary of previous research and statement of areas of current interest along with names of three references to:

Ms. Nancy Squiers

Michigan Cancer Foundation

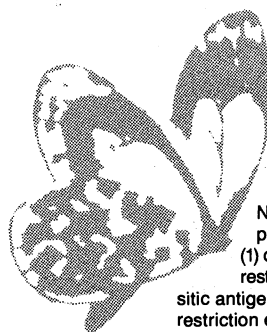
110 E. Warren Avenue

Detroit, Michigan 48201

An Affirmative Action Equal Opportunity Employer



*Funding for Comprehensive Cancer Center positions is from a P.H.S. Training Grant restricted to U.S. citizens and permanent residents.



Molecular Biologist/ Biochemist

New England Biolabs is seeking qualified professionals to join these active groups: (1) cloning, sequencing and overexpressing restriction and modification genes and parasitic antigens; and (2) purifying and characterizing restriction endonucleases.

You should have a BS or equivalent degree, and familiarity with recombinant DNA procedures or protein purification techniques. We encourage attendance at meetings, publication of research results and open communication with others.

Microbiologist/ Fermentation Specialist

We are also in need of an experienced individual to work with 25-100 litre fermentations in a variety of microorganisms. Cell disruption and protein purification experience are helpful; a BS in Microbiology or a related field and good mechanical skills are essential.

New England Biolabs offers a generous salary and benefits package, as well as the opportunity to learn and grow in an exciting and growing professional environment. Please submit your curriculum vitae and three references to:

New England Biolabs, Inc.
Human Resources
32 Tozer Road
Beverly, MA 01915-5510



PEPTIDE CHEMISTS

Bachem Inc. is a leading manufacturer of bioactive peptides for research and pharmaceutical uses. As a result of our continuing success in the peptide industry, we have a number of new positions for peptide chemists.

Laboratory Director

Bachem currently has available an excellent opportunity for an experienced, hands-on peptide chemist to manage our rapidly growing production facility in San Diego. The successful candidate must have a minimum of 5 years post-doctoral experience in peptide synthesis and purification. Excellent management skills are required.

Laboratory Associate/Assistant

Bachem has positions open for chemists or biochemists to assist in the synthesis and purification of peptides, synthetic intermediates and related products. Openings are available at our facilities in Los Angeles and San Diego. Successful candidates should have a B.S., M.S. or Ph.D. in chemistry or biochemistry, with a minimum of 3 years laboratory experience in synthetic organic chemistry, preferably in peptide chemistry.

Quality Control Specialist

Bachem is currently seeking a Quality Control Specialist for our Quality Control Department. The successful candidate should have a minimum of 5 years experience in chemical quality control, and preferably have familiarity with FDA regulations, particularly those applying to the manufacture of products under GMP.

Bachem offers an excellent salary and benefits package including relocation assistance. Interested candidates should submit their resume in confidence to:



BACHEM, INC., 3132 Kashiwa Street, Torrance, California 90505

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SCIENCE MAGAZINE
NEW LAB SERVICE DEPT.
1515 BROADWAY
NEW YORK, N.Y. 10036

GROUP LEADERS

CANGENE, the Canadian Genetic Engineering Company, is currently undergoing a major expansion in its research activity. This provides the opportunity for individuals of proven outstanding accomplishment to join at the group leader level.

Principal areas of interest are:

1. **PROTEIN SECRETION.** The successful candidate will have demonstrated a practical approach to the study of heterologous protein expression and secretion in Gram-positive organisms and will lead a team in exploiting a proprietary breakthrough in gene expression.
2. **NUCLEIC ACID-BASED DIAGNOSTICS.** The successful candidate will have a background demonstrating his ability to manage the overall development of entirely novel nucleic acid amplification technology already reduced to practice.
3. **TISSUE CULTURE.** The successful candidate will be responsible for set-up and operation of tissue culture facilities for both the assay of biopharmaceuticals and the development of gene expression systems.

CANGENE CORPORATION, located near the Western border of Toronto, North America's most livable city, is financed by a number of Canada's largest commercial enterprises. We offer an attractive remuneration package, including bonus incentives, moving and health expenses, and equity participation plus the opportunity to work in a creative, goal-oriented, and exciting research atmosphere.

Candidates are invited to submit, in strictest confidence, a curriculum vitae, a list of publications, and the names, addresses and telephone numbers of three knowledgeable referees to:

Director, Technical Recruiting



The Canadian Genetic Engineering Company
3403 American Drive Mississauga, Ontario
Canada L4V 1T4

Senior Cerebrovascular Pharmacologist

Stroke Research

OUR WALLINGFORD, CONNECTICUT WORLD HEADQUARTERS is an advanced, multi-million dollar setting for pharmaceutical research. Here, you'll enjoy an environment where interdisciplinary cooperation is encouraged, and opportunities for professional advancement and recognition are exceptional.

This challenging position involves stroke research in our Cardiovascular Pharmacology Department. The successful Sr. Scientist will participate in the discovery of therapeutic agents for the treatment of stroke and ischemia-related damage, and will be expected to establish experimental models of acute stroke. PhD in Pharmacology or a related area, plus at least 2 years post-doctoral training is required. Experience in research on cerebral circulation highly desirable, as is working knowledge of cerebral metabolism, the blood-brain barrier, and neuroanatomy.

COLLABORATIVE RESEARCH with other R&D departments is a distinct possibility. BRISTOL-MYERS offers sustained growth, highly competitive salaries, extensive benefits and career support. Our countryside location is convenient to New Haven and Hartford, Connecticut, New York City and New England. Please send resume with salary history to:

BRISTOL-MYERS COMPANY, Pharmaceutical Research & Development Division, Attn: HR2, P.O. Box 5100, 5 Research Parkway, Wallingford, CT 06492.

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Bristol-Myers
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POSITIONS OPEN

FACULTY POSITION IN PHYSIOLOGY UNIVERSITY OF WISCONSIN-MADISON

The Department of Comparative Biosciences, School of Veterinary Medicine, invites applications for a tenure-track position for individuals with research interests in gastrointestinal physiology or a closely related field. This may include, but is not limited to, transport, pharmacology, neuroendocrinology, control of feeding, metabolism, microbiology, or molecular biology aspects of gastrointestinal function. A program relating to gastrointestinal function of food producing ruminants is preferred, but other species orientation is not excluded. The candidate will be expected to teach veterinary medical and graduate students. Applicants must have a D.V.M.-Ph.D. or Ph.D. with postdoctoral experience. Rank and salary will be commensurate with qualifications. Send curriculum vitae, selected reprints, statement of research goals, and the names of three references by 30 April 1988 to: **Dr. Mark Brownfield, Chair, Search Committee, Department of Comparative Biosciences, School of Veterinary Medicine, University of Wisconsin, 2015 Linden Drive West, Madison, WI 53706. An Equal Opportunity/Affirmative Action Employer.**

Several newly created **FACULTY POSITIONS** at the assistant and associate professor levels in the Department of Hematology of the Division of Medicine in the M. D. Anderson Hospital and Tumor Institute, Houston, Texas are available. This department has responsibility for one of the largest patient populations of leukemia, lymphoma, and bone marrow transplant patients with extensive facilities and resources for the experimental therapy of these disorders.

Applicants with a strong interest in the study of neoplastic cells at the molecular or cell biological level, bone marrow transplantation and the treatment of leukemia, and lymphoma should apply to: **Albert Deisseroth, M.D., Ph.D., Chairman, Department of Hematology, 1515 Holcombe Boulevard, Box 24, Houston, TX 77030. M. D. Anderson Hospital is an Equal Opportunity Employer.**

FACULTY POSITIONS— POLYMER SCIENCE AND ENGINEERING

Lehigh University is seeking to fill several tenure-track faculty positions by August 1988 or later. Development of a vigorous research program and teaching excellence at the undergraduate and graduate levels within the Departments of Chemical Engineering, Chemistry, or Materials Science and Engineering are required. Candidates with an interest in theoretical and/or thermodynamic aspects of polymers; polymer processing/composites/multicomponent systems; polymer colloids/interfaces; and polymer synthesis are encouraged to apply. Rank and departmental affiliation are based on applicant's background. Send curriculum vitae, a statement of research plans, and three letters of reference to: **Chairman, Search Committee, Polymer Science and Engineering Program, 308 Packard Laboratory #19, Lehigh University, Bethlehem, PA 18015. Lehigh University is an Equal Opportunity/Affirmative Action Employer.**

The University of North Carolina at Asheville (UNCA) invites applications for an expected tenure-track position as a **FRESHWATER VERTEBRATE ZOOLOGIST** at the level of **ASSISTANT PROFESSOR**. A Ph.D. and strong interest in undergraduate education are required. An active research program appropriate to UNCA's location and undergraduate participation is expected. Teaching responsibilities include: introductory level biology, vertebrate field zoology, and a specialty course. Send curriculum vitae and three letters of recommendation to: **Dr. Alan Comer, Chairman, Biology Department, University of North Carolina at Asheville, Asheville, NC 28804. Deadline for application: 18 March 1988. An Affirmative Action/Equal Opportunity Employer.**

HEMATOLOGIST/ONCOLOGIST—Faculty position at the Dartmouth-Hitchcock Medical Center for an M.D. with an interest in bone marrow transplantation/biology. Applicant should have well-developed research interest and active or pending research funding. Successful candidate will have 70% of time to devote to research and spend 30% of time supervising care of patients undergoing bone marrow transplantation. Submit curriculum vitae to: **Edward D. Ball, M.D., Chairman, Search Committee, Section of Hematology/Oncology, Dartmouth-Hitchcock Medical Center, Hanover, NH 03756. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

FACULTY POSITIONS

Applications are invited for tenure-track faculty positions. Ranks are commensurate with qualifications. Candidates specializing in pharmacologically relevant systems are invited to apply, and we especially encourage applicants with experience in research on receptors for growth factors, oncogene products, protein kinases, biochemistry of membrane channels, or arachidonic acid metabolism. Faculty participates in the education of M.D., Ph.D., M.D.-Ph.D. candidates and postdoctoral fellows who are supported by federal training grants, research grants, and institutional funds. Applicants should send curriculum vitae, bibliography, representative publications, a statement of research plans, and the names and addresses of three references to: **Search Committee, Department of Pharmacology, Box 1215, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6574. An Equal Opportunity Employer.**

MINERALOGIST

Biotechnology position working with synthetic connective tissue production. Specifically evaluating apatite-group minerals found in teeth and bones. Must have full working knowledge of mineral characterization and crystal chemical description. Must routinely operate x-ray diffractometer, Fourier transform infrared spectrometer, atomic absorption spectrometer, and scanning electron microscope.

Please send cover letter of interest, and résumé with three references to: **Norian Corporation, 1030 Hamilton Court, Menlo Park, CA 94025.**

MOLECULAR BIOLOGIST

The Department of Pathology and Laboratory Medicine, Emory University School of Medicine seeks applicants for position as molecular biologist. We are particularly seeking applications from scientists who have experience in molecular biology including the in vitro transcription and in vitro translation with particular emphasis on muscle. One of the major programs of current emphasis relates to autoimmune cardiomyopathy although other aspects of autoimmunity and other organ systems are included in this research program. The incumbent must have evidence of extensive knowledge of all the techniques of molecular biology. The candidate must also be willing to participate in the experimental pathology Ph.D. educational programs of the Department. The incumbent must also be willing to participate in the activities of the Department in the development of molecular biological approaches to the surgical pathology programs in the diagnosis of disease, including the use of in situ hybridization for rapid diagnosis in pathology. Please send curriculum vitae and the names of three references to: **Kenneth W. Sell, M.D., Ph.D., Chairman, Department of Pathology, Emory University School of Medicine, Atlanta, GA 30322. Emory University is an Equal Opportunity Employer.**

MOLECULAR GENETICS/BIOCHEMISTRY FACULTY POSITION. Full-time tenure-track teaching and research position in the departments of physiological chemistry and neurology. Candidates should hold a Ph.D. or M.D. and have performed a minimum of 2 years of postdoctoral research. Experience in molecular genetics of neurological disorders required, preferably in the area of muscular dystrophy. It is expected that the individual will sustain a viable, independent research program. Send curriculum vitae, names of three references and a statement of research plans to: **Search Committee, Department of Physiological Chemistry, 5166 Graves Hall, The Ohio State University, Columbus, OH 43210. Applications should be received by 18 March 1988. OSU is an Equal Opportunity/Affirmative Action Employer, and we encourage applications from women and minority candidates.**

ONE-YEAR FACULTY APPOINTMENT starting September 1988, visiting instructor or assistant professor, Ph.D. or A.B.D. Responsibilities include teaching ecology, or behavior and general biology to non-majors first semester and botany and environmental science second semester. Send curriculum vitae and three letters of reference to: **James B. Mitchell, Ph.D., Chairperson, Department of Biology, Moravian College, Bethlehem, PA 18018-9990. An Equal Opportunity Employer.**

POSITIONS OPEN



MOLECULAR BIOLOGIST

We seek a Ph.D., molecular biologist for a key research position in the development of transgenic poultry. The successful candidate should have the following qualifications:

- at least 4 years in recombinant DNA technologies
- extensive experience in cDNA and genomic cloning
- knowledge of mammalian/avian expression systems
- experience with viral vector or mechanical transformation methodologies
- undergraduate degree in chemistry or physics desirable

Embrex, Inc. is a biotechnology company whose charter is the research, development and marketing of unique biochemical products and delivery systems to the commercial poultry industry worldwide. Compensation will be commensurate with experience, including relocation assistance, competitive benefits package, and an equity position. Please forward your curriculum vitae and expression of interest to: **Dr. Tom Frederickson, Embrex, Inc., P.O. Box 13989, Research Triangle Park, NC 27709. Telephone: 919-821-0555.**

An Equal Opportunity Employer.

MOLECULAR BIOLOGY. Assistant or associate professor, tenure-track, Ph.D. position in the Department of Pathology, Eastern Virginia Medical School. Preference for research interests in nutrition, obesity, energy metabolism, diabetes, or gut hormones, but general molecular biology acceptable. Laboratory and office to be located at Hampton VA Medical Center. Applicants must have a good publication record and potential for funding; will be eligible to apply for VA funding. Send curriculum vitae and names of three references to: **Richard L. Atkinson, M.D., Research Service, VA Medical Center, Hampton, VA 23667. An Affirmative Action/Equal Opportunity Employer.**

PEPTIDE CHEMIST to work in the area of calcium-binding proteins. Must be proficient in the synthesis of peptides by solid-phase methods. A knowledge of protein NMR would be useful but not essential. Contact: **Dr. R. Kumar, Biochemistry and Molecular Biology, Mayo Clinic and Foundation, 909 Guggenheim, 200 1st Street Southwest, Rochester, MN 55905. Telephone: 507-284-4343. An Equal Opportunity/Affirmative Action Institution.**

PHOTOGRAPHER/SCIENTIFIC. Supervise and be responsible for all photographic activities, including all types of ophthalmic patient photography, within ophthalmology institute. Requires: 5 years of experience as ophthalmic photographer in a large (500 beds or more) hospital or an ophthalmic outpatient clinic with a minimum of 15,000 patient visits a year, including 2 years with some supervisory experience. Ophthalmic photography experience must have included retinal angiographic, slit-lamp, fundus, and external eye photography. Experience must also have covered continuing medical education such as course presentations at national ophthalmic meetings, preparation of ophthalmic medical illustrations for publications, and commercial public relations photography. Must be a certified retinal angiographer (C.R.A.) \$52,512 per year. References required. If offered employment, must show legal right to work. Job Site: Los Angeles. Send this ad and a résumé to: **Job #MA15078, POB 9560, Sacramento, CA 95823-0560 no later than 19 March 1988.**

POSTDOCTORAL ASSOCIATE—position is available immediately for research in cellular motility, utilizing microinjection and laser-microsurgery. Research will involve basic mechanistic studies of motility in *Physarum* amoeboid flagellates and amphibian melanophores. General background in cell biology is required, and experience in microinjection technology is highly desirable. Salary is \$20,000 per annum (plus fringe benefits). Send curriculum vitae and three letters of reference to: **Dr. Mark R. Adelman, Department of Anatomy, Uniformed Services University of the Health Sciences (USUHS), 4301 Jones Bridge Road, Bethesda, MD 20814-4799. The USUHS is an Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

Research-oriented **PHYSICIAN-INVESTIGATOR** wanted for leadership position in Division of Hematology/Oncology of the Department of Pediatrics at Case Western Reserve University School of Medicine and Rainbow Babies and Childrens Hospital. The successful candidate will be given ample resources and will be expected to recruit several additional faculty members to form a widely-recognized research group to complement established clinical excellence. Salary and faculty rank dependent upon qualifications. Case Western Reserve University School of Medicine is an *Equal Employment Opportunity/Affirmative Action Employer*. Send letter of application and curriculum vitae to:

Melvin Berger, M.D., Ph.D.
Chief

Division of Allergy/Immunology
Department of Pediatrics
2101 Adelbert Road
Cleveland, OH 44106

The Department of Botany, Miami University expects to have one or two tenurable positions at the rank of assistant professor for a **PLANT PHYSIOLOGIST** and/or **PLANT ECOLOGIST**. Applicants in ecology must have field and laboratory skills in either physiological, evolutionary, population, or rhizosphere ecology. The positions begin 17 August 1988, pending final approval of funding. Strong potential in both undergraduate and graduate teaching and research, including direction of M.S. and Ph.D. students is required. Postdoctoral experience is strongly recommended.

A comprehensive statement of teaching and research interests, complete résumé, and at least three letters of recommendation should be received by 4 April 1988. Address inquiries and materials to: **Jerry W. McClure** (Physiology) or **John L. Vankat** (Ecology), Search Committee, Department of Botany, Miami University, Oxford, OH 45056. *Miami University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL ASSOCIATE in gastrointestinal neuropharmacology. The successful applicant will investigate the role of enteric neuropeptides in regulating intestinal ion transport processes through the use of contemporary pharmacological, physiological and neuroanatomical techniques. Candidate will work closely with Drs. D. R. Brown (veterinary biology) and V. S. Seybold (cell biology and neuroanatomy). Ph.D. and at least 1 year of research experience in pharmacology or other biomedical discipline is required. Send curriculum vitae by 15 January 1989 to: **David R. Brown, Ph.D.**, Department of Veterinary Biology, University of Minnesota, 1988 Fitch Avenue, St. Paul, MN 55108. *The University of Minnesota is an Equal Opportunity Educator and Employer and specifically invites and encourages applications from women and minorities.*

POSTDOCTORAL FELLOWS IN MOLECULAR BIOLOGY

Research positions are available for two molecular biologists in the Veterinary Research Laboratory at Montana State University, Bozeman, Montana. These positions will require a Ph.D. in molecular biology or a related field, experience with recombinant DNA techniques, and evidence of research productivity. Preference will be given to candidates who are willing to study livestock diseases and/or resistance to these diseases and to pursue collaborative work with other members of the Veterinary Research Laboratory and university community. Research experience in molecular biology of infectious diseases of livestock is desired. Salary will be \$20,000 to \$25,000 depending on the experience and qualifications of the individual. Applicants should send a letter of application, curriculum vitae, and the names and addresses of three current, professional references to: **Dr. Joan Henson**, Chairperson, Search Committee, Department of Microbiology, Montana State University, Bozeman, MT 59717, not later than 1 April 1988. *MSU is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately for kinetic studies of the mechanism of in vitro and in vivo assembly of microtubules. Background in cell biology or biochemistry required. Send résumé and names of three references to: **Dr. Michael Caplow**, Department of Biochemistry, University of North Carolina, Chapel Hill, NC 27599-7260. *Equal Opportunity/Affirmative Action Employer.*

Postdoctoral Scientist Cardiovascular Pharmacology/ Gastrointestinal Pharmacology

Smith Kline & French Laboratories, located in suburban Philadelphia, Pennsylvania is seeking 2 Postdoctoral Scientists in Cardiovascular Pharmacology and 1 Postdoctoral Scientist in GI Pharmacology.

We consider postdoctoral studies to be of major importance in an individual's career and encourage publication of findings in leading journals and a full interaction with the scientific community. Our postdoctoral appointments are normally of 2 years duration.

Cardiovascular Pharmacology

Candidates are required to have:

- Ph.D. or equivalent in Pharmacology or Physiology with research background in Adrenergic Pharmacology.
- Demonstrated productivity, based on publication record.
- Good oral and written communication skills.
- Experience with general biochemical and receptor binding techniques desirable.

These positions will be involved with the investigation of the role of neurotransmitter receptors in multiple aspects of cardiovascular pharmacology. The successful applicants will be expected to develop an independent research effort in an area compatible with overall program goals. Some possible projects could include: mechanisms of signal transduction; the role of co-transmitters and neuromodulators in vascular neurotransmission; studies on adrenoceptor subtypes via functional and receptor binding techniques; examination of novel physiological responses to selective adrenoceptor activation.

Gastrointestinal Pharmacology Candidate

Candidates are required to have:

- Ph.D. degree in Pharmacology, Biochemistry or Physiology plus 0-2 years post-doctoral experience with emphasis on membrane transport required.
- Experience with epithelial membrane techniques including receptor binding and second messengers assays systems and other state-of-the-art *in vitro* pharmacological and biochemical techniques necessary.
- Experience with epithelial cell culture methodology helpful.
- Excellent oral and written communication skills and a record of published research.

The successful candidate will:

- Participate in research efforts investigating the biochemical pharmacology of epithelial membrane transport with specific reference to the regulation of electrolyte transport.
- Conduct specific research exploring the intracellular regulation of membrane transport processes to advance the fundamental understanding of secretion and absorption.
- Serve as consultant and collaborator to other areas of the Department of Pharmacology with interests in biochemical pharmacology of membrane transport processes.
- Present work at relevant scientific meetings in-house and nationally.
- Publish the results of research efforts regularly in appropriate scientific peer review journals.

We offer excellent compensation and benefits and an attractive relocation policy. For confidential consideration, send your C.V. and names of three references to: **Barbara Schwartz**, Associate Employment Administrator, S0022, Smith Kline & French Laboratories, Research and Development Division, P.O. Box 1539, King of Prussia, PA 19406-0939. We are an Equal Opportunity Employer, M/F/H/V.

SK&F
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POSITIONS OPEN

DANA-FARBER CANCER INSTITUTE HARVARD MEDICAL SCHOOL DIVISION OF TUMOR IMMUNOLOGY

POSTDOCTORAL IMMUNOLOGIST. Position available for research scientist in an active program of immunotoxin and immunoconjugate development for treatment of human disease. Individual to conduct pre-clinical analyses of conjugates in animal and in vitro systems. Experience in tissue culture and murine models preferred. Appointment at postdoctoral or more senior level according to experience. Please send curriculum vitae, statement of background and goals and three references to: **James B. Breitmeyer, M.D., Ph.D., Division of Tumor Immunology, Dana-Farber Cancer Institute, Boston, MA 02115. Equal Opportunity/Affirmative Action Program.**

POSTDOCTORAL POSITION available to study single channels that underlie signal transduction in the olfactory system. Applicants with expertise in planar bilayers and/or patch clamp techniques preferred. Competitive salary and benefits. Send curriculum vitae and names of three references to: **Drs. S. A. Simon and R. H. Anholt, Box 3709, Duke University Medical Center, Durham, NC 27710. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available to work on the expression of a major plasma membrane protein in neural tissue to be carried out as part of a multidisciplinary effort. Experience in molecular/cell biology required. Competitive salary; suburban New York. Send résumé to: **Dr. Victor Sapirstein, Division of Molecular Biology, Nathan Kline Institute, Orangeburg, NY 10962.**

POSTDOCTORAL POSITION in cardiovascular pharmacology available immediately for a recent Ph.D. in pharmacology, physiology, or biochemistry. The project is related to identification of purine receptors and the involvement of second messenger systems. Salary NIH level. Experience in receptor biochemistry or pharmacology preferred. Send curriculum vitae and three letters of recommendation to: **Dr. S. Jamal Mustafa, Department of Pharmacology, East Carolina University, Greenville, NC 27834.** Federal law requires proper documentation of identity and employability prior to final consideration for this position. *Affirmative Action/Equal Employment Opportunity.*

POSTDOCTORAL POSITION available immediately for biochemist to study enzymology and molecular biology of yeast pyruvate dehydrogenase complex. Applicants must have a Ph.D.; experience in recombinant DNA methods, yeast molecular genetics, or protein chemistry will be favored. Starting salary and benefits are competitive. Send curriculum vitae and names of three references to: **Dr. Lester Reed, Clayton Foundation Biochemical Institute, ESB 442, The University of Texas, Austin, TX 78712.**

POSTDOCTORAL POSITION available for biochemist, biologist, or chemist. Bioanalytical studies of drug/protein interactions. Strong background in fluorescence as applied to biochemical measurements desirable. Minimum salary of \$18,000. Send curriculum vitae and names of three references to: **Professor Isiah M. Warner, Department of Chemistry, Emory University, Atlanta, GA 30322.** Applications from women and minority groups are encouraged. *Emory University is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION POSTDOCTORAL RESEARCH ASSOCIATE

Postdoctoral position to begin July 1988 (1988-1989, 12 months) with possibility of renewal to study the synthesis, genetic regulation, and processing of gonadotropin releasing hormone in lamprey, an evolutionarily important vertebrate. Minimum qualifications: Ph.D. in biochemistry, zoology, biology, or other related field; experience in recombinant DNA technology desired. Salary: \$17,440 to \$27,000; starting salary normally not to exceed \$19,520. Send curriculum vitae (noncitizens must include current visa status), dissertation abstract, reprints of publications, and names of three references by 30 April 1988 to: **Drs. Clyde Denis and Stacia Sower, Department of Biochemistry, University of New Hampshire (UNH), Durham, NH 03824.** UNH is an Affirmative Action/Equal Employment Opportunity Employer.



CLINICAL RESEARCH

Nova Pharmaceutical Corporation, a leading research and development company in Baltimore, Maryland, is inviting applications for a position as Senior Clinical Research Associate.

Successful candidates will be involved in all aspects of clinical research on investigational drugs and drug delivery systems. The primary responsibilities will be to monitor studies, design protocols and case report forms, review and evaluate data, and write clinical summaries.

Qualified candidates will have a Pharm. D., Ph.D., or R.N. degree.

Approximately 2-3 years of field monitoring experience is essential. Knowledge of statistics / computing and regulatory practices / procedures will be an asset, as well as experience in the evaluation and presentation of data. Travel is estimated to be 35-40%.

Nova Pharmaceutical Corporation is an equal opportunity employer, offering a very competitive compensation and benefits package as well as a challenging work environment. Interested individuals should forward their CV with names of three references and salary history to: **L. Faris, Human Resource Department, CRA/JK, Nova Pharmaceutical Corporation, 6200 Freeport Centre, Baltimore, Maryland 21224-2788.** Equal opportunity employer M/F.



THE WORLD HEALTH ORGANIZATION is initiating a Programme on **BASIC VACCINOLOGY** with the aim of improving the efficiency of existing and newly developed vaccines.

THE RESEARCH WITHIN THE FOLLOWING PRIORITIES WILL BE CONSIDERED FOR SUPPORT:

1. To determine whether an *existing vaccine* (e.g., diphtheria toxoid, hepatitis B surface antigen) requiring *multiple injections* can be made effective using one injection;
2. To define ways to improve systemic and local immunity to orally administered vaccines;
3. To define optimal T-cell epitopes to be used as carriers in sub-unit vaccines for the generation of appropriate immune response in the *majority* of the vaccinated populations;
4. To define the rules for generating T- and B-cell memory to vaccines;
5. To define ways of influencing specific *effector functions* generated by vaccines;

Application forms and information can be obtained from Chief, Microbiology and Immunology Support Services, WHO, Avenue Appia, 1211 Geneva 27, Switzerland.

Deadline for submission of applications: 4 May 1988

G.D. Searle is a worldwide leader in the pharmaceutical industry. Our Gastrointestinal Diseases Research function recognizes the importance of productive research as a key to maintaining a position of leadership in the discovery of novel drugs. Currently we are seeking candidates with expertise for the following positions:

GROUP LEADER GASTROINTESTINAL DISEASES

The Organic/Medicinal Chemist will lead the discovery activities of our Motility Disorders Chemistry Program, collaborating with multidisciplinary scientists to develop and execute research programs and strategies. The scientist we seek will have a solid background, proven abilities and a record of achievement in synthetic organic/medicinal chemistry. In addition candidates must have an understanding of the basic concepts of molecular pharmacology and biochemistry and a strong desire to apply their knowledge and skills to the solution of biological problems, in particular, the design of synthetic targets and the discovery of new therapeutic agents. We require a Ph.D. in Organic Chemistry and a minimum 5-7 years industrial or academic research experience in organic synthesis and/or medicinal chemistry plus knowledge of computer aided drug design as a research tool. Supervisory experience is desirable.

SENIOR IMMUNOLOGIST GASTROINTESTINAL DISEASES

Directs multidisciplinary scientists and research assistants in developing studies/procedures for evaluating compounds of potential value for treating Inflammatory Bowel Disease. Translates research into verbal and written reports, attends scientific conferences. Requires Ph.D. in immunology/pharmacology with minimum three years academic/industrial experience and supervisory experience. A background in arachadonate cascade is preferred along with 2-3 years postdoctoral work.

These positions offer an excellent salary, high visibility, and comprehensive benefits package. Searle is located in a northern suburb adjacent to Chicago. Our location offers access to a variety of cultural and recreational facilities, several fine universities, and an active science community. Qualified candidates may respond in strictest confidence to: **G. D. Searle & Co., R&D Professional Staffing, Dept. RM, 4901 Searle Parkway, Skokie, IL 60077.** Equal Opportunity Employer.

SEARLE

SUPERVISORY RESEARCH PHYSICIST, RESEARCH CHEMIST, OR ELECTRONICS ENGINEER

GM-14/15 • \$46,679 TO \$71,377 per annum
(Salary dependent upon qualifications)

The Electronics Science and Technology Division, NRL is seeking a Supervisor to Head the Vacuum Deposition Section in its Electronics Materials Branch.

Responsible for planning, initiating, and guiding the research program of the Section and investigating the growth and properties of thin films of novel semiconductors and optoelectronic materials.

SELECTIVE PLACEMENT FACTOR: The position requires a Ph.D. in solid state physics, electrical engineering or chemistry or the equivalent experience. Demonstrated competence in the growth and characterization of epitaxial films of semiconductors and a strong orientation towards applied physics and solid state technology. Have familiarity with device requirements and with the material restraints on device performance. These competencies should have been demonstrated by publications in the professional literature, patents, presentations or other professionally equivalent means. Finally, the applicant should have been engaged in collaborative and interactive programs and should be capable of initiating research and development activities.

Interested applicants should submit a Personal Qualifications Statement (SF-171) or detailed resume to:

NAVAL RESEARCH LABORATORY

Civilian Personnel Office, Attn: 68-001-22.DF (S)
4555 Overlook Avenue, SW
Washington, DC 20375-5000

AN EQUAL OPPORTUNITY EMPLOYER • U.S. CITIZENSHIP REQUIRED

OPPORTUNITIES IN CANCER RESEARCH

The Organon Teknika Corporation's Bionetics Research Institute is a leader in biomedical research and application. Today, we continue to pioneer new advances in the diagnosis and treatment of cancer as well as the development of therapeutic and diagnostic products. Our continued expansion creates immediate opportunities for Scientists in the following fields:

Immunology

You will perform and develop *in vitro* cell-mediated and humoral immunity

assays against characterized human tumor-associated antigens. A PhD in immunology and several years postdoctoral experience are required.

Molecular Biology

You will initiate, direct and perform experiments in prokaryotic gene expression of recombinant proteins. Roles in this area require a PhD in molecular biology or biochemistry and two years postdoctoral experience in *E. coli* expression vectors, DNA sequencing and protein purification.

Immunochemistry

You will develop and perform biochemistry for constructing unique antibody-drug conjugates. A PhD in chemistry or biochemistry and postdoctoral experience in immunoconjugation are essential.

We also have immediate openings available for **Research Specialists** with BS/MS degrees.

Located in suburban Washington, D.C., OTC-Bionetics Research Institute offers an attractive benefits package that includes company-paid insurance for employees, partially matched funds in a 401 (K) Savings Program, and relocation assistance. In addition, you will find a research atmosphere and facilities conducive to professional growth. To apply, please send your curriculum vitae to:

Human Resources Department (S34)
OTC-Bionetics Research Institute
1330-A Piccard Drive
Rockville, MD 20850

OTC is an equal opportunity employer, m/f/h/v. Principals only.

Organon Teknika Corporation

POSITIONS OPEN

POSTDOCTORAL POSITION: MAMMALIAN DEVELOPMENT

Two postdoctoral positions open immediately to study growth control during limb development in mice. Approaches include immunochemistry, retroviral lineage marking, cell culture and ex utero embryo surgery. Interested candidates are invited to send curriculum vitae, names of three references and a description of research goals to:

Dr. Ken Muncoka
Department of Biology
Tulane University
New Orleans, LA 70118

Tulane University is an Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL POSITION MOLECULAR ENDOCRINOLOGY

To study hormonal control of gene expression in the mammalian brain and reproductive system. Training in reproductive endocrinology or experience with molecular biology techniques desirable. Candidates should send a complete curriculum vitae and names of three references to: **Dr. Kelly E. Mayo, Department of Biochemistry, Molecular Biology and Cell Biology, Northwestern University, Evanston, IL 60208.**

POSTDOCTORAL POSITIONS

At the National Center for Toxicological Research (NCTR), four postdoctoral positions are available: (i) to investigate mechanisms of drug metabolism and drug-induced toxicities (with **Dr. Jack A. Hinson**), (ii) to utilize immunochemical approaches to investigate the role of carcinogen-DNA and drug-macromolecule adducts in biochemical mechanisms of toxicity (with **Dr. Dean W. Roberts**), (iii) to elucidate the mechanisms of metabolic activation and detoxification of carcinogenic nitro-polycyclic aromatic hydrocarbons (with **Dr. Peter P. Fu**), and (iv) to study mechanisms of chemical mutagenesis in mammalian cells (with **Dr. Robert H. Hefflich**). These positions are funded by a NCTR/VA interagency agreement and are at the GS-11 level (\$27,716 per year). *Candidates must be U.S. citizens.* Send curriculum vitae to: **Division of Biochemical Toxicology, NCTR, Jefferson, AR 72079.** The position of interest should be stated. *NCTR and the VA are Equal Opportunity/Affirmative Action Employers.*

POSTDOCTORAL POSITIONS available for (i) the study of immunologic mechanisms in experimental autoimmune diseases and (ii) poliovirus receptor characterization. Candidates should have Ph.D. in immunology, virology or molecular biology. Send curriculum vitae and names of three references to: **Howard L. Weiner, M.D., Co-Director, Center For Neurologic Diseases, Brigham and Women's Hospital, Harvard Medical School, Thorn 12, 75 Francis Street, Boston, MA 02115.** *Equal Opportunity Employer.*

POSTDOCTORAL POSITIONS in neuroimmunology/neurooncology in the Division of Neurology, Harvard Medical School. A multidisciplinary approach is used to understand and manipulate the immune response to neural antigens. Focus is on neural tumors and autoimmune disorders. Send résumé with reprints and names of references to: **Dr. Lois Lampson, Center for Neurologic Diseases, Biosciences Research Building, Brigham and Women's Hospital, Boston, MA 02115.** *An Equal Opportunity Employer.*

RESEARCH ASSOCIATE POSITION

Research Associate position available immediately in the Department of Microbiology and Immunology, University of Kentucky College of Medicine, to study the effect of cigarette smoke on pulmonary immune responses and on chromosomal abnormalities. Successful candidates will be well versed in intratracheal immunizations of mice, measurement of antibody responses from bronchial tissues and chromosomal analysis of lung-associated lymphocytes. Requirements for this position are a Ph.D. and 1 year of relevant postdoctoral experience; salary: \$19,000 per year. Send curriculum vitae and list of three references to: **Ms. Tillie Moore, Commonwealth of Kentucky Bureau of Manpower Services, Kentucky Department for Human Resources, 300 South Upper Street, Lexington, Kentucky 40503** [and reference to Job Order #KY704175.]

The University of Kentucky is an Equal Opportunity Employer, F/M

POSITIONS OPEN

POSTDOCTORAL POSITION: Immediate opening for an individual with a Ph.D. in biochemistry or immunology to investigate mechanisms involved in the generation and function of activated cytotoxic lymphocytes. Experience in mammalian cell culture, flow cytometry, and/or molecular biology is desirable. Send curriculum vitae and three letters of reference to: **Professor Denis Callewaert, Department of Chemistry, Oakland University, Rochester, MI 48309.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION HARVARD MEDICAL SCHOOL

Available 1 July 1988. Organic chemist will synthesize radionuclide carrier molecules as part of a multidisciplinary program studying the toxic effects of internal emitters in cancer radiotherapy. Salary contingent on experience (NRSA Guidelines). U.S. citizenship or permanent residency status required. Please contact: **Dr. A. I. Kassiss, Harvard Medical School, SWRL, 50 Binney Street, Boston, MA 02115.** Telephone 617-732-2184. *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

POSTDOCTORAL RESEARCH ASSOCIATE, Ph.D. or M.D. to work on cell and molecular biology of hormone receptors. Special emphasis is on the regulation of the glucocorticoid receptor in tumor cells and culture. Send curriculum vitae and names of three references to: **Gerald Litwack, Fels Research Institute, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140.** *An Equal Opportunity/Affirmative Action Employer.*

Two positions in the Ophthalmology Department, University of Southern California (USC) School of Medicine, to study the structure and function of the human retinoblastoma tumor suppressor gene.

1) **RESEARCH ASSISTANT PROFESSOR** with possibility of tenure-track. Salary: \$35,000 to \$40,000.

2) **POSTDOCTORAL FELLOW.** Salary: \$20,000 to \$30,000 depending on experience.

Send curriculum vitae to: **Dr. Y. K. Fung or Dr. A. L. Murphree at Clayton Molecular Biology Program, P.O. Box 54700, Los Angeles, CA 90054-7000.** *USC/Children's Hospital of Los Angeles is an Affirmative Action Employer.*

SKIN R & D

Continued expansion of product development programs in novel dermatotherapeutics has created opportunities for motivated self-starters to join the CHEMEX PHARMACEUTICALS team. Our company is an advanced development stage enterprise committed to innovation in ethical drugs for dermatology.

SENIOR ANALYTICAL CHEMIST—to work in close association with pharmaceutical and biological scientists to develop, validate and implement analytical methods and specifications for new drug substance in bulk drug, finished dosage forms and biological fluids. The successful candidate will have a Ph.D. in Analytical Chemistry with 3-5 years experience in the pharmaceutical industry. Emphasis on micro-analytical methods (HPLC, GC, GC/MS, IR, NMR). Experience with topical products (creams, gels, ointments, lotions) is a plus.

CLINICAL RESEARCH ASSOCIATES—New positions are available to monitor our expanding program of clinical studies. Successful candidates will have a B.S. degree in basic sciences, 3-5 years experience in monitoring clinical studies and in-depth knowledge of FDA regulations and the process of drug development. Must possess excellent communication skills, ability to work in team environment and willingness to travel.

We offer an excellent compensation, benefits, important stock participation, and relocation package, as well as an opportunity for personal and professional gratification in our rapidly growing company. Colorado is an outstanding location for family life that affords great year-round outdoor recreational and cultural opportunities. For confidential consideration, forward your personal letter and C.V. to: **Dr. Atul Khandwala, Vice-President, Research, CHEMEX PHARMACEUTICALS, INC., 1401 Seventeenth Street, Suite 850, Denver, CO 80202.** AN EQUAL OPPORTUNITY EMPLOYER.



Chemex
Pharmaceuticals, Inc.

ADVANCED LIGHT SOURCE OPENINGS

Lawrence Berkeley Laboratory, University of California

OPTICAL SYSTEMS LEAD SCIENTIST Staff Scientist 3 (A/4522)

Duties: The incumbent will be responsible for the design of x-ray and vacuum-ultraviolet optical systems for synchrotron radiation beamlines. Will report to the Project Deputy Director for Experimental Systems of the Advanced Light Source, a state-of-the-art national facility for scientific research at the Lawrence Berkeley Laboratory. Becoming familiar with the specialized needs of the scientific teams at each beamline, the incumbent will develop beamline design strategies for each. The overall systems will include monochromators, relay optics water-cooled components, condensing mirrors, polarization and harmonic control mechanisms, wavelength-tuning and spectral-resolution control mechanisms, and detection systems. Ray tracing will be an important tool for these activities. The optical systems must satisfy challenging fabrication tolerances and withstand demanding photon beam power loadings. The advanced instrumentation required includes glancing-incidence mirror assemblies, high-resolution grating and crystal monochromators and beam position and intensity sensors.

Requirements: The successful candidate will have considerable experience and a strong record of published original work in the design of x-ray or vacuum-ultraviolet optical systems. Candidates with a background in instrumentation for synchrotron radiation research are encouraged to apply. A Ph.D in a relevant field is preferred.

OPTICAL SYSTEMS SPECIALIST Staff Scientist 2 (A/4525)

Duties: The incumbent will participate in the design, implementation, and commissioning of optical systems for one or more synchrotron radiation beamlines of the Advanced Light Source, a state-of-the-art national facility for scientific research at the Lawrence Berkeley Laboratory. The design process will involve consultations with the intended user groups, development of optimized optical schemes by analytical methods, and evaluation of the schemes by computer modeling procedures, including exact geometrical ray tracing. The optical systems are for the vacuum-ultraviolet and soft x-ray regions of the spectrum, involve both relay and spectroscopic technologies, and must satisfy challenging fabrication tolerances and withstand demanding photon beam power loadings. The advanced instrumentation required includes glancing-incidence mirror assemblies, high-resolution grating and crystal monochromators, and beam position and intensity sensors.

Requirements: The successful candidate will have working experience and a record of published original work in the design of optical systems, either for synchrotron radiation or for applications in other parts of the electromagnetic spectrum. Applications from graduates of universities that specialize in optics are particularly welcome. Expertise in vacuum-ultraviolet or soft x-ray systems is available in the existing group to complement those who do not have it. A Ph.D. in a relevant field is preferred.

OPTICAL SYSTEMS STABILITY SPECIALIST Staff Scientist 3 (A/4523)

Duties: The incumbent will be responsible for assuring the stability of the overall optical system of the Advanced Light Source, a state-of-the-art national facility for scientific

research at the Lawrence Berkeley Laboratory. Involving instrumentation for the control of near-diffraction-limited radiation to very short wavelengths in the vacuum-ultraviolet and x-ray regions of the spectrum. The work will require a stability analysis for the overall system and the development of such photon detection interface, feedback, and control systems as may be necessary to provide optical systems with stable aiming, focusing, and positioning controls. The advanced beamlines will include glancing-incidence mirror assemblies, high-resolution grating and crystal monochromators, and beam position and intensity sensors. The above tasks will require close collaboration with accelerator physics and instrumentation teams on the development of complementary electron-beam diagnostic and control systems.

Requirements: The successful candidate will have substantial experience and a strong record of published original work in the design and implementation of optical stabilization systems. Expertise in the geometrical stability of large optical systems would be a plus. The candidate must have working experience at visible wavelengths and may rely on colleagues at the Advanced Light Source for complementary expertise at vacuum-ultraviolet and x-ray wavelengths. Applications from graduates of universities that specialize in optics are particularly welcome, although candidates with a background in instrumentation for synchrotron radiation research are also encouraged to apply. A Ph.D in a relevant field is preferred.

OPTICAL COMPONENTS METROLOGY Staff Scientist 2 (A/4524)

Duties: The incumbent will be responsible for the metrology of optical components of the Advanced Light Source, a state-of-the-art synchrotron radiation facility. In addition to studies of surface finish, assessments of optical surface figure, and measurements of reflecting optics (particularly mirrors and gratings), the incumbent will conduct R&D in new areas of optical component fabrication, such as electroforming. The incumbent may also be responsible for the implementation of one or more beamlines. The beamline optical systems, which involve both relay and spectroscopic technologies, must satisfy challenging fabrication tolerances and withstand demanding photon beam power loadings. The state-of-the-art instrumentation required includes glancing-incidence mirror assemblies and high-resolution grating and crystal monochromators.

Requirements: The successful candidate will have demonstrated experience and a strong record of published original work in the design of optical systems and in optical metrology. Although the Advanced Light Source will generate vacuum-ultraviolet, soft x-ray, and hard x-ray synchrotron radiation, the candidate may have experience at either visible or at the shorter wavelengths. It is expected that optical measurements will primarily be done in the visible even for ultraviolet and x-ray optics, and, if required, colleagues at the Advanced Light Source may provide complementary short-wavelength expertise. Applications from graduates of universities that specialize in optics are particularly welcome, although candidates with a background in instrumentation for synchrotron radiation research are also encouraged to apply. A Ph.D in a relevant field is preferred.

Please send resume to: **LBL Employment Office, #1 Cyclotron Road, 90-1012, Berkeley, CA 94720.** An equal opportunity employer.



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BERKELEY
LABORATORY

POSITIONS OPEN

PROJECT SCIENTIST MOLECULAR BIOLOGY/ TUMOR NUCLEAR MAGNETIC RESONANCE

Scientist trained in molecular biology with doctoral degree and less than 5 years of relevant research experience. A highly motivated biologist is needed to immediately lead the day-to-day operation of the biological laboratory. Requirements of technical experience are tissue culture, centrifugal elutriation, cytocentrifuge and DNA flow cytometry. Team approach on MRS/MRI research of tumors is encouraged. Salary is competitive with excellent fringe benefits package.

Please send your résumé to: **Dr. Thian C. Ng, Director of MR Research, Division of Radiology, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44106.**

RESEARCH ASSOCIATE: For research in endocrinological manipulation of metabolism of eicosanoids and nucleotides in organ transplantation. HPLC, RIA, and cell culture experience desirable. Salary according to experience. Address inquiries to: **Dr. Peter W. Ramwell, Department of Physiology and Biophysics, Georgetown University Medical Center, 3900 Reservoir Road, N.W., Washington, D.C. 20007.**

SCIENTIFIC PROGRAM DIRECTORS

The American Cancer Society invites applications for the position of Scientific Program Director in Atlanta. Scientific Program Directors are responsible primarily for the administration and management of the Society's peer-reviewed, extramural research program. Applicants must be 5 to 10 years beyond their Ph.D. or M.D. degree, and have demonstrated independent research and grant writing capability. Interested individuals should submit their curriculum vitae with the names, addresses, and telephone numbers of three references to:

**Personnel Director
American Cancer Society
261 Madison Avenue
New York, NY 10016**

POSITIONS OPEN

RESEARCH ASSISTANT

A position is available in our research and development department for an individual with a B.S. in biochemistry or related discipline to assist staff scientists studying mechanisms of pathogenesis of mycoplasmas. The candidate must have experience in protein isolation and characterization as well as immunoassays. Salary commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Steven J. Geary, Director of Research and Development, Bionique Laboratories, Inc., Bloomingdale Road, Saranac Lake, NY 12983.**

Bionique Laboratories is located in the Olympic region in the Adirondack Mountains.

SENIOR TECHNICIAN PROTEIN ELECTROPHORESIS MOLECULAR EVOLUTION PROGRAM

The Smithsonian Tropical Research Institute, located in the Republic of Panama, seeks a senior technician to manage a protein electrophoresis laboratory. Duties include set-up of facility and responsibility for all aspects of its operation. M.S. degree in molecular biology or equivalent with substantial experience in protein electrophoresis required. Must work effectively with scientists varying widely in biochemical training. Interest in natural history and/or familiarity with Spanish desirable. The successful candidate will be part of a growing program whose goal is to bring modern biochemical methods to the study of diverse tropical biotas. Curriculum vitae and two confidential letters of recommendation should be received by 1 April 1988. Send to: **Nancy Knowlton, Smithsonian Tropical Research Institute, APO Miami 34002-0011. Equal Opportunity Employer; employment not limited by nationality.**

The California Department of Food and Agriculture is seeking **STAFF TOXICOLOGISTS** for positions in Sacramento. Ph.D. in toxicology or related science followed by 3 years of recent, related experience is required. The work is primarily review of animal toxicology studies submitted in support of risk assessments. Salary: \$3,990 to \$4,826 per month. Submit résumés to: **Department of Food and Agriculture, 1220 N Street, Room 154, Sacramento, CA 95814, by 6 May 1988.**

POSITIONS OPEN

The Department of Biology, College of St. Thomas, seeks to fill a full-time, **TEMPORARY POSITION** for one year beginning September 1988. Rank and salary are negotiable. Teaching responsibilities will include comparative vertebrate anatomy and animal physiology, for biology majors; and human anatomy and physiology, and general biology laboratories, for non-majors. The College of St. Thomas is a coeducational, Catholic liberal arts college committed to the total development of the individual student. The successful applicant will have a Ph.D., or substantial progress toward the degree, and a strong commitment to teaching at the undergraduate level. Send letter of application, curriculum vitae, and three letters of reference directly to: **Mrs. Kathy Fell, Box 4208, College of St. Thomas, 2115 Summit Avenue, St. Paul, MN 55105.** All materials must be received by 1 April 1988. *An Equal Opportunity/Affirmative Action Employer.*

UNIVERSITY OF TORONTO DEPARTMENT OF CHEMISTRY TENURE-STREAM APPOINTMENT

The Department of Chemistry, University of Toronto will make a tenure-stream appointment at the assistant professor level in experimental physical chemistry on or after 1 January 1989. Applicants should possess a strong academic background and an excellent research record in modern experimental physical chemistry. The successful candidate will be expected to conduct an active and highly innovative research program and to teach at both the undergraduate and graduate level.

This position is open to men and women candidates of any nationality. Applicants should provide curriculum vitae and an outline of their proposed research, and should arrange to have three letters of recommendation sent on their behalf, by 1 May 1988, to:

**Professor M. A. Winnik
Chairman, Search Committee
Department of Chemistry
University of Toronto
80 St. George Street
Toronto, Ontario, Canada M5S 1A1**

Postdoctoral Fellow

California Biotechnology Inc., a leading biopharmaceutical company engaged in the development of human therapeutics, has an immediate research opening for a postdoctoral fellow to join a group studying both the molecular biology and mechanism of action of FGF and related growth factors.

The qualified candidate will be a recent Ph.D. with a strong background in molecular biology, protein chemistry and cell biology, with a particular interest in growth factors and their clinical utility.

We offer a stimulating research environment with a competitive compensation and benefits package. Please submit a curriculum vitae, with the names of three references, to: **California Biotechnology Inc., Human Resources MF-JF, 2450 Bayshore Parkway, Mountain View, CA 94043.** We are an equal opportunity employer.

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RESEARCH SCIENTIST EXPLORATORY RESEARCH

Amgen is a dynamic and growing organization that is a recognized leader in recombinant DNA technology. Our leadership in developing erythropoietin and other products for human therapeutics, human diagnostics, animal health care and specialty chemicals has placed us firmly in the forefront of the industry. We currently have an opportunity for a Research Scientist to contribute to our Exploratory Research Group.

Qualified candidates will have a Ph.D. and at least 2-4 years of postdoctoral experience in the molecular and cellular biology of any of the following disciplines: neurobiology, lipid metabolism, bone formation, soft tissue regeneration, hematology, endocrinology or immunomodulators. Experience in cDNA cloning and gene expression as it relates to these disciplines is highly desirable.

Amgen offers a stimulating and challenging research environment as well as an attractive location (about an hour northwest of Los Angeles). **Amgen** also offers a competitive compensation and benefits package. Qualified applicants should send a resume, in confidence, to:

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AMGEN
1900 Oak Terrace Lane
Thousand Oaks
CA 91320**



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Genentech, Inc., a leader in the field of biotechnology, has the following opportunities available at our South San Francisco headquarters.

Scientist

Protein Purification & Characterization

We are seeking a highly motivated and innovative Scientist with experience in the purification and characterization of proteins. This Scientist will join a multidisciplinary team of biochemists and biochemical engineers developing methods to purify and characterize recombinant proteins to be used as human pharmaceuticals. The individual will focus on rapid protein purification and characterization in conjunction with research.

The successful candidate will have a PhD in Biochemistry with at least 2 years' postgraduate experience in either academia or industry with a demonstrated record of accomplishment. Knowledge of HPLC and other protein purification/analysis techniques are essential.

Research

Assistant/Associate

We are also seeking a Research Assistant/Associate to work on cDNA cloning and the expression/functional analysis of polypeptides. You will also be involved in membrane signal transduction. This opportunity requires a BS/MS in Molecular Biology, Cell Biology or equivalent with at least 2 years' experience in molecular cloning techniques. Cell culture experience is desirable.

Genentech, Inc. offers an excellent salary and benefits package coupled with the opportunity to make a significant contribution to our organization. For the Scientist position, please send resume to: Joyce Goulden, Human Resources Dept. 0642, Genentech, Inc., 460 Point San Bruno Blvd., South San Francisco, CA 94080. For the Assistant/Associate position, please send resume to Eric Mankuta, Human Resources Dept. 1413 at the same address. An equal opportunity employer.

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Pharmacokinetics Professionals

Adria Laboratories, a rapidly expanding Columbus, Ohio-based pharmaceutical company, is moving aggressively to meet R&D challenges in the development of human pharmaceuticals. As we undertake major research expansions, we seek pharmaceutical pharmacokinetics professionals:

SENIOR RESEARCH SCIENTIST

Responsibilities include supervision of the bioanalytical group and participation in the development/validation of analytical procedures to support both clinical and preclinical pharmacokinetics investigations in support of NDA/ANDA. To qualify, you must have a PhD in Analytical, Pharmaceutical or equivalent Chemistry field with at least 3-5 years' experience, preferably in Bioanalytical/Pharmaceutical R&D. Excellent background in current bioanalytical separation principles using HPLC, GC is a must, along with proven ability to conceptualize and conduct innovative, independent research.

SCIENTIST

Responsibilities include the clinical pharmacokinetics support for new and marketed drug candidates, evaluation and execution of pharmacokinetic studies, designing protocols, collation and review of reports, IND preparation. Ideal candidate will possess a PhD in Pharmacokinetics, Pharmaceuticals or a PharmD with 1-2 years' experience in kinetics and protocol development.

RESEARCH CHEMIST

You will develop and validate new bioanalytical methods for kinetic support of new chemical entities and some preclinical product screening. To qualify, you must have a BS or MS with 2-5 years of experience in bioanalytical work with proven ability to work independently. Knowledge of HPLC, GC is a must along with experience with different detectors, UV, VIS, EC.

SENIOR RESEARCH SCIENTIST

You will be responsible for evaluation, planning and execution of pharmacokinetic studies for both preclinical and clinical support of NDA/ANDA. A PhD degree in Pharmacokinetics, Pharmacology or equivalent associated science is required with a minimum of 2-3 years' experience. Expertise must include ability to apply physico-chemical principles to kinetic and metabolism investigations, strong background in pharmacostatistics and use of kinetic software packages.

These unique career opportunities will position you for visibility and advancement in a research environment that turns good ideas into reality while our Columbus, Ohio location surrounds you with an affordable and enviable quality of life. Adria's extreme financial strength allows us to offer an excellent salary and benefits package. To investigate our growth and your ability to grow with us, send resume and salary level to: **Adria Laboratories, Staffing—MLP, P.O. Box 16529, Columbus, Ohio 43216.** An Equal Opportunity Employer M/F/H/V.



ADRIA LABORATORIES

POSITIONS OPEN

SHRINERS HOSPITAL FOR CRIPPLED CHILDREN, TAMPA UNIT

We are seeking highly motivated staff scientists at the Ph.D. or M.S. level, and also postdoctoral fellows to join interdisciplinary research teams working on structure-function relations of polypeptide growth factors and of structural connective tissue proteins. The positions offer the opportunity to work with state-of-the-art technology in a cooperative, exciting and expanding research environment in the following disciplines:

MOLECULAR BIOLOGY

Extensive experience in cloning and expression work required. Program planning and management skills are essential; experience in site-directed mutagenesis and DNA synthesis/sequencing would be an advantage.

PEPTIDE SYNTHESIS

Expertise in the structural modification and synthesis of peptide analogues is essential; experience with an automated peptide synthesizer would be an advantage.

PROTEIN CHEMISTRY

Experience in protein or proteoglycan structure analysis and the use of protein micro-separation and sequencing techniques would be an advantage.

CELL CULTURE

A strong background in cell culture techniques and the ability to manage a cell culture laboratory are essential; experience with hybridoma technology would be an advantage.

We offer highly competitive salaries and benefit packages. If you would like to be considered for these challenging positions, please send your curriculum vitae and the names of references to: **Personnel Director, Shriners Hospital for Crippled Children, Tampa Unit, 12502 North Pine Drive, Tampa, FL 33612-9499.**

VERTEBRATE ZOOLOGIST. Temporary 1-year position beginning fall 1988. Responsibilities include teaching vertebrate embryology, vertebrate comparative anatomy, and a non-majors general biology course. Master's degree required; Ph.D. preferred. University/college teaching experience and/or postdoctoral experience preferred. Send curriculum vitae, all transcripts, three letters of reference, and a brief statement of teaching philosophy to: **Dr. Carl Train, Chairperson, Department of Biology, Southeast Missouri State University, Cape Girardeau, MO 63701**, by 30 March 1988. *Southeast Missouri State University is an Equal Opportunity/M/F/Affirmative Action Employer.*

SYMPOSIUM

INTERNATIONAL CONFERENCE ON GASTROENTERIC BIOLOGY 25-28 October 1988

Oxnard, California

John H. Walsh, M.D., Chairperson

Intestinal Differentiation and Adaptation

Enterocyte Molecular and Cell Biology

Gastroenteric Neurobiology

Gastroenteric Endocrine Biology

Gastric Mucosal Cell and Molecular Biology

Mechanisms of Mucosal Protection and Repair

For abstract forms and information contact: **Joyce Fried, Brain Research Institute, University of California, Center for the Health Sciences, Los Angeles, CA 90024-1761**, or telephone: 213-825-5061.

INTERNATIONAL SYMPOSIUM ON THE HAZARDS OF DIVING IN POLLUTED WATERS to be held in Bethesda, Maryland, on 14, 15, and 16 December 1988. Sponsored by the University of Maryland Sea Grant College, in cooperation with the National Oceanic and Atmospheric Administration and the Undersea Hyperbaric and Medical Society, the conference will address microbial, chemical, nuclear, thermal, acoustic, and other diving hazards. The planning committee invites posters on relevant topics. For further information, please contact: **International Diving Symposium, University of Maryland Sea Grant College, 1224 H. J. Patterson Hall, College Park, MD 20742.**

DEPUTY DIRECTOR THE WASHINGTON TECHNOLOGY CENTER

THE UNIVERSITY OF WASHINGTON is searching for a qualified individual to serve as Deputy Director of The Washington Technology Center. As a leader in research and new technology development in the areas of advanced materials, compound semiconductors, computers and software, manufacturing systems, microsensors, and medical and plant biotechnology, the Center creates technologies for application to industrial products and processes which contribute to the development of the Washington state economy.

In the Center's organizational hierarchy, the Deputy Director reports directly to the Executive Director, is number two in the management chain, and functions as the Center's chief operations officer in charge of all day-to-day operations of the Center. **Specific responsibilities include:**

Setting research program requirements and providing overall research program guidance

Approval of specific research program plans

Review and assessment of research program performance

Supervision and performance evaluation of Program Directors

Research facilities management and safety

Industry contract/grant negotiations

Liaison and staff support to the Research Committee and the Facilities Committee of the Center's Board of Directors

Qualified applicants must have a Ph.D. in engineering or science, professional experience in a field of engineering or science, and at least ten (10) years of experience in research and development management. Starting salary will be in the \$60,000 to \$75,000 range and will be dependent upon the experience and overall credentials of the successful applicant. Corporate experience is preferred but not required. Letter of application and a professional resume should be mailed by no later than March 22, 1988, to:

**Dr. Edwin B. Stear, Executive Director
THE WASHINGTON TECHNOLOGY CENTER
376 Loew Hall FH-10
University of Washington
Seattle, WA 98195**

THE UNIVERSITY OF WASHINGTON IS AN EQUAL OPPORTUNITY EMPLOYER

Information Scientist/ Literature Searcher

The Agricultural Research Division of American Cyanamid Company seeks an individual with a strong background in animal science or zoology with knowledge of information sources and resources in biology.

The ideal candidate must possess an advanced degree in zoology or agricultural sciences, laboratory experience, and at least three years experience in literature searching using manual and on-line bibliographic retrieval systems with a substantial knowledge of biological information resources.

Please forward your resume, in confidence, to Judith C. Leondar, Manager, Technical Information Services



American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08540

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OPPORTUNITIES IN METABOLISM

ICI Americas Inc. has several exciting career opportunities available in the Metabolism Laboratory at its Environmental Health Center located in Farmington, CT.

Metabolism Supervisor

You will supervise scientists working on metabolism/pharmacokinetic studies and work as part of a team of chemists and biochemists to separate and identify metabolites in biological systems. To qualify, you should possess a Ph.D. degree or equivalent in biochemistry, chemistry, or a related field, and 5-7 years of experience in conducting metabolism/pharmacokinetic studies in animals and experience in laboratory supervision. You should also have experience in modern biochemical and analytical procedures including TLC, GC, HPLC and radioisotope handling.

Metabolism Scientist

You will conduct a variety of animal metabolism, enzyme induction and special studies. Responsibilities include system design, overall study supervision, interpretation of results and report preparation. You will work as part of a team of chemists and biochemists to separate and identify metabolites in biological systems, and collaborate to determine the etiology of toxic effects. The successful candidate will have an M.S. or Ph.D. degree or equivalent experience in biochemistry, chemistry or a related field, and be experienced in modern biochemistry and analytical procedures, including TLC, GC, HPLC and radioisotope handling.

ICI Americas Inc. offers on-going growth opportunities, excellent salaries and an attractive package of paid company benefits. The Environmental Health Center is adjacent to the University of Connecticut Health Center, in one of the state's most attractive semi-rural towns. To apply, please send your resume, a brief description of your experience, and your salary requirements to: Mrs. P. A. Frutchev, ICI Americas Inc., 400 Farmington Ave., Farmington, CT. 06032. We are an Equal Opportunity Employer M/F.

ICI Americas Inc.

Opportunities in Japan for BS, MS or PhD Life Scientists

Procter & Gamble has immediate openings for BS, MS, Ph.D. or postdoctoral life scientists in Japan. These positions are in our technical center in Osaka, but may be preceded by 1-2 years of industrial research or product development training in the U.S. in Cincinnati, Ohio. Applicants must be Japanese citizens and fluent in both Japanese and English.

Procter & Gamble is a multi-national technically-based corporation with \$17 billion in sales in the pharmaceutical, health care, paper, beauty care, household care, beverage, food, soap and detergent, and fabric care consumer product categories. Our sales more than doubled in the last 10 years, and we now have 83 consumer brands in 38 different product categories, with sales in 140 countries.

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Allow 6-8 weeks for response.

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COURSE

PENN STATE BIOTECHNOLOGY INSTITUTE WORKSHOP HYBRIDOMA AND MONOCLONAL ANTIBODIES

A 4-day workshop will provide researchers with both practical and theoretical background on hybridoma and monoclonal antibody production. The course will emphasize lab experience starting with immunization, and covering all aspects through ascites production. Offered 16 to 19 May 1988. Limited to 20 participants. Cost: \$600. Contact: **Dr. Richard Artega**, 519 Biotechnology Institute, University Park, PA 16802. Telephone: 814-865-0921.

PROGRAM

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain a doctor of optometry (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: **Ph.D.-O.D. Program Director, Admissions Office, The New England College of Optometry, Room 14, 424 Beacon Street, Boston, MA 02115.**

M.S. DEGREE IN APPLIED MOLECULAR BIOLOGY

The University of Maryland Baltimore County offers a 2-year, highly laboratory-intensive program leading to a Master's degree in Applied Molecular Biology. The program, in which ten biotechnology companies participate, is designed primarily to supply highly qualified research personnel for industry. Formal laboratory courses, exclusive to this program, are in recombinant DNA methods, microbial genetics, and a hybridoma production. Research internships, both at a company and on-campus, are also required. For information write:

Dr. Richard E. Wolf, Jr.
AMB Program Director
Biological Sciences Department
University of Maryland Baltimore County
Catonsville, MD 21228

TRAINING PROGRAM

POST-PREDOCTORAL TRAINING ENVIRONMENTAL PATHOLOGY

NIHES-sponsored training program. Research areas: environmental pathology, molecular biology, mechanisms of carcinogenesis, mutagenesis, heavy-metal neurotoxicity. Only U.S. citizens or permanent residents eligible. *Women and minorities encouraged to apply.* **Dr. David G. Kaufman**, Department of Pathology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7525. Telephone: 919-966-5046.

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CONFERENCES

NEW TECHNOLOGIES IN ESTABLISHED INDUSTRIES: LESSONS IN HAZARD MANAGEMENT 26-27 MAY 1988 WORCESTER, MASSACHUSETTS

The second annual conference of The New Technologies Safety and Health Institute will focus on the management of potential hazards that established industries encounter with the introduction of new products and processes. Some of these include: new materials, new chemicals, robotics, lasers, low frequency non-ionizing radiation, automated factories, and expert systems.

The objectives of the conference are to exchange information and promote collaboration among those concerned with workplace health and safety, productivity, environmental impacts, and risk communication.

Co-sponsors of the conference are the Center for Technology, Environment and Development (CENTED) at Clark University; the Occupational Health and Environmental Health Sciences Programs at the University of Massachusetts Medical School; and the Division of Interdisciplinary Affairs at Worcester Polytechnic Institute.

For information, contact: **Barbara Guthrie**, Worcester Consortium for Higher Education, 37 Fruit Street, Worcester, MA 01609. Telephone: 617-754-6829.

CONFERENCES

POPULATION GENETICS AND GERMPLASM RESOURCES IN CROP IMPROVEMENT AN INTERNATIONAL SYMPOSIUM

11 to 13 August 1988, University of California, Davis. The Symposium will stimulate interactions among population geneticists, ecologists, molecular geneticists, plant breeders, and germplasm resource managers. An international slate of speakers has been invited to integrate the theory and practice of population genetics with plant genetic resource management and utilization. New approaches based on molecular genetics will be examined. Poster pages may be volunteered. For registration information and materials, contact: **Donna Hyatt**, Dean's Office, College of Agricultural and Environmental Sciences, University of California, Davis, CA 95616. Telephone: 916-752-9485, TWM/TELEX: 910-531-0785.

FELLOWSHIPS

FELLOWSHIP IN ENDOTHELIAL CELL PHYSIOLOGY. Studies are currently underway on the role of cell surface macromolecules in determining patterns of red cell distribution in the microcirculation. A position will open 1 July 1988 and applicants who may wish to participate in this work should send letters of recommendation and résumés to: **Dr. Brian R. Duling**, Department of Physiology, School of Medicine, Box 449, Charlottesville, VA 22908. *We are an Equal Opportunity Employer.*

NEUROBEHAVIORAL FELLOWSHIP (September 1988): The Department of Neurology, University of Wisconsin Medical School, Milwaukee Clinical Campus, announces an opening in its 2-year postdoctoral fellowship program in clinical neuropsychology. The program and its requirements are consistent with the Task Force Guidelines [cf., *The Clinical Neuropsychologist* 1, 29-31 (1987)]. For further details, write to: **Kerry Hamsher, Ph.D.**, University of Wisconsin Medical School, P.O. Box 342, 950 North 12th Street, Milwaukee, WI 53201-0342. Application deadline: 30 May 1988.

POSTDOCTORAL FELLOWSHIP in developmental respiratory neurophysiology/neuroendocrinology requiring experience with nerve, muscle and CNS recording in behaving animals, microiontophoresis, and/or radioimmunoassays. Please send cover letter, résumé, and three references to: **I. R. Moss, M.D., Ph.D., Director, Pediatric Pulmonary Division, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9063. An Equal Opportunity University.**

POSTDOCTORAL FELLOWSHIP IN MOLECULAR BIOLOGY OF PROTOZOA

Position available immediately to study molecular biology of protozoan parasites *Toxoplasma gondii* and *Trypanosoma cruzi*. Project involves cloning, expression, and characterization of genes and products important for host immunity or useful for diagnosis of infection. Applicant should have a Ph.D. in molecular biology or related field, with background in recombinant DNA techniques. Some experience in gene cloning and expression is also desirable. Send curriculum vitae and names of three references to: **Dr. Jack S. Remington**, Division of Infectious Diseases, Department of Medicine, Stanford University School of Medicine, Stanford, CA 94305.

PREDOCTORAL FELLOWSHIPS are available for studies leading to the Ph.D. in the Physiology Graduate Program in the Temple University School of Medicine. Stipends and tuition waivers are available for eligible candidates. Specific research topic areas include cell biology of normal and diseased myocardium, membrane receptors, developmental cardiopulmonary physiology, liquid ventilation, underwater medicine, membrane transport, gastrointestinal function, vascular smooth muscle chemoreceptor function, and control of microcirculation. Applications may be sent to: **Steven R. Houser, Ph.D., Director, Physiology Graduate Program, Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. Equal Opportunity Employer, M/F.**

FELLOWSHIPS

FELLOWSHIPS IN FOOD SCIENCE

The Department of Food Science, North Carolina State University will award four USDA National Needs Fellowships in Food Science and Human Nutrition. Each fellowship will support a doctoral candidate in food science for 3 years, with an annual stipend of \$15,000. Selection of fellows will be based upon academic record, GRE scores, recommendations, research experience and accomplishments, awards and extracurricular and professional activities. Students selected for these fellowships must be U.S. citizens who have completed an M.S. degree. They must begin their Ph.D. graduate programs by summer or fall of 1988. The fellowships are to be awarded to students pursuing a Ph.D. degree in food chemistry, food microbiology, or food engineering and processing. Information/application may be obtained from: **Dr. David R. Lineback**, Head, Department of Food Science, Box 7624, North Carolina State University (NCSU), Raleigh, NC 27695. *NCSU is an Equal Opportunity/Affirmative Action Employer.*

NEUROBIOLOGY OF AGING TRAINING for M.D.'s and Ph.D.'s. Several fellowships, supported by the National Institute on Aging, will be available in 1988 for post-residency M.D.'s and Ph.D.'s who are interested in research training in the neurobiology of aging and/or Alzheimer's disease. We encourage applicants with diverse backgrounds who wish to apply their past training to problems of the aging CNS. We are particularly interested in persons with prior training in molecular biology, cell culture, protein chemistry, neuropathology, or neurology. The training program offers an intense research apprenticeship in fundamental research, contact with a variety of laboratories, seminars, and clinical activities. Twenty potential preceptors are in the Departments of Neurology, Neurobiology and Anatomy, Medicine, Biochemistry, and Psychology. The University of Rochester is notable for its absence of barriers among laboratories, facilities, and departments so work in facilities outside the formal preceptor list is also possible. There are over 70 laboratories devoted to the study of the nervous system. Molecular biology is another area of strength at the University of Rochester. U.S. citizens or permanent U.S. residents only. Apply to: **Dr. Paul D. Coleman**, Department of Neurobiology and Anatomy, University of Rochester Medical Center, Rochester, NY 14642.

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FACS IV™ Single-laser Flow Cytometer/Sorter with 5 watt tunable Argon laser, 4 data channel log amps, high speed data lister, single cell deposition system; Consort 40™ Computer System with PDP 11/23 CPU, 71 Mb Winchester, tape drive, Graphics printer and terminal and Software + list mode. Also, FACS 440™ Dual-laser Electronics Console. Contact **Robert Adron**, 919-549-8641, Ext. 236.

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<i>Aat</i> II	<i>Ban</i> III	<i>Dra</i> I	<i>Hae</i> III	<i>Mlu</i> I	<i>Pst</i> I	<i>Sca</i> I
<i>Acc</i> I	<i>Bcl</i> I	<i>Eco</i> 81 I	<i>Hha</i> I	<i>Mro</i> I	<i>Pvu</i> I	<i>Sfi</i> I
<i>Alu</i> I	<i>Bgl</i> I	<i>Eco</i> 47 I	<i>Hinc</i> II	<i>Msp</i> I	<i>Pvu</i> II	<i>Sma</i> I
<i>Apa</i> I	<i>Bgl</i> II	<i>Eco</i> 47 III	<i>Hind</i> III	<i>Mva</i> I	<i>Rsa</i> I	<i>Sph</i> I
<i>Ava</i> I	<i>Bst</i> E II	<i>Eco</i> 52 I	<i>Hinf</i> I	<i>Nae</i> I	<i>Sac</i> I	<i>Taq</i> I
<i>Bam</i> H I	<i>Cfr</i> 10 I	<i>Eco</i> R I	<i>Hpa</i> I	<i>Nci</i> I	<i>Sac</i> II	<i>Xba</i> I
<i>Ban</i> I	<i>Cfr</i> 13 I	<i>Eco</i> R V	<i>Hpa</i> II	<i>Not</i> I	<i>Sal</i> I	<i>Xho</i> I

- SP6 RNA Polymerase
- *recA* Protein
- SSB
- T4 DNA Ligase
- *E. coli* DNA Ligase
- ATP-Dependent DNase
- Bal 31 Nuclease
- Deoxyribonuclease I
- Exonuclease III
- T7 Gene 6 Exonuclease
- Mung Bean Nuclease
- *N. Crassa* Nuclease
- P1 Nuclease
- S1 Nuclease
- AMV Reverse Transcriptase
- DNA Polymerase I
- T4 DNA Polymerase (cloned)
- T7 DNA Polymerase (cloned)
- Terminal Deoxynucleotidyl Transferase
- T7 RNA Polymerase
- Bacterial Alkaline Phosphatase
- T4 Polynucleotide Kinase (cloned)
- Cloned T4 Gene 32 Protein

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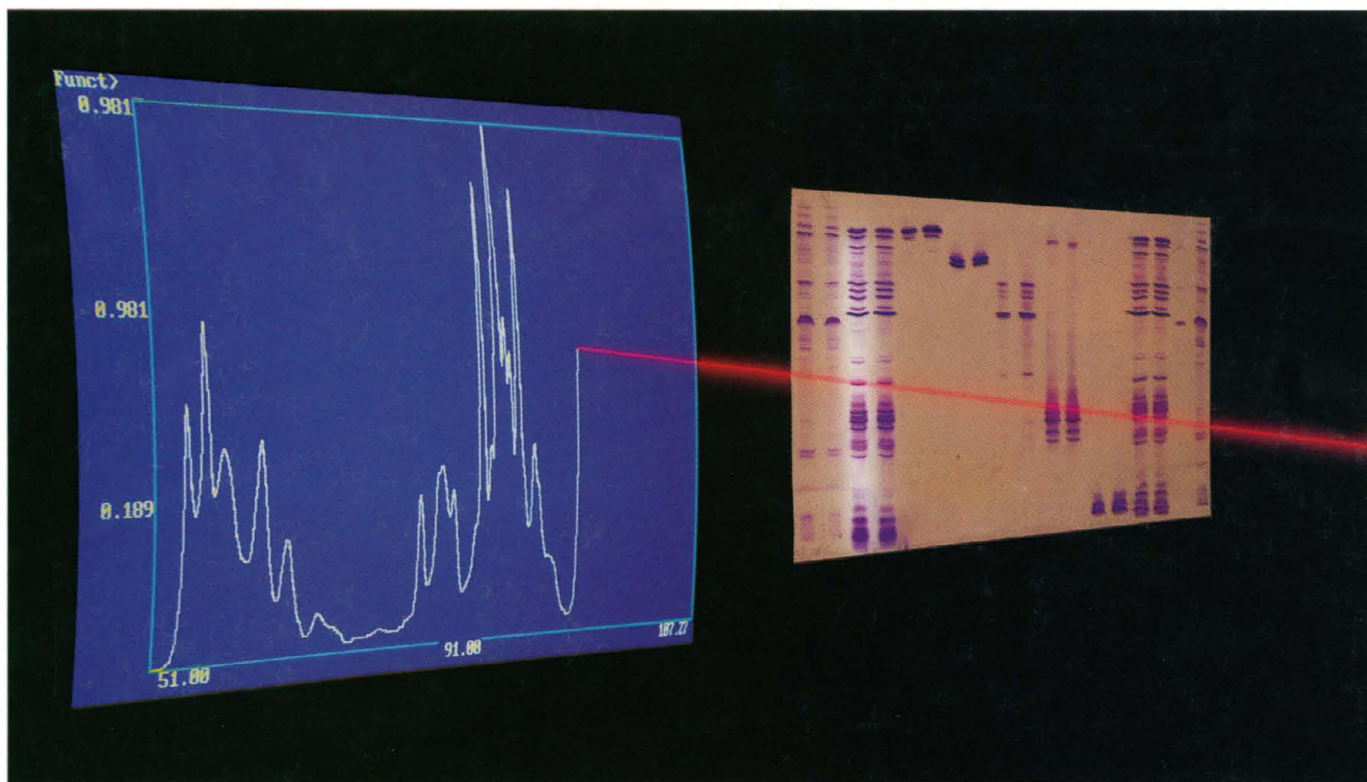
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