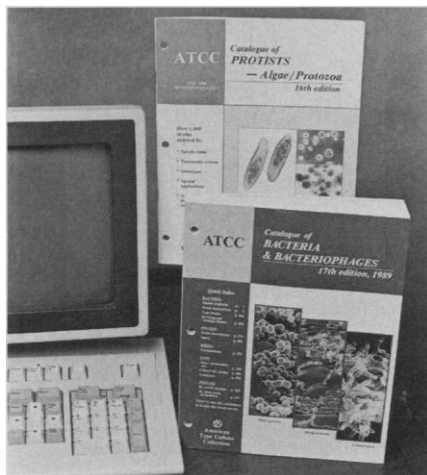


Biological Culture Collection Goes Online

The complete catalogs of *Bacteria & Bacteriophages* and *Protists—Algae/Protozoa* are now available through the American Type Culture Collection (ATCC) ONLINE database service. The service is accessible through the CODATA Microbial Strain Data Network. Included in the catalog information are strain descriptions, instructions for culture



maintenance, media formulations, and special uses for specific strains. Databases for the ATCC Recombinant DNA Material Collection and the *ATCC/National Institutes of Health Repository of Human & Mouse DNA Probes and Libraries* are also available through the ATCC ONLINE service. Other features of the service include electronic mail, international microbial databases, an international hybridoma database, and electronic conferencing. American Type Culture Collection. Circle 491.

Monoclonal Antibodies

An extensive range of oncoproteins and oncoprotein antibodies are site-specific, raised against small synthetic peptides selected from a particular oncoprotein's amino acid sequences. The antibodies can be used

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.

to recognize identical sequences in intact native proteins as well as the synthetic peptide. Bioproducts for Science. Circle 494.

Mouse Anti-Rat Natural Killer Cell Monoclonal Antibody for research recognizes and reacts with all rat natural killer cells, large granular lymphocytes, and neutrophils. It is especially useful for studies involving transplant immunology and those that require in vivo depletion of natural killer cells. Serotec. Circle 495.

Benchtop Cleanroom

The Cleansphere CA100 is a spherical, portable, benchtop air class 100, mini clean room. A high-efficiency particulate air filter cartridge gives 99.997% efficiency, and the spherical chamber allows all-around vision. Specially designed handbays provide easy handling of materials, and the top half of the chamber can be removed for cleaning from the inside or for access to larger experiments. Positive pressure within the chamber provides uniform airflow and continuous experiment protection. Safetech. Circle 519.

DNA Sequence Computer Entry System

The DNA Parrot is a device with five buttons and visual and audio feedback for entering DNA sequence data into a Macintosh, IBM-PC, or IBM-compatible computer via the serial port. Four of the buttons are for the entry of the four bases; the fifth one deletes the last entry. Each of the four buttons has a light-emitting diode (LED) for visual feedback. As a button is pressed, the base is entered onto the screen, the computer echoes back the base by digitized sound, and the LED button lights. The Macintosh system requirements are a Macintosh Plus model or higher with 1 megabyte of memory and system 6.02 or higher. The PC system requires 640 kilobytes of memory and runs on all models. T & T Research. Circle 493.

Scientific Information Managing Software

Hyperlab software program enables scientists to enter, store, organize, and retrieve text, data, graphs, tasks, literature references, ideas, laboratory procedures, and tables. It includes a powerful conversion calculator. The program organizes information by "project," the main component of which is a "notebook," a free-form space for storing and organizing text, data, and graphics.

The program also features databases for laboratory procedures, tables, and ideas for future projects. Hyperlab requires a Macintosh Plus, SE, or II with 1 megabyte of memory and HyperCard 1.2. Asgard Software. Circle 501.

Transcription Translation System

Escherichia coli S30 Coupled Transcription Translation System is a tool for the study of the expression of prokaryotic genes. Exogenously added DNA, containing appropriate prokaryotic promoter and ribosome binding sites, directs the synthesis of proteins in vitro. The system contains all the transcription and translation components necessary for translation. Four amino acid mixtures are available to allow labeling with the optimum amino acid for each protein. Promega. Circle 515.

Literature

Data Acquisition & Signal Conditioning is a 20-page catalog with the latest in hardware and software data acquisition tools for Macintosh and IBM-compatible computers. World Precision Instruments. Circle 520.

Capillary Electrophoresis Systems I is a brochure that describes the capabilities of an automated system for the separation of a wide range of molecules. Dionex. Circle 521.

Waters Column is a newsletter that provides information about applications, columns, and chemistries for high-performance liquid chromatography. The first 16-page issue features an article on new packings and columns for protein analysis and purification. Waters Chromatography Division of Millipore. Circle 522.

Research News is a 20-page document that presents a detailed analysis of each of the key separation parameters available to the researcher on current capillary electrophoresis instruments. Applied Biosystems. Circle 523.

Personal Spectroscopy Software is a full-color brochure describing the QuantaScan 2D Analysis Software Program for the CS9000U Scanning Densitometer. The package enables researchers to analyze data from two-dimensional gels, thin-layer chromatography plates, blots, and autoradiograms. Shimadzu Scientific Instruments. Circle 524.

The Catalog of Personal Computing Tools for Scientists and Engineers is a 48-page listing featuring many new products. Personal Computing Tools. Circle 530.

Personnel Placement

SCIENCE publishes each Friday, except the last Friday of the year, and is mailed on issue date. 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. **SCIENCE** reserves the right, in its discretion, to decline to publish advertisements submitted to it.

LINE CLASSIFIED ADVERTISEMENTS

DEADLINE: Thursday, 10 a.m., 2 weeks prior to issue date. Advertising is accepted only in writing.

POLICIES: All classified ads will be edited and typeset according to **SCIENCE** style guidelines. NO ABBREVIATIONS. Any deadline for applications stated in ad must be at least 2 weeks after date of issue in which ad appears.

CLASSIFICATION: **SCIENCE** publishes line classified ads under the following headings: **Positions Open, Employment Agencies, Fellowships, Situations Wanted, Courses and Training, Meetings, Announcements, and Marketplace.** Advertisers should specify classification desired; however, **SCIENCE** reserves the right to decline classification requests which it believes may be misleading to readers.

RATE: \$41 per line, \$410 minimum, per week. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces per line. No charge for use of blind box number. No agency commission for ads less than 40 lines. To ESTIMATE ad cost, structure ad copy on a 52-character line; include any desired heading on 32-character lines. Each line of heading, one line of white space between heading and body of ad, and all partial lines (including centered reply information, if desired) are counted as full lines. Multiply total number of lines x \$41 = approximate cost of ad, per week. (This is an approximate cost ONLY. Allow for variation between estimated lines and actual typeset lines and resulting final cost. Purchase orders must allow for some degree of flexibility and/or adjustment. **SCIENCE** cannot provide proofs of typeset ads.)

PREPAYMENT DISCOUNT: A 3% cash discount is granted to all prepaid line ads. Prepayment in U.S. dollars by checks drawn on U.S. banks is required for all foreign ads.

BOXES AND LOGOS: Any 1-column line classified ad can be boxed and/or published with logo. No extra production charge for use of box or logo. For boxed ads, one line equals 48 characters and spaces; two additional lines will be added to cost of ad to allow for top and bottom rules. Logos are billed according to number of lines needed to accommodate logo.

SITUATIONS WANTED ADS: As a service to AAAS members in good standing, **SCIENCE** offers free placement of Situations Wanted ads for individuals seeking full-time or part-time employment. A blind box may be used. Ads must be submitted in writing with text of 20 words or less, not including address or box number, and are limited to two insertions per member in each calendar year. Please enclose **SCIENCE** mailing label including AAAS membership number when submitting ad.

CANCELLATIONS: Deadline for cancellations is 10 a.m. Tuesday, 10 days prior to issue date.

Address ad copy or requests for information to:

SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005
Telephone: 202-326-6555
FAX: 202-682-0816

MARKETPLACE AND DISPLAY PERSONNEL ADVERTISEMENTS

For rates, deadlines, and information about fractional display ads (1/6 page and larger) and all **Marketplace** listings of available products and services, contact:

Scherago Associates, Inc.
1515 Broadway
New York, NY 10036
Telephone: 212-730-1050
FAX: 212-382-3725

RESPONSES TO EMPLOYMENT ADS

Applicants should read Positions Open ads carefully in order to submit all required material when responding, and should especially check for any stated deadline for receipt of applications. **SCIENCE** encourages applicants for positions to investigate employment laws, non-discrimination policies, visa requirements, and cultural differences in the country advertising for employees.

To reply to a blind box ad, address correspondence to:

Box (give number)
SCIENCE Classified Advertising
1333 H Street, NW, Room 940
Washington, DC 20005

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

Previous vacancy has been redefined. Applicants with teaching and research abilities in either microbiology or genetics are invited for a tenure-track position in the Department of Biology. Teaching responsibilities include general microbiology or genetics and other courses depending on candidate's expertise. Opportunity for participation in the development of a master's degree is anticipated. Doctorate required. Applicant should enjoy working closely with a student population representing a socially and ethnically diverse environment. The position is available as early as January 1991 and will remain open until filled. To insure full consideration, completed applications should be received by 1 September 1990. Applicants should send curriculum vitae, a statement of teaching philosophy, and names, addresses, and telephone numbers of five references to: **Dr. F. Duane Blume, Chair, Department of Biology, California State University, Bakersfield (CSUB), 9001 Stockdale Highway, Bakersfield, CA 93311-1099. CSUB is firmly committed to achieving the goals of Equal Opportunity and Affirmative Action. Women and minorities are urged to apply.**

The Department of Biological Sciences invites well-qualified applicants for three 1-year, full-time **TEMPORARY FACULTY POSITIONS** in one or more of the areas of botany, general biology, human anatomy, and physiology, microbiology, and zoology, as sabbatical replacement from an applicant pool developed in part from responses to this announcement. The positions will be filled at the **ASSISTANT PROFESSOR** level and will begin fall semester 1990. The applicant must have a Ph.D. degree in an area of biological science. Responsibilities of each successful candidate will include introductory major and/or nonmajor courses and may include advanced course(s) in the candidate's specialty. All faculty in the department are expected to participate in the general education program and address the needs of ethnically diverse students through course materials and teaching strategies. Salary range is \$30,000 to \$36,000 for the academic year. Applicants must submit a résumé, college transcripts, a statement of teaching interests/philosophy, and three current letters of reference by 26 July 1990 to: **Dr. Wayne Savage, Chairman, Department of Biological Sciences, San Jose State University, San Jose, CA 95192-0100. Telephone: 408-924-4900.**

An Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR ANATOMY AND CELL BIOLOGY

The Department of Anatomy and Cell Biology, Wayne State University School of Medicine, invites applications for a tenure-track position at the assistant/associate professor level. The department is seeking an individual whose research interests will complement the interests of vision scientists of the present faculty. Applications are invited from candidates using cell biology, genetics, or molecular biology. The successful candidate will be expected to participate actively in teaching and to establish a funded, independent research program. Excellent start-up funds and laboratory space are available. Intra- and interdepartmental collaboration is fostered by a Core Vision grant in the department and a Visual Sciences Training grant program. Applicants should have a Ph.D. or an M.D. degree and postdoctoral training. Please submit a cover letter with curriculum vitae and the names of three references to: **Dr. Linda Hazlett, Chairman, Search Committee, Department of Anatomy and Cell Biology, Wayne State University School of Medicine, 540 East Canfield, Detroit, MI 48201. Affirmative Action/Equal Opportunity Employer.**

The Cardiovascular Division, University of Louisville, is seeking a faculty member at the **ASSISTANT PROFESSOR** level in a non-tenure-track position. Candidates must have at least 7 years of research experience in basic cardiac electrophysiology. Must have established skills using multiple microelectrodes in two and three chamber tissue baths and microelectrode tip dye labeling. Other duties include lecturing and supervising fellows and medical students. Ph.D. or equivalent with previous faculty appointment desirable. Please send inquiries, including curriculum vitae and letters of reference, to: **Richard N. Redinger, M.D., Chairman, Department of Medicine, University of Louisville, Louisville, KY 40292. Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN

FRED HUTCHINSON CANCER RESEARCH CENTER

ASSISTANT MEMBER position, Division of Clinical Research, Department of Transplantation Biology.

Background required: Board-eligible or Board-certified in medical subspecialties of oncology and hematology with 2 to 4 years of clinical experience emphasizing marrow transplantation beyond formal training; molecular biology training either as doctoral or postdoctoral fellow with demonstrated experience in the area of gene cloning and interest in hematopoietic and lymphopoietic growth factors; the potential to become an independent investigator.

Expectations: To establish laboratory-based research programs which will successfully compete for extramural research funds; must be a capable clinician with potential of carrying forward laboratory science into appropriate clinical trials in animal or human systems; must contribute to general clinical marrow transplantation program in patient care and teaching at the attending physician level.

Please respond with curriculum vitae and letter of interest to: **Search Committee Chairman: Robert P. Witherspoon, M.D., Fred Hutchinson Cancer Research Center (FHCRC), M318, 1124 Columbia Street, Seattle, WA 98104.**

FHCRC is an Equal Opportunity/Affirmative Action, Minority/Female/Handicapped Employer. Smoke-free environment.



Chiron Corporation, a recognized world leader in the field of biotechnology, has an opening for a **YEAST BIOLOGIST**. A Ph.D. and 2 to 4 years of postdoctoral experience in the fields of yeast biology and/or yeast biochemistry are required. The successful candidate will be a highly motivated individual responsible for the development of novel heterologous protein expression systems and the elucidation of the mechanisms by which these systems operate. Chiron Corporation, located in the San Francisco Bay area, offers a competitive salary and benefits program. Please send a copy of your curriculum vitae and the names of three references (before 14 July 1990) to:

Yeast Biology Search
Chiron Corporation
4560 Horton Street
Emeryville, CA 94608

ANATOMY/CELL BIOLOGY POSITION

The Department of Anatomy and Cellular Biology of Tufts University Schools of Medicine, Dental Medicine and Veterinary Medicine invites applications for a tenure-track position. This position will also involve membership in the Cell, Molecular and Developmental Biology Program of the Sackler School of Graduate Biomedical Sciences which is administered from this department. Applicants should possess a Ph.D. or M.D. degree, or equivalent. Applicants must have an active, independent, research program with extramural funding. Preference will be given to candidates whose research emphasizes image analysis or electron microscopy but other candidates with particularly strong backgrounds in cell, developmental, or reproductive biology will also be considered. Teaching responsibilities will be in histology or gross anatomy, and experience in one of these areas is expected. Salary and rank will depend on qualifications and experience. Applicants should submit curriculum vitae, names of at least four references, and a letter describing research interests, accomplishments, and teaching experience to: **Dr. Bryan Toole, Department of Anatomy and Cellular Biology, Tufts University Health Science Schools, 136 Harrison Avenue, Boston, MA 02111.**

Tufts University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

SCIENCE recruitment ads reach thousands of scientists in all disciplines, worldwide. **Classified Advertising** telephone: 202-326-6555. FAX: 202-682-0816.



SmithKline Beecham

Research Director Spain

Smithkline Beecham, a leading pharmaceutical group in Spain and in the top five worldwide, is creating a new research centre in Spain.

Research is a high priority of the Group and is being conducted in centres in several developed countries.

The new centre being built at the Technology Park at Tres Cantos in Madrid will contribute to the international research programme of the group. The specific research to be undertaken will include natural product screening to identify selected agents with antimicrobial and/or pharmacological activity. Both antimicrobial assays and mechanism based screens, involving biotechnology and biochemistry, will be used. Additionally it is intended to support a fundamental programme on expression of genes in *Streptomyces* and filamentous fungi.

We are looking for a top scientist (5 years plus post PhD) well experienced in molecular and cellular biology, and with

organisational and managerial skills. Moreover, the successful candidate will need a good command of Spanish and English.

The main functions will be to establish, develop and manage the Research Centre, which will have an initial staff of approximately 70 people, recruited under his/her supervision.

SB offers the right candidate the opportunity of conducting top level research in a high-ranking organization of great international prestige.

The persons interested, should apply by letter to PA Consulting Group, enclosing C.V., and quoting the reference on the envelope.

All matters concerning PA are totally confidential.

Ref.: 4258

PA Consulting Group

Pº de la Castellana, 135 - 28046 MADRID (Spain)

Tel: (91) 279 65 03



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To qualify, you must hold a BS degree in Immunology or a closely related field with 4 years' post grad work, or an MS. Prior experience in mammalian cell culture, cytochemistry and use of monoclonal antibodies is essential. A background in fluorescence flow cytometry and cell sorting is highly desirable.

We offer a highly competitive salary and an excellent benefits package. For immediate, confidential consideration, please forward your resume to: Ms. P. Valendo, Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. An equal opportunity employer.

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we put in action.*



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ImmuLogic is a growing company with laboratories in Cambridge, Massachusetts, and Palo Alto, California, dedicated to the creation of novel therapeutic and diagnostic products to modulate and monitor the human immune system. We employ state-of-the-art techniques and proprietary knowledge in immunology, biochemistry and molecular biology to develop products in the vaccine, allergy and autoimmune disease areas. We collaborate with world leaders in the pharmaceutical industry and in academic institutions and are already recognized as a leading force among companies focusing in immunology. We are currently adding to the outstanding scientific team at our research facility in **Palo Alto, California.**

AUTOIMMUNE DISEASES RESEARCH

BIOCHEMIST

Will investigate the interaction between HLA proteins and antigenic peptides and develop assay systems to monitor this interaction and investigate the structural requirements for binding. Biochemistry/Chemistry background and research experience with cell surface receptors and/or ligand binding desired. Understanding relationship between protein structure and function and 2-6 years' postdoctoral experience with strong record of achievement is required.

CHEMIST

Will investigate the structural requirements for HLA protein-antigenic peptide binding via the synthesis/design of peptides and peptidomimetic drugs which interact with HLA proteins. Involves both peptide and medicinal chemistry techniques. Requires experience with computer-assisted drug design/molecular modeling technologies. Medicinal chemistry background, including experience with peptide synthesis/design, and 2-6 years' postdoctoral experience with strong record of achievement also required.

ImmuLogic provides an outstanding working environment and state-of-the-art laboratory facilities. We have a first-rate support network of academic advisors and collaborators, an active postdoctoral program, and we support and encourage the publication of important research findings. ImmuLogic offers competitive salaries and benefits as well as equity participation through an incentive stock option program.

Please send curriculum vitae and list of publications to:
**ImmuLogic Pharmaceutical Corporation,
855 California Avenue, Palo Alto, California 94304,
ATTN: Human Resources Department.**

IMMULOGIC
Pharmaceutical Corporation



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POSITIONS OPEN

CHAIR DEPARTMENT OF PHARMACOLOGY

The University of Texas Medical School at Houston invites applications and nominations for the position of chair of the Department of Pharmacology. Responsibilities include directing, managing, planning, and continuing development of a department committed to excellence in research and the teaching of graduate students and medical students. The candidate must have a Ph.D., M.D., or equivalent degree from an accredited institution, be qualified for an academic appointment at the rank of professor, and have demonstrated abilities in administration, teaching, and research. Applications should include curriculum vitae, a brief statement of current research interests, and names of three references. Nominations and applications should be sent by 15 September 1990 to: **John H. Byrne, Chair, Pharmacology Search Committee, The University of Texas Medical School at Houston, P.O. Box 20708, Houston, TX 77225.**

The University of Texas is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

LABORATORY DIRECTOR for CAP-accredited infertility laboratory. Endocrine (RIA), andrology, microbiology, and embryology (IVF) laboratories. Ph.D. in clinical chemistry or biology with postdoctoral experience preferred. Send résumé to: **George L. Gaunt, M.D., Ph.D., Center for Reproductive Medicine, P.A., 2034 Randolph Road, Charlotte, NC 28207.**

Houston, Texas. The University of Texas Medical School, Department of Internal Medicine, seeking **DIRECTOR** for Division of Nephrology. Professor level; salary commensurate with qualifications. Previous experience in basic research, teaching, and clinical services required. Send curriculum vitae and references to: **Dr. James Willerson, Chairman, Department of Internal Medicine, University of Texas Medical School, 6431 Fannin, #1150, Houston, TX 77030. Equal Opportunity Employer. Women and minorities are encouraged to apply.**

POSITIONS OPEN

CHAIRMAN DEPARTMENT OF PHYSIOLOGY

The Stritch School of Medicine of Loyola University Chicago invites applications and nominations for the position of Chairman of the Department of Physiology. We seek a learned doctorate, Ph.D. or M.D., with teaching, research, and service accomplishments commensurate with a tenured faculty appointment at the rank of Professor. A research interest in cardiovascular science with cellular and/or molecular dimensions would be preferred but all strong applicants will be considered. A proven record of scholarly activity, experience in attracting external research support, a commitment to graduate education, and good managerial skills are prerequisites.

Applications or nominations should be received by 1 August 1990 and should include curriculum vitae and the name of four references. They can be sent to:

**John F. Moran, M.D.
Chairman, Search Committee
Loyola University Medical Center
Russo Room 1830
2160 South First Avenue
Maywood, IL 60153**

FISHERY POPULATION DYNAMICS/ ECOLOGY

The Southwest Fisheries Center (U.S. Department of Commerce) anticipates permanent, full-time, Ph.D. level openings in La Jolla, California, for population dynamics and/or quantitative ecologists. Responsibilities include assessment/management of exploited fish populations and research. Salary: \$35,825 to \$46,571. Contact: **Dr. Larry Jacobson, National Marine Fisheries Service, P.O. Box 271, La Jolla, CA 92038. Equal Opportunity Employer.**

POSITIONS OPEN

EDUCATIONAL COORDINATOR. To organize and coordinate various educational activities in the Department of Pathology and Cell Biology, and supervise the sophomore pathology curriculum. Qualified candidate should have a Ph.D. in biomedical sciences, preferably pathology, cell biology, molecular biology, or immunology. A demonstrated record of research productivity and an interest in teaching are essential. The appointment will be at the assistant or associate professor level, depending on qualifications. Send curriculum vitae and three references to: **Ivan Damjanov, M.D., Ph.D., Chairman, Search Committee, Department of Pathology and Cell Biology, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, PA 19107-6799. Equal Opportunity Employer.**

Houston, Texas. The University of Texas Medical School, Department of Internal Medicine, seeking **DIRECTOR** for Division of Pulmonary Diseases. Professor level; salary commensurate with qualifications. Previous experience in basic research, teaching, and clinical services required. Send curriculum vitae and references to: **Dr. James Willerson, Chairman, Department of Internal Medicine, University of Texas Medical School, 6431 Fannin, #1150, Houston, TX 77030. Equal Opportunity Employer. Women and minorities are encouraged to apply.**

U.S. DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

The U.S. Grain Marketing Research Laboratory, Manhattan, Kansas, is seeking a **LABORATORY DIRECTOR**. The successful applicant will be responsible for providing leadership and operational accountability within the laboratory for post-harvest research programs including engineering, cereal chemistry, and entomology. For further information contact: **Julia Murchison, telephone: 301-344-3138. Announcement RB-OW-034-OW-007, USDA, ARS, Personnel Division, 6306 Ivy Lane, Room 318, Greenbelt, MD 20770-1435. Closing date: 6 August 1990. Affirmative Action/Equal Opportunity Employer.**

At Collaborative Research, a diversified biotechnology company, you'll find our work environment reflects our company name. Here, we work closely together, generating breakthroughs in a variety of areas such as manufacturing specialty biochemicals, genetic testing and developing natural and recombinant proteins. And we share the collective feeling of accomplishment that results from our efforts.

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Ph.D. Product Development Scientist (DNA Products)

You will develop DNA based or DNA associated products. Primary responsibilities are to identify appropriate products, oversee their development, write production documents and descriptive literature, and initially produce and do quality control on the developed products. A Ph.D. in molecular biology, genetics or related discipline and experience making DNA constructions and Southern blot analysis required. Hands-on experience constructing genetic or physical maps desirable.

We offer competitive salaries and an excellent benefits package. To apply, please forward resume to: **Patricia Gani, Human Resources Department, Collaborative Research, Inc., Two Oak Park, Bedford, MA 01730. An Equal Opportunity Employer.**



MOLECULAR BIOLOGIST

DNAX Research Institute is seeking two scientists to join the staff of our Molecular Biology Department. Candidates should hold either a Ph.D. or M.D. degree and have completed postdoctoral training.

The Institute conducts basic research in a variety of areas of molecular and cellular biology with an emphasis on cytokines and growth factors controlling the immune system and hemopoietic cells. We invite applicants whose research interests could take advantage of these established strengths. We are particularly interested in individuals employing molecular or biochemical approaches to cellular receptors and signal transduction, cell-cell interaction and cell adhesion molecules, or transgenic mouse models, but applicants with related interests are also encouraged to apply.

The successful candidate will be expected to establish an independent research program in his/her area of interest, and will have the opportunity to conduct basic research in the absence of teaching and grant-writing responsibilities. Institute scientists may work with postdoctoral fellows and are free to communicate their scientific findings in an open manner.

DNAX Research Institute, located near Stanford University, carries out basic research in Immunology and Molecular Biology in an open, academic environment. We are looking for individuals who can contribute to our enthusiastic & productive research program.

Interested applicants should send a curriculum vitae and the names of three references to: **Human Resources Dept., DNAX Research Institute, 901 California Avenue, Palo Alto, Ca., 94304-1104. DNAX is an equal opportunity employer, m/f/h.**

DNAX Research Institute

NOVA PHARMACEUTICAL CORPORATION, a leading research and development company located in Baltimore, MD, has an immediate need for a

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We are conducting clinical trials with a variety of promising compounds in two major therapeutic areas: pain & inflammation and central nervous system (CNS) disorders. We are also establishing a leadership position in the field of drug delivery.

Your responsibilities will be to oversee the isolation of mRNA, constructing cDNA and genomic libraries, screening libraries, sequencing clones and constructing expression vectors for a variety of receptor and enzyme-based projects. Excellent oral & written communication skills and previous supervisory experience are a must.

You should possess a PhD and at least 2 years' postdoctoral experience in cloning and expression vector construction, particularly of receptors.

NOVA PHARMACEUTICAL CORPORATION is a small and growing company. We offer a challenging work environment, a competitive salary and a benefits package which includes fully paid life, health and dental insurance; profit sharing and 401(k) plans; relocation assistance and stock options.

If you are interested in this opportunity to grow with Nova, please send your CV along with the names of three references and your salary history to:

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6200 Freeport Centre
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ABBOTT LABORATORIES

Abbott Laboratories' Diagnostic Division holds an undisputed leadership position in the development of medical diagnostic products. Our extensive technical resources create a superior environment for those who would like to make a significant personal and professional commitment.

BIOCHEMIST

The selected candidate must possess a Ph.D. in biochemistry or a related field and 0-4 years postdoctoral and/or industrial experience. Experience with EIA, RIA, and protein purification are desired. Job #D90Y.

We offer competitive compensation and benefits including a profit sharing and a stock retirement plan. We are located in an attractive suburban area approximately 30 miles north of Chicago. For consideration, please send your resume indicating job number to: **Keith Allen, Corporate Placement, Abbott Laboratories, One Abbott Park Road, Abbott Park, IL 60064.** Abbott is an Affirmative Action Employer.

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Roche Diagnostic Systems, Inc., a subsidiary of world-renowned Hoffmann-La Roche Inc., is a leader in the development, manufacture and marketing of diagnostic products. We are seeking self-motivated individuals to join our aggressive effort to develop *in vitro* human diagnostic products based on Polymerase Chain Reaction (PCR) DNA amplification.

The positions available are at several levels within DNA Probe and PCR amplification groups. Experience in the areas of clinical sample processing, PCR amplification and detection, nucleic acid hybridization techniques or assay validation desirable.

We offer an outstanding compensation package commensurate with your experience and education, as well as significant growth potential in the development of a powerful new application of biotechnology. For consideration, please send your resume, including a list of references and present salary (those without this information will not be acknowledged), to: **Mrs. Eleanor M. Malone, Staffing and Employee Services, Department JL, Hoffmann-La Roche Inc., New Jersey 07110.** We are an equal opportunity employer.

Roche Diagnostic Systems



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SCIENTIST

Peptide/Protein Drug Delivery Systems

Exciting opportunity for a resourceful and imaginative biochemist familiar with biotechnology products to develop novel delivery systems.

The position requires a PhD in protein biochemistry or related discipline; postdoctoral and industry experience is considered a plus. You must have an in-depth understanding and practical knowledge of the behavior of recombinant peptides and proteins in aqueous solution. Facility with the usual repertoire of bio-analytical techniques is expected and knowledge of the "tricks of the trade" used in formulating peptides/proteins for therapeutic applications is a must. You will work with a multidisciplinary team of capable and highly motivated scientists to develop liposome and other lipid-based delivery systems designed to prolong the bioavailability of peptide/protein drugs administered by the parenteral and pulmonary routes.

Located in the San Francisco Bay Area, LTI is committed to providing its employees with a dynamic working environment, sophisticated facilities and a competitive salary and benefits package. For immediate consideration, please send your resume, to: **Liposome Technology, Inc., Professional Staffing, Dept. RPB/HR, 1050 Hamilton Court, Menlo Park, CA 94025.** LTI is an equal opportunity employer.



We're SmithKline Beecham, one of the world's leading pharmaceutical research and development companies. At our state-of-the-art R&D complex in suburban Philadelphia, researchers enjoy an atmosphere of scientific freedom and numerous opportunities for growth. Right now, we have an opportunity for Ph.D. Scientists in our Gene Expression and Biological Process Sciences Departments.

EUCARYOTIC GENE EXPRESSION

You'll conduct research to improve our current mammalian expression systems and develop novel systems for the expression of heterologous proteins. Requirements are a Ph.D. in Genetics, Microbiology, Biochemistry or related discipline, 2-6 years of postdoctoral experience (1-2 years in industry preferred), and excellent communication skills. Experience in CHO is preferred, but expertise in other higher eucaryotic expression systems will be considered. Please refer to JOB #S0132.

BIOLOGICAL PROCESS SCIENCES

You'll plan and conduct lab experiments in the areas of cell physiology, biochemistry and nutrition, specifically in the development of serum-free media, optimization of product expression and the evaluation of environmental factors. Qualifications include a Ph.D. in Cell Biology, Cell Physiology, or Biochemistry, postdoctoral experience and excellent communication skills. Please refer to JOB #S0133.

For confidential consideration send your resume to: Barbara Schwartz, Senior Employment Administrator, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.

SB
SmithKline Beecham
Pharmaceuticals

Faculty Position/ Post Doctoral Fellowship Cutaneous Immunoregulation University of Michigan Medical Center

The University of Michigan Medical Center has a research investigator or fellowship position available to study immune recognition events in human models of cutaneous autoimmunity or UV-injury. The successful candidate will have a Ph.D. and/or M.D. degree involving immunocellular/molecular biological techniques, including cellular immunology, antigenic peptides, protein chemistry, and nucleic acid hybridization and isolation. Fully equipped laboratory and support facilities are available.

Respond to:

Kevin D. Cooper, M.D.
Director, Immunodermatology Unit
Department of Dermatology
R5538 Kresge I, Box 0530
The University of Michigan Medical Center
Ann Arbor, Michigan 48109-0530

*The University of Michigan is
an Equal Opportunity Employer*



ENDOWED CHAIR CHAIRMAN, NEW GENETICS DEPARTMENT

St. Jude Children's Research Hospital, a private research institute, is creating a new Department of Genetics. The chairperson will be expected to direct an internationally recognized research program in contemporary genetics and will shape the future of genetics research within the institution through new faculty recruitment and by contributions to its overall scientific leadership. The Department of Genetics will be located in a new 240,000 square foot research building to be completed in early 1991, which will also accommodate ongoing basic science programs in Virology and Molecular Biology, Biochemistry, Immunology, Pharmacology, and Tumor Cell Biology, leaving ample space for further future expansion. The Chairman's salary will be provided through committed endowment funds, together with additional resources commensurate with the needs of a dynamic and ambitious individual. Opportunities exist to interact with strong clinical programs in pediatric Hematology/Oncology and Infectious Disease. Applicants should submit a curriculum vitae and the names and addresses of four references to:

James N. Ihle, Ph.D.
Chairman, Department of Biochemistry
St. Jude Children's Research Hospital
332 North Lauderdale
Memphis, Tennessee 38105

St. Jude Children's Research Hospital is an Equal Opportunity Employer

SUCCESS THROUGH SCIENCE

A rapidly growing provider of diversified healthcare products. A new leader in the biotechnology industry. An innovative marketing force. With 500 employees worldwide and an impressive array of products, Genzyme is all of these. At Genzyme, high profile science is the cornerstone of our success. Our projects are expanding. Our diverse R&D teams are developing extraordinary programs for healthcare. And each of our positions represent an opportunity for growth and future responsibilities and opportunity to achieve success through science.

Genzyme offers an excellent compensation and benefits package, including equity participation, 3 weeks' vacation, a 401(k) Plan with a company match, and extensive insurance coverages. For immediate consideration, please send your resume to: Director, Human Resources, Dept. S615, Genzyme Corporation, One Mountain Road, Framingham, MA 01701.

All positions listed will be in our new Cambridge, Massachusetts facility.

Research Scientists

Biopolymers

Set up multiple preclinical animal studies for the evaluation of biopolymer devices and help coordinate R&D for new products. Requires a Ph.D. in Bioengineering or Biomaterials, 3-5 yrs.' experience in the development of biomedical devices, and familiarity using animal models for evaluation of biomedical products and in preclinical safety and efficacy studies.

A second individual is needed to define and implement programs to develop new materials for medical applications based on modification of biopolymers. Requires a Ph.D. in synthetic organic chemistry and 2-3 yrs'. postdoctoral experience in synthesis and modification of organic compounds.

Cell Biology

A new position requires a Ph.D. in Biology or Biochemistry to conduct applied and basic research in cell biology, including work with glycoproteins, cell differentiation, intracellular protein trafficking, and cellular adhesion and migration. Candidates should have a working knowledge of protein sorting, protein glycosylation, receptor biology, and cell adhesion and differentiation.

Carbohydrate Chemistry

A carbohydrate chemist is needed to develop new methods for the synthesis of neoglycoproteins and neoglycolipids. Requires a Ph.D. in Organic Chemistry and 1-3 years of experience in carbohydrate and/or peptide chemistry.

Biochemistry

We seek a carbohydrate biochemist to develop new methods for the purification and analysis of oligosaccharides. Requires a Ph.D. in Biochemistry/Chemistry and 2-5 yrs. of experience in the structural analysis of oligosaccharides.

Research Associates

Genzyme is also looking for outstanding individuals at the Research Associate level. Requirements are a BS/MS in an appropriate scientific discipline and 2-5 yrs'. relevant post-graduate laboratory experience. Openings currently exist in the following areas:

Bioorganic Chemistry

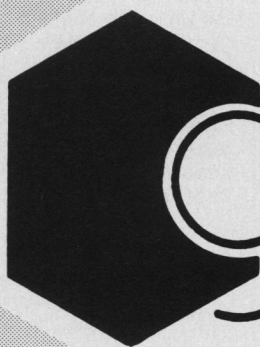
Organic Synthesis

Enzymology

Bacterial Genetics

Large-scale Tissue Culture

Molecular Biology



genzyme

An equal opportunity employer

Neuroscientists

Pfizer Inc is an international leader in the research and development of health care products. The Department of Neuroscience of the Central Research Division is committed to innovative research leading to the discovery of novel therapeutics for the treatment of central nervous system disorders. Our approach to drug discovery encourages individual creativity as an important element in guiding a team effort toward a therapeutic target. This philosophy results in an environment that is challenging to the individual while enhancing group productivity. Scientific growth and development are stimulated by frequent interactions with prominent scientists in academia and medicine as well as with members of the research community within Pfizer.

Currently there are two positions open for research scientists with a PhD in neuroscience or related discipline and at least two years of postdoctoral experience. We are particularly interested if you have demonstrated an ability to address neuropharmacological issues with *in vivo* models. You are encouraged to apply if your expertise with electrophysiological, neurochemical, or behavioral techniques can be applied productively to the study of affective disorders, anxiety, psychosis, cognition, neurodegenerative disorders, central regulation of body weight, pain or addiction.

We offer a stimulating research environment and an excellent opportunity for professional recognition and advancement. In addition we provide a competitive salary/benefits package and an opportunity to live in an attractive Connecticut shore community. Qualified applicants should submit their resume and references in confidence to: Dr. Jerry K. Larson, Assistant Director, Employee Resources, Central Research Division, Pfizer Inc, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.



UNIVERSITY
OF DUBLIN
TRINITY COLLEGE

LECTURESHIP IN MOLECULAR NEUROBIOLOGY

Applications are invited for the above post in the Department of Biochemistry, which will form part of the proposed School of Molecular and Cell Biology at Trinity College, Dublin. The successful candidate will be either an established molecular neurobiologist or a molecular biologist with considerable expertise who wishes to move into neurobiology.

The Department is actively engaged in an extensive range of European and international research programmes. In addition to the normal modern biochemical research facilities, there is convenient access to NMR, X-Ray and EM instrumentation, to Molecular Graphics and to the DNA Sequence Data Bank, GenBank/EMBL.

Salary scale: IR£11,587 - IR£25,421 per annum. Appointment will be made within the salary range IR£11,857 - IR£16,702 per annum, at a point to accord with qualifications and experience to date.

Application forms and further particulars relating to this post may be obtained from:

**Establishment Officer
Staff Office
Trinity College
Dublin 2**

Tel. 772941, Ext. 1678/FAX 772169

The closing date for receipt of completed applications will be **Friday, 29th June, 1990.**

Informal enquiries may be made from Dr. M.J. Carroll (Acting Head of Department) (Ext. 1608) or Dr. D.C. Williams (Ext. 1802).

Trinity College is an Equal Opportunities Employer

Clinical Scientist

CNS

The PARKE-DAVIS Pharmaceutical Research Division of Warner-Lambert is seeking candidates for the position of Clinical Scientist, to work in the Central Nervous System therapeutic area at their worldwide headquarters in Ann Arbor, Michigan.

The successful candidate will primarily be responsible for conducting clinical studies of new, investigational drugs at the Phase 2/3 stage of development. This includes: protocol design and development; budget negotiations; identification and selection of clinical investigators; monitoring of ongoing studies; maintaining documentation and evaluating results; and assisting in the preparation of New Drug Applications and comparable documents for foreign registrations.

Candidates should have a graduate degree (PhD, PharmD, or MS) in an area of neurobiology or possess an equivalent level of training and experience with at least 3 years' experience in clinical research in the CNS area. Prior industry experience is highly desirable. Outstanding oral and written communication skills are essential, as is the ability to work well as part of a multi-disciplinary team.

Located adjacent to the North Campus of the University of Michigan, the PARKE-DAVIS Ann Arbor Research facility offers a modern (smoke-free) research environment. We encourage independent thought, offer opportunities for self-development and reward responsible risk-taking. The Midwest charm of Ann Arbor is only minutes away from a major international airport with ready access to big-city sports, shopping and cultural events.

Interested, qualified applicants should send their resume or CV with references in confidence to **Mr. Lance Williams, Human Resources, PARKE-DAVIS, 2800 Plymouth Road, Ann Arbor, MI 48105.** Refer to opening #90201 when applying.

"Equal Opportunity in Action"



PARKE-DAVIS

A DIVISION OF **WARNER
LAMBERT**

IMMUNOLOGIST

Applications are invited for a faculty position as an Assistant/Associate Professor in Immunology for the Department of Pathology and Laboratory Medicine at the University of Florida, College of Medicine, with a joint appointment in the Division of Immunology, Department of Pediatrics. This position will be available October 1, 1990 and requires an M.D. and/or Ph.D. degree and post-doctoral research experience. Applicants should have demonstrated ability to conduct high quality research in either molecular or cellular immunology, while candidate will be expected to participate in the teaching of graduate and medical students in the field of Immunology and Immunopathology. Ample research laboratory space is located adjacent to the University of Florida Molecular Biology Core facilities and within the immunobiology unit of the Department of Pediatrics.

Please send CV, letter stating present research efforts and future research goals and the names and addresses of three references September 1, 1990 to:

Richard T. Smith, M.D.
University of Florida
Department of Pathology
Box J 275 JHMC
Gainesville, Florida 32610

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AFFIRMATIVE ACTION**

ADVANCING THE FRONTIERS OF BIOTECHNOLOGY

Amgen is a major bio-pharmaceutical company discovering, developing, and marketing human health care products based on recombinant DNA technology. Our commitment to finding answers to disease within human physiology rather than chemical pharmacology has established us as an industry leader.

Our rapid growth is constantly creating opportunities for innovative and motivated scientists and associates at the Ph.D., MS, and BS level who wish to share Amgen's dedication to scientific excellence. The positions below are currently available.

RESEARCH SCIENTISTS

Candidates for the Research Scientist positions must have an appropriate Ph.D. and 2-4 years' relevant post-doctoral experience as indicated:

CELL BIOLOGY

Dept. #514

Responsibilities include developing research programs for the functional analysis of growth factors and receptors. The successful candidate will also participate in collaborative research efforts for the isolation and expression of novel factors with therapeutic potential.

A Ph.D. in mammalian cellular physiology or somatic cell genetics and experience in cellular regulation by extracellular/intracellular factors and transmembrane signaling mechanisms are required. Familiarity with cloning, cell sorting, and isolation of metabolic and drug resistant mutants in various cell lines is essential. Ligand-receptor assay development experience is desirable.

MOLECULAR BIOLOGY

Dept. #527

The successful candidate will be responsible for a research program leading to the identification and cloning of novel cellular growth factors involved in stem cell regeneration and recruitment.

A Ph.D. in molecular or cellular biology and experience in the characterization of cellular growth factors, cDNA cloning, and the expression of recombinant proteins are required.

RESEARCH ASSOCIATES

Candidates for all Research Associate positions must have a BS or MS degree in a discipline relevant to the following job descriptions:

BIOCHEMISTRY

Dept. #507

Contributions will be made to on-going research efforts in the identification of novel hematopoietic growth factors as well as comparing and characterizing recombinant and natural proteins.

A minimum of two years' experience in mammalian cell culture and general biochemical techniques is required. Familiarity with immunological and biological assays for the quantification of biological activity is essential.

MOLECULAR BIOLOGY

Dept. #509

Our Molecular Biology Groups have several opportunities available with responsibilities including assay development, cDNA cloning, and general molecular biology as they relate to a number of on-going research projects.

A minimum of two years' experience in molecular and cellular biology, basic gene cloning, and mammalian tissue culture is essential. Familiarity with a variety of bio-assays, cDNA cloning, dideoxy DNA sequencing, and gene expression in prokaryotic and/or eukaryotic systems is highly desirable.

CELL BIOLOGY

Dept. #533

Responsibilities include tissue culture of a variety of mammalian cell lines, and performing a number of factor dependent bio-assays in support of exploratory research programs.

A minimum of three years' experience in bio-assay development and analysis, including cell proliferation assays and soft agar cloning, is required. A background in molecular biology and the establishment of primary cell cultures is highly desirable.

Amgen is located about an hour northwest of Los Angeles in the scenic Conejo Valley, allowing for the best in Southern California living.

Amgen offers an excellent compensation and benefits package as well as the unique opportunity to contribute to the development of significant new human pharmaceuticals on the cutting edge of biotechnology.

If you have the necessary skills and qualifications and would like to be a part of a company that places a high priority on its human resources, please send a resume or complete CV, specifying the appropriate Dept. #, in confidence, to:

AMGEN, INC.
Recruitment, Dept. # (please specify)
Amgen Center
Thousand Oaks
CA 91320-1789

Equal Opportunity Employer

AMGEN

MAKING BIOTECHNOLOGY WORK

Bristol-Myers Squibb Pharmaceutical Research Institute

Bristol-Myers Squibb Pharmaceutical Research Institute is continuing to expand our efforts in basic biomedical research. New research laboratories are currently under construction at our research headquarters in Princeton, New Jersey. More than at any time in the past the commitment to basic biomedical research, both at the Institute and through our academic research alliances has never been stronger.

GROUP LEADER

Virology

- Build a dynamic research team which will establish basic projects to define novel antiviral approaches, with emphasis on defining potential antiviral chemotherapy targets for influenza viruses. This position requires a P.h.D. and a minimum of 5 years postdoctoral experience. **Dept. #114A**

RESEARCH INVESTIGATORS

Cardiovascular Pharmacology

- Lead a Cardiovascular and Renal Pharmacology Research Group in the development of in vivo models for investigating mechanisms involved with cardiovascular and renal homeostatic systems and evaluate therapeutic agents interacting with these systems. Current emphasis is on atrial natriuretic peptide and renin-angiotensin systems and conditions related to heart failure and hypertension. **Dept. #114B**

Heterologous Expression

- Conduct studies involved in heterologous expression of a variety of genes in bacterial, yeast and mammalian systems. **Dept. #114C**

Drug Metabolism

- Conduct studies to support various drug discovery programs using various in situ, in vitro and in vivo methods to address the absorption and bio-availability of drug candidates. Experience with liquid chromatography, radioisotopes and pharmacokinetics is necessary. **Dept. #114D**

Positions require a Ph.D. and a minimum of 2 years postdoctoral experience.

RESEARCH ASSOCIATES

Pharmacology

- Perform in vitro experiments including cell culture, gel electrophoresis and tissue bath experiments. **Dept. #114E**
- Determines DNA sequences and screen c-DNA libraries with nucleotide, antibody or other defined probes. Perform mammalian cell transfection and related cell culture operations. **Dept. #114F**

Drug Metabolism

- Responsible for the quantification, isolation and purification of drugs and drug metabolites. A knowledge of HPLC/TLC and proficiency in the use of radioisotopes (3H and 14C is preferred.) **Dept. #114G**

Molecular Biology

- Basic research on the molecular analysis of growth related genes. Experience in cloning, library screening and/or expression is preferred. **Dept. #114H**
- This position in our developmental genetics laboratory is involved in the regulation and expression of oncogenes, growth factors and growth factor receptors during development using transgenic mice. **Dept. #114J**
- Establish an in situ hybridization core unit to interact with ongoing basic research on molecular characterizations of oncogenes utilizing in situ hybridization techniques, preparation of tissue sections and probes. **Dept. #114K**

Positions require a BS or MS and a minimum of 1 year related research experience.

Please forward your resume to (including dept. code #) : Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department , P.O. Box 4000, Princeton, NJ 08543-4000. An equal opportunity employer.



Bristol-Myers Squibb Company

POSITIONS OPEN

DIRECTOR

New Mexico Museum of Natural History (NMMNH), a state agency, seeks qualified director with demonstrated administrative and management experience in areas of personnel, budget, and planning. Applicants must possess advanced degree in a field of science or equivalent in experience. NMMNH has active programs in exhibits, education, collections, and scientific research in natural sciences. Major program and building expansions involving physical science education and exhibits are anticipated. Staff of 60 serves 300,000 visitors annually in 5 year-old, 100,000-square-foot facilities. Salary range is \$46,817 to \$65,995 with State of New Mexico benefits. Incumbent reports to and serves at the pleasure of the Officer of Cultural Affairs. Director will interact with active Board of Trustees. Send curriculum vitae with names and addresses of three references by 1 September 1990 to: **Search Committee, New Mexico Museum of Natural History, P.O. Box 7010, Albuquerque, NM 87194-7010.** *Affirmative Action/Equal Opportunity Employer.*

IMMUNOPATHOLOGIST

STAFF POSITION in immunopathology/clinical pathology is available now in laboratory service, West Los Angeles Veterans Administration (VA) Medical Center. Qualifications include an M.D. degree, certification in clinical or specialty pathology or equivalent experience, interest in teaching, demonstrated research ability and potential for development of an independent research program, administrative skills in developing and managing computerized laboratories to fulfill current requirements. Application with curriculum vitae and names and addresses of four references should be sent to: **J. H. Howanitz, M.D., Chairperson, Search Committee for Immunopathologist, Laboratory Service 691/113, West Los Angeles, VA Medical Center, Los Angeles, CA 90073.** *Veterans Administration is an Equal Opportunity/Affirmative Action Employer. U.S. citizenship is required.*

POSITIONS OPEN

ECOTOXICOLOGY LABORATORY STUDY DIRECTOR

Exon Biomedical Sciences, Inc., has an immediate opening for a qualified individual as a study director in our Ecotoxicology Laboratory. The state-of-the-art laboratory includes facilities to culture and test marine and freshwater organisms. Acute and chronic tests of products and effluents are conducted in accordance with GLP and appropriate regulatory guidelines. The position requires the individual to act as a study director with full responsibility for the study design, development of protocols, review and evaluation of the data, and final review and approval of reports. In addition, the position involves some administrative duties including scheduling and coordination of studies, training lab personnel, monitoring ongoing studies, etc. The successful candidate will have a masters in environmental toxicology or a related field and 2+ years of experience in an aquatic testing facility. A working knowledge of TSCA/FIFRA GLPs, statistical methods, PC and mainframe computers is desired. Please forward résumé to:

**Christine Ramos, Human Resources
Exxon Biomedical Sciences, Inc.
Mettlers Road, CN 2350
East Millstone, NJ 08875-2350
Equal Opportunity Employer M/F/H/V.**

ELECTRON MICROSCOPE TECHNICIAN.

Experience required with all phases of tissue preparation and sectioning for conventional TEM, scope alignment, and darkroom technique. Experience with immunocytochemistry, ultracyromicrotomy, freeze fracture, and x-ray analysis desirable but not required. Salary commensurate with qualifications. Send résumé and names of references to: **Dr. H. Wayne Sampson, Department of Anatomy, Texas A&M University, College of Medicine, College Station, TX 77843-1114.**

Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

DIRECTOR OF STUDENT LABORATORIES

The Department of Physiology at University of California, Los Angeles (UCLA), invites applications for a **LABORATORY MANAGER/SPECIALIST** to direct and supervise its student laboratories. The successful candidate will be responsible for coordinating and developing the technical aspects of the department's laboratory teaching to medical, dental, and graduate students; this is predominantly, but not exclusively, in the areas of cardiovascular, respiratory, and neuro-physiology. The position involves close interaction with the department's teaching faculty. In addition, participation in the instructional programs would be desirable, in which case the successful applicant may be appointed to an adjunct assistant professorship. Candidates must possess a Ph.D. degree (or equivalent) in physiology or a related discipline. Applicants should submit curriculum vitae, including a description of previous laboratory and/or teaching experience, and the names of three individuals prepared to provide letters of reference to: **Brian J. Whipp, Ph.D., D.Sc., Department of Physiology, UCLA School of Medicine, Los Angeles, CA 90024-1751.** *The University of California is an Equal Opportunity/Affirmative Action Employer.*

PHYSICAL SCIENCES EDITOR

Cambridge University Press (American Branch) has an immediate opening for an acquisitions editor in the physical sciences, especially in the applied fields. Our publishing program of advanced level monographs, texts, and reference works covers a wide range of disciplines, including geophysics, geology, materials science, and engineering. We prefer candidates with some graduate training. Publishing experience is desirable. Salary will be commensurate with experience and professional qualifications. Please apply in writing and indicate your salary requirements. Write to: **Editorial Director, Cambridge University Press, 40 West 20th Street, New York, NY 10011.**

Scientist/Project Manager

Whitby Pharmaceuticals is a wholly owned subsidiary of the Ethyl Corporation. Whitby Research Inc. is the R&D division responsible for drug discovery, drug development, and product registration. Whitby Research has an active program for the development of novel molecular entities for the treatment of osteoporosis. We are currently looking for an experienced Scientist with expertise in the biochemistry and pharmacology of bone metabolism to lead a program dedicated to the development of our lead compounds as therapeutic agents. The successful candidate will take responsibility for the management of a number of preclinical/clinical research programs presently underway with leading investigators in academic institutions. Whitby Research Inc. offers a professional environment with competitive salary and benefits. Interested candidates should send their resume with salary history to:

**Joan Isaac
Manager, Human Resources
Whitby Pharmaceuticals, Inc.
330 South Fourth Street
Richmond, VA 23217**



Equal Opportunity Employer

Immunology/ Inflammation Group Leader Position

Searle Research & Development is seeking two individuals to fill complementary group leader positions in its St. Louis laboratories. Each will be responsible for leading a team of scientists in the discovery of new drug candidates for the treatment of autoimmune and inflammatory diseases. We are looking for qualified candidates with an M.D. or Ph.D. and a strong record of accomplishment in at least one of the following areas: immunoregulation, cell-cell interaction in autoimmune inflammatory disease models, antigen processing and presentation, T-cell effector function, and eicosanoid regulation of the inflammatory and immune response. Candidates must have a record of publication demonstrating ability to lead independent and creative research. Expertise in cellular immunology and immunopharmacology is required and experience in working in a collaborative team environment is preferred.

Searle, a wholly owned subsidiary of Monsanto Company, offers competitive salary and benefit plans. Qualified applicants should send resumes in confidence to: **Joan M. Lineberry - MCB2; Searle, BB4E; 700 Chesterfield Village Parkway; St. Louis, MO 63198.** An Equal Opportunity Employer.

The SEARLE logo consists of the word 'SEARLE' in a bold, sans-serif font. To the right of the text is a graphic element consisting of several horizontal lines of varying lengths, similar to the one in the Whitby logo.



AGRIGENETICS
COMPANY
Madison Laboratories

Agrigenetics Company, a division of The Lubrizol Corporation, is seeking the following scientists to join a growing plant biotechnology and breeding research program located in Madison, Wisconsin.

BIOCHEMIST

Research position in the enzymology of higher plant fatty acid metabolism. Applicants must have a Ph.D. in biochemistry or related field and three or more years of postgraduate experience. Proven record of innovative research in enzyme purification and characterization is essential. Direct experience with membrane-bound enzymes and/or lipid metabolism is preferred.

MICROBIOLOGIST

Research position in bio-degradation. Position will develop improved systems to evaluate degradation of hydrocarbons in the environment. Applicants should have an M.S. or Ph.D. in microbiology or related field experience in environmental microbiology is preferred.

Applicants should be versatile, have excellent oral and written communication skills, and enjoy working in multi-disciplinary research teams. Salaries will be commensurate with experience.

Please Forward CV To:

Russell L. Kiker
Director, Research Administration
Agrigenetics Company
5649 E. Buckeye Road
Madison, WI 53716

Agrigenetics Company is an equal opportunity employer

WE'RE CHANGING MILLIONS OF LIVES. NOW IT'S YOUR TURN.

At Praxis Biologics, a wholly owned subsidiary of American Cyanamid Company, we're pioneering the design, manufacture and marketing of vaccines so sophisticated, they're changing lives—right now.

At Praxis, you'll help improve the quality of a lot of lives. Including your own. Our Rochester, NY, research facility is located within easy reach of some of New York State's most attractive cultural, educational and recreational resources.

SR. RESEARCH SCIENTIST

As a member of our Bacteriology Group, you'll be part of a team of scientists working to determine mechanisms of bacterial pathogenicity and of the host response. Research will be directed toward identifying and isolating components for vaccine candidates.

A Ph.D. in Microbiology or a related field is required, as well as several years' relevant experience in pathogenic bacteriology research. In addition, you should have experience in immunology and protein purification. Supervision of support staff will also be required.

At Praxis, you'll enjoy a professional atmosphere and the kind of salary and benefits package you'd expect from an industry leader. Please send your resume to: **Human Resources Department, Praxis Biologics, Inc., 300 East River Road, Rochester, NY 14623.** An Equal Opportunity Employer M/F.

P R A X I S
B I O L O G I C S

POSTDOCTORAL POSITION

SCIENTIFIC COMPUTING

SmithKline Beecham Pharmaceuticals R&D currently has a postdoctoral position available in our Scientific Computing Group. The position will focus on a research project to apply advanced mathematical techniques to understand tumor heterogeneity. This is an exciting project to use non-traditional approaches to tackle a difficult, but important problem.

Successful candidates will join a multi-disciplinary team consisting of biological and computational scientists. An advanced degree (Ph.D.) in a scientific field as well as strong, documented experience in scientific computing are essential. Candidates should have extensive experience developing and applying mathematical computational techniques to complex scientific problems. Experience with population biology, dynamical systems approaches (chaos or facts). A biological background is desired, but not required. Especially of interest are self-motivated individuals with interests in mathematics, scientific computation, and biology.

The position will be located at our state-of-the-art facility in Upper Merion, PA. We offer an attractive compensation and benefits package. For confidential consideration, send your resume to Barbara Schwartz, S0131, Senior Employment Administrator, SmithKline Beecham Pharmaceuticals,

P.O. Box 1539, King of Prussia, PA 19406. We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals

CLINICAL ASSOCIATE OR SENIOR STAFF FELLOW

The Laboratory of Clinical Studies, National Institute on Alcohol Abuse and Alcoholism, Public Health Service, invites applications for a position to study the psychobiology and molecular biology of alcoholism and its complications. Unique opportunity to become a member of a multidisciplinary team working in a 10-bed research ward and outpatient clinic at the National Institutes of Health Clinical Center, Bethesda, Maryland. State-of-the-art equipment and experienced technical support available. The salary range is \$40,000 to \$52,000 per annum commensurate with qualifications. Interested candidates must be board certified or eligible psychiatrists or neurologists who are U.S. citizens or permanent residents. Position information and qualification requirements may be obtained by contacting Dr. George. This position is available now. Submit Curriculum Vitae and names of three references to:

Ted George, M.D.
National Institute on Alcohol
Abuse and Alcoholism
Laboratory of Clinical Studies
Building 10, Room 3B-19
9000 Rockville Pike
Bethesda, Maryland 20892
Phone: (301) 496-9705



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Plan Now to Attend the

Fourth Annual North American & 1990 International Cystic Fibrosis Conference

Crystal Gateway Marriott Hotel
Arlington, Virginia
October 3-6, 1990

■ PLENARY SESSIONS

The CF Gene One Year Later
Francis S. Collins, M.D., Ph.D.
John Riordan, Ph.D.
Lap-Chee Tsui, Ph.D.

Immunopathology and New Approaches to Therapy
Melvin Berger, M.D., Ph.D.
Niels Hoiby, M.D., Ph.D.
Richard Moss, M.D.
Suzanne Suter, M.D.

Gene Therapy and Model Systems
C. Thomas Caskey, M.D.

■ SYMPOSIA

- Liver Disease
- CF 101
- Controversies in the Management of Pseudomonas Infections
- Issues in Surgical Intervention
- Multidisciplinary Approach to Pancreatic Disease
- Late-Breaking Science
- Biology and Physiology of the Intestine
- Models of Gene Transfection
- Diagnosis and Management of Diabetes
- Lung Injury and Repair
- New Advances in Cell Biology
- Signaling and Transport
- Inflammatory Mediators
- Family Dynamics
- Structure and Function of Membrane Proteins
- P. Glycoproteins
- Controversies in Care

■ EARLY-BIRD SHORT COURSES

Study Design and Clinical Epidemiology
Molecular Biology for Scientists in Other Disciplines

■ MINI-COURSE

**Introduction to Ion Transport and
Molecular Biology**

■ PROGRAM COMMITTEE

CHAIRMEN: Francis S. Collins, M.D., Ph.D. and Niels Hoiby, M.D., Ph.D.

MEMBERS:

Anne Baird, M.S.W.
Melvin Berger, M.D., Ph.D.
Richard J. Bonforte, M.D.
Joan C. Darbee, M.S., P.T.
Pamela B. Davis, M.D., Ph.D.
John A. Dodge, M.D.
William B. Guggino, Ph.D.
Michael Iannuzzi, M.D.

Ann McMullen, M.S., R.N.
Suzanne H. Michel, M.P.H., R.D.
David M. Orenstein, M.D.
Beryl J. Rosenstein, M.D.
Daniel V. Schidlow, M.D.
Edward Tempany, M.D.
Jeffrey Whitsett, M.D.

■ CONTRIBUTED PAPERS AND CONFERENCE PUBLICATION

Some 200 abstracts will be presented in poster form. Proceedings will be published as a supplement to *Pediatric Pulmonology*. The conference also will feature 21 workshops, and roundtables on more than 60 subjects.

CME credits and CEU's for other disciplines are pending.

*A multidisciplinary
conference for
researchers,
physicians, and
allied health
professionals on the
latest advances in
cystic fibrosis (CF)
research and care.
Presented by the
Cystic Fibrosis
Foundation (CFF)
and the European
Working Group for
Cystic Fibrosis.*

Registration Fee: \$200 (U.S.); \$100 for students,
residents, fellows and postdoctoral
trainees.

Short Course Tuition: \$100

Preregistration Deadline: September 3, 1990

For more information, please contact the CFF.



6931 Arlington Road
Bethesda, Maryland 20814
(301) 951-4422

**COLD SPRING HARBOR LABORATORY
SIX FACULTY POSITIONS
MOLECULAR NEUROBIOLOGY**

We seek applicants for six new faculty positions in the fields of vertebrate and invertebrate Molecular Neurobiology. This new area of research at Cold Spring Harbor Laboratory will complement the long standing program of courses and lectures in neuroscience held at the Laboratory each Summer. The successful applicants will occupy the new Beckman Neuroscience Building which is scheduled for completion in mid 1991. Both senior and junior faculty positions will be considered.

Curriculum vitae, and brief statement of research interests and names of references should be submitted to:

**Dr. Bruce Stillman
Cold Spring Harbor Laboratory
P.O. Box 100
Cold Spring Harbor, NY 11724**



Cold Spring Harbor Laboratory

An equal opportunity/affirmative action employer.

SCIENTIST

Glycomed is a new company, aggressively exploiting recent advances in carbohydrate research techniques in our efforts to uncover and develop novel drug compounds.

In the position of Scientist, you will perform or assist in glycolipid extractions and purifications. Requirements include a PhD in Biochemistry and experience in cell adhesion or receptor binding assays. Experience with glycolipid biochemistry, and familiarity with carbohydrate linkage chemistry and general carbohydrate biochemistry are also required.

Glycomed offers a competitive compensation and benefits package, including stock options. To apply, please send your resume to:
Manager of Human Resources, 860 Atlantic Ave., Alameda, CA 94501. EOE.



FACULTY POSITIONS IN THE MOLECULAR PHARMACOLOGY OF CANCER

The Department of Pharmacology and the Lineberger Cancer Research Center of the University of North Carolina at Chapel Hill are seeking to recruit one or more outstanding individuals to tenure track positions in the area of basic research related to cancer. Positions are available immediately, and rank will be commensurate with ability and experience.

Preference will be given to individuals with demonstrated competence in applying modern techniques of molecular biology, biochemistry or biophysics to fundamental problems in cancer pharmacology, and molecular oncology. Potential areas of interest would include, but not be limited to, the following: regulation of gene expression by oncogenes or growth factors; signaling mechanisms involved in growth control; molecular bases of drug resistance; mechanisms of action of novel anticancer drugs.

Successful candidates will be expected to establish well-funded independent research programs, to participate in the graduate and professional educational activities of the Department, and to interact closely with members of the Lineberger Cancer Research Center.

Applicants should send a curriculum vitae, a statement of research plans and the names of three referees to:

**R. L. Juliano, Ph.D.
Professor and Chairman
Department of Pharmacology
CB # 7365, 1106 Fac. Lab Office Bldg.
The University of North Carolina at Chapel Hill
Chapel Hill, NC 27599-7365**

Women and minority candidates are encouraged to identify themselves. Candidates are urged to apply prior to July 15, 1990. The University of North Carolina at Chapel Hill is an equal opportunity/affirmative action employer.



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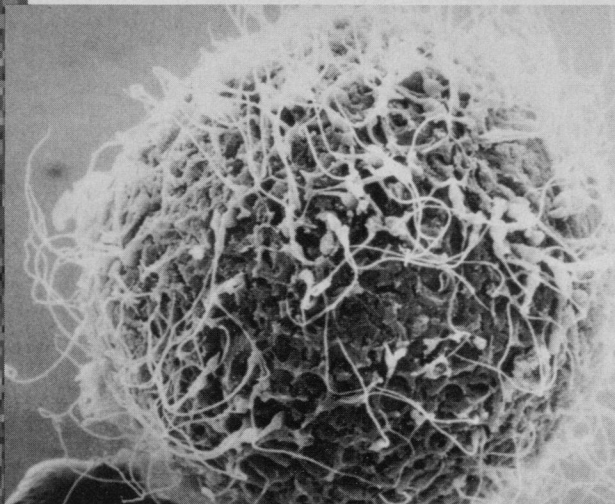
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The successful candidate will act as a consultant to our ecotoxicologists and to our affiliates on matters pertaining to the assessment of environmental hazards associated with products, effluents, hazardous wastes, etc. by providing analytical expertise to the design and interpretation of these programs. Client interactions are an important aspect of our work, and thus, we are seeking an individual who has excellent communication skills. Please forward résumé to:

Christine Ramos, Human Resources
Exxon Biomedical Sciences, Inc.
Mettlers Road, CN 2350
East Millstone, NJ 08875-2350
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CLINICIAN-INVESTIGATOR PSYCHIATRISTS with University of Oklahoma Medical Center. Six new **FACULTY POSITIONS** are available for psychiatrists with research interests in affective disorders, anxiety disorders, geropsychiatry, child psychiatry psychoactive substance use disorders, and schizophrenia. M.D.'s with expertise/interest in molecular medicine, neuroimaging neurotransmitters, psychoendocrinology, psychopharmacology, and psychoimmunology are being sought. Appointments any level from assistant to full professor, depending on qualifications. Must have an M.D., ABPN eligible, and be able to obtain medical licensure. A Molecular Medicine Center has been established. Neurosciences group is organizing and clinical research infrastructure being developed at the departmental level. Send curriculum vitae, statement of research interests, reprints of key publications, and names of three references to: **Joe Westermeyer, M.D., Ph.D., Chair, Department of Psychiatry, University of Oklahoma Medical Center, Oklahoma City, OK 73190. An Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE or **ASSISTANT PROFESSOR** position available immediately for a neurophysiologist with experience in chronic unit recordings in freely moving animals (preferably rodents) and/or unit recording. Ph.D. in neurophysiology required. Salary range is \$28,000 to \$33,000 depending upon experience. Send curriculum vitae and three references to: **Georgia Department of Labor, 2811 Lakewood Avenue, S.W., Atlanta, GA 30315, or the nearest Georgia Job Service Center. Control #GA 5429315. Emory University is an Equal Opportunity/Affirmative Action Employer.**

MOLECULAR BIOLOGY OF NEUROPEPTIDE RECEPTORS

A **POSTDOCTORAL POSITION** is available for a project involving the cloning of neuropeptide receptors using a combination of homology-based approaches and expression cloning [see *PNAS* 87, 133-136 (1990)], and the subsequent analysis of tissue-specific transcript distribution and regulation of receptor gene expression. Experience in molecular biology required. Send curriculum vitae and the names of three references to: **Dr. Michael M. White, Department of Pharmacology, University of Pennsylvania, Philadelphia, PA 19104-6084.**

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The biological oceanography and geochemistry/marine chemistry groups at the Scripps Institution of Oceanography, University of California (UC), San Diego, intend to appoint a **PROFESSOR(s)** at any level (tenure or tenure track) with a distinguished record or demonstrated potential in original research and in formal graduate teaching. Assistant-level candidates will be expected to show evidence of their potential through a publication record appropriate for their experience and letters of recommendation; associate and full professor level candidates must show evidence of a strong research record. Salary will be based on UC pay scale. Candidate(s) must hold the Ph.D. degree at the time of appointment.

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Please send a letter of application with curriculum vitae including a description of research interests, list of publications, résumé of teaching experience, and names of five references to: **Chairman, Biogeochemistry Search, Graduate Department, A-008, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, CA 92093.** Closing date for applications is 1 September 1990. *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS IN MOLECULAR IMMUNOLOGY, BIOCHEMISTRY, AND ANALYTICAL CYTOLOGY. Study role of lymphocyte serine proteases in cell killing. One position available immediately, others after 1 October 1990. Send curriculum vitae and names of three references to: **Dorothy Hudig, Ph.D., Cell and Molecular Biology Program, MS 320, University of Nevada, Reno, NV 89557. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL FELLOWSHIP AREA: RENAL CELL PHYSIOLOGY/BIOCHEMISTRY

A postdoctoral position is available in a multidisciplinary hypertension program project, "Vasoactive Hormones: Receptor and Signaling Mechanisms," which includes the Departments of Medicine and Physiology and Biophysics. The primary focus is on patch clamping of renal epithelial cells, membrane vesicle and lipid bilayers, and regulation by eicosanoids, G proteins, and hormones. The position provides training opportunities in epithelial electrolyte transport and various aspects of signal transduction. Interested persons should send curriculum vitae and two letters of recommendation to: **Ulrich Hoyer, M.D., Ph.D., or Janice Douglas, M.D., Department of Physiology and Biophysics, Case Western Reserve University, School of Medicine, 2119 Abington Road, Cleveland, OH 44106. Telephone: 216-368-2878 or 216-368-4744. Case Western Reserve University is an Equal Opportunity Employer.**

POSTDOCTORAL POSITION. Available in the Department of Neurology, University of California, San Francisco, to study signal transduction mechanisms involved in neural differentiation. Grant support for this project has been obtained for at least 3 years. Interested applicants should send curriculum vitae and three letters of reference to: **Robert Messing, M.D., Building 1, Room 101, San Francisco General Hospital, San Francisco, CA 94110.**

POSTDOCTORAL ASSOCIATE TRANS-ACTING RIBOZYMES

A postdoctoral position is available for a recent Ph.D. to study modalities of expression and intracellular geography affecting trans-acting ribozyme function. Candidates should send a copy of their curriculum vitae and the names, addresses, and telephone numbers of three professional references to: **Dr. John J. Rossi, Department of Molecular Genetics, Beckman Research Institute of the City of Hope, 1450 East Duarte Road, Duarte, CA 91010.**

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Scientist

In this position, you will develop and implement several immunoassays in support of an increasing number of projects. Your qualifications should include a Ph.D. with a minimum of 1 year's experience developing and utilizing immunological techniques. This includes antibody purification, protein conjugation, enzyme and radioimmunoassays, protein analysis by Western blot and/or HPLC. Some supervisory experience would be an asset.

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- **Endothelial Cell Biology**
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- **Extracellular Matrices**

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Interested candidates should send curriculum vitae, career interests, salary history, and bibliography to:

Mr. Harry Cardin,
Personnel Manager
GIBCO Laboratories
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**Paul Weber, M.D.
Chairperson of Neurology
Search Committee
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Ms. Judy Bear
Administrative Services Manager
Faculty Search Committee
Dept. of Microbiology & Immunology
Stanford University School of Medicine
Stanford, California 94305-5402

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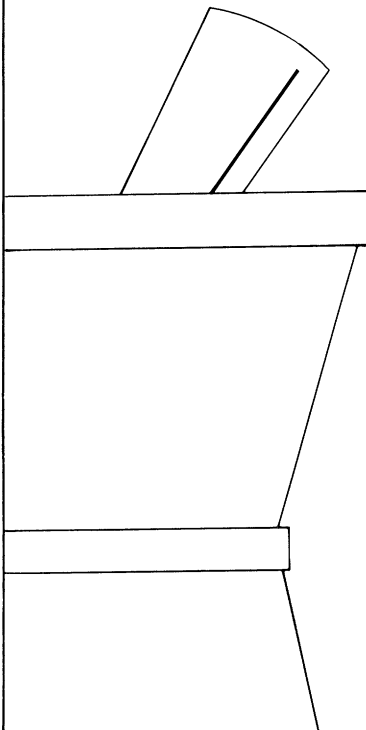
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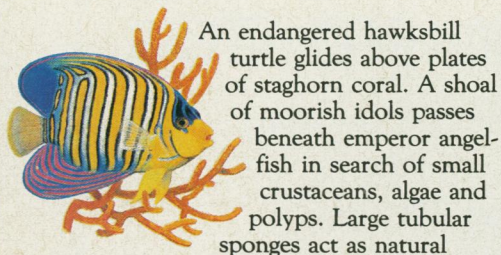
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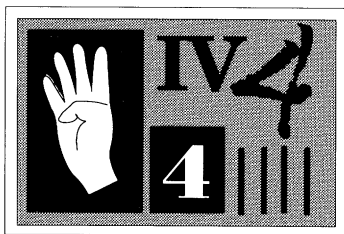
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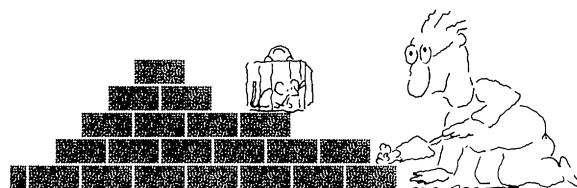
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For immediate consideration, forward your resume and salary history to **Manager of Human Resources, Organogenesis Inc., 83 Rogers Street, Cambridge, MA 02142.**



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UNIVERSITY OF MINNESOTA

The University of Minnesota invites nominations and applications for the position of Dean of the College of Agriculture and Associate Director of the Minnesota Agricultural Experiment Station. The Dean is the chief executive officer of the College of Agriculture and Associate Director of the Minnesota Agricultural Experiment Station with general administrative responsibility for College faculty, the recurring Station budgets in the College departments, and shared responsibility for state extension specialists integrated into College departments. The Dean and Associate Director reports directly to the Vice President for Agriculture, Forestry and Home Economics, who is also the Director of the Minnesota Agricultural Experiment Station. The person in this position shall be appointed initially to a three-year academic administrative appointment. Reappointment to annual terms rests upon successful completion of periodic reviews. Academic rank and tenure is dependent upon qualifications and vote of peer faculty in the appropriate department.

The College of Agriculture is part of the Twin Cities Campus of the University of Minnesota and is a key part of a large land-grant university that is located in a metropolitan area of about 2.2 million people. The College has outstanding undergraduate and graduate programs, and faculty that are nationally and internationally known for their disciplinary and interdisciplinary programs that have contributed significantly to the land-grant mission of the University.

Qualifications for the position include an earned doctoral degree; experience in food or agriculture; a demonstrated record of administrative or leadership experience; and demonstrated knowledge of teaching, extension and research programs.

Send nomination(s) or an indication of interest to:

Dr. Patrick J. Borich
Dean and Director of Minnesota Extension Service
and Search Committee Chair
Minnesota Extension Service
University of Minnesota
240 Coffey Hall
1420 Eckles Avenue
St. Paul, Minnesota 55108

Telephone: (612) 624-2703

Further information on the position and application materials will then be forwarded. Completed applications must be received by **August 6, 1990.**

The University of Minnesota is an equal opportunity educator and employer and specifically invites and encourages applications from women and minorities.



STAFF SCIENTISTS & POSTDOCTORAL FELLOWS

Neurobiology & Molecular Biology

Regeneron Pharmaceuticals, a company dedicated to developing therapeutic agents for degenerative and traumatic neurological diseases, is seeking to apply recent advances in the understanding of neuronal growth and regeneration.

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Positions in Neurobiology require expertise in the areas of:

- Neural Regeneration (PNS/CNS)
- Models of Neuronal Disease

All positions in Neurobiology require a strong neuronatomical background. Experience with receptor autoradiography and/or *in situ* hybridization is desirable.

Additional openings in Molecular and Cell Biology require skills in the areas of:

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- Mammalian Expression Vectors
- Molecular Genetics
- Monoclonal Antibodies

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Please forward your resume, in confidence, to: Ms. Carol Deaken, Regeneron Pharmaceuticals, Inc. 777 Old Saw Mill River Road, Tarrytown, NY 10591-6706. Equal opportunity employer.

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NMR CHEMISTS: To produce 3-D structural elucidation of biomacromolecules.

X-RAY CRYSTALLOGRAPHERS: To grow protein crystals and perform structure solutions.

PROTEIN CHEMISTS/BIOCHEMISTS: To purify and characterize peptides using solution and solid phase synthesis.

BIOCHEMICAL PHARMACOLOGISTS: To investigate enzymology-based drug design.

PHARMACOLOGISTS: To perform receptor-based pharmacological analysis using protein chemistry/molecular biology techniques.

MOLECULAR BIOLOGISTS: To perform CDNA synthesis, gene expression, cell culturing and DNA sequencing.

IMMUNOLOGISTS: To perform antibody techniques and molecular immunology.

Candidates should have an outstanding ability in their field of expertise and be able to work in a multi-disciplinary team environment to achieve breakthrough technologies. We offer competitive compensation, benefits, and stock option opportunities. Please forward your resume/CV with references in complete confidence to:

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POSITIONS OPEN

POSTDOCTORAL POSITIONS: MOBILE SELF-SPLICING INTRONS

Nucleic acid rearrangements of group I introns are studied at the RNA and DNA levels. Projects include analysis of self-splicing RNAs and DNA-based intron mobility in prokaryotes using genetic and biochemical approaches [*Trends Genet.* 5, 209 (1989)]. Protein-nucleic acid interactions also under investigation. Experience in genetics, protein, and/or nucleic acid chemistry desirable. Competitive federally funded (through Health Research, Inc.) salary commensurate with experience.

Send curriculum vitae and names of three references to: **Dr. Marlene Belfort, Wadsworth Laboratories and School of Public Health, State University of New York, Box 509, Empire State Plaza, Albany, NY 12201-0509.**

POSTDOCTORAL FELLOWSHIPS IN IMMUNOLOGY. Support for two positions are available beginning 1 July 1990, on an NIH training program which provides a core curriculum of interdepartmental training in basic and clinical immunology with an emphasis on developmental processes. *U.S. citizenship or permanent residence is required.* Please send letter of interest and curriculum vitae to: **The Director, International Center for Interdisciplinary Studies of Immunology, Gorman 130, Georgetown University Medical Center, 3800 Reservoir Road, NW, Washington, DC 20007. Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE/POSTDOCTORATE

Division of Cardio-Thoracic Surgery, New England Deaconess Hospital/Harvard Medical School has a 2-year position immediately available to study endothelial/vascular smooth muscle involvement in coronary vascular resistance. Ph.D. or M.D. required, molecular biology experience desirable. Send curriculum vitae and three references to: **Dr. H. Feinberg, at above address, to SWRL Building, 50 Binney Street, Boston, MA 02217.**

POSITIONS OPEN

ASSOCIATE RESEARCH SCIENTIST, POSTDOCTORAL RESEARCH SCIENTIST

Position(s) available to study molecular aspects of DNA repair in yeast and human systems. Candidate should have a Ph.D. in molecular biology, biochemistry, genetics, or a related field, and preferably have experience with recombinant DNA techniques. Applicant should send curriculum vitae and the names of three references to: **Dr. Howard B. Lieberman, Center for Radiological Research, Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. We are an Equal Opportunity/Affirmative Action Employer.**

DNA RESEARCHER

Position open in an academic setting with a large molecular biology research community. Responsible to coordinate DNA sequence and synthesis activities in a core facility. Provide expertise to and collaborate with users. Present workshops and minicourses. Send résumé and three references to: **Ronald L. Niece, Director, Protein/DNA Sequence Synthesis Facility, University of Wisconsin (UW) Biotechnology Center, 1710 University Avenue, Madison, WI 53705. The UW-Madison is an Equal Opportunity Employer.**

ASSOCIATE RESEARCH SCIENTIST. Opening is available immediately for structural and dynamics studies of DNA lesions and drug-DNA complexes in solution. The applicant should have a strong background in chemistry, two-dimensional NMR and structure reconstruction algorithms, Ph.D. degree, and 2 years of experience required. Contact: **Dr. Dinshaw Patel, Department of Biochemistry and Molecular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032.**

Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

TECHNICAL EDITOR, CHEMISTRY RESEARCH ASSOCIATE

Publisher of chemistry journal seeks Ph.D. in synthetic organic chemistry to serve as technical editor and chemistry research associate. Approximately 50% of time will be allocated to editorial work and 50% to research.

Technical editorial duties will involve direction and coordination of the activities of writers engaged in preparing technical chemistry material for publication. Analysis of developments in the field to determine need for revisions, corrections, or changes. Confer with publisher to establish technical specifications. Review draft of manuscripts and make recommendations for changes. Edit and correct final draft.

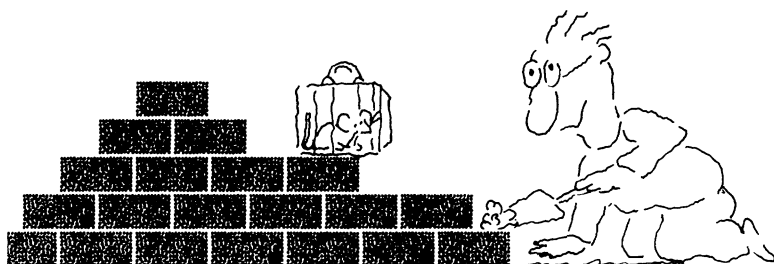
Chemistry research will involve synthesis and characterization of novel heteroaromatic ring systems and their intermediates via photo-induced cyclization utilizing modern scientific instruments such as IR, NMR, chromatography, and interpretation of MS spectra. Chemistry research will also involve drug design and synthesis of heterocycles as antiviral and antitumor agents and study of structure-activity relationship.

In addition to Ph.D. in synthetic organic chemistry, applicant must have a minimum of 1 year of experience as a technical editor of a chemistry journal. Two years of experience required in chemistry research in the synthesis of heterocyclic compounds with practical experience in spectroscopic techniques, i.e., IR, NMR, chromatography.

Forty-hour work week. Salary: \$30,000 per year. Interested applicants should send résumé to: **Division of Labor, Employment, and Training, P.O. Box C, Clearwater, FL 34618-9990. Attention: Mrs. Patricia A. Ganno. Job Order Number 0284976.**

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MOLECULAR GENETICIST

The Center for Hereditary Communication Disorders at the Boys Town National Research Hospital is seeking an experienced Molecular Geneticist with interest in the study of human genes causing deafness to: (1) participate in ongoing research projects to clone and characterize the Usher Syndrome gene and other genes involved in the hearing process; (2) develop new and innovative research programs dealing with the molecular genetics of the inner ear, and (3) acquire independent research funds.

Applicants should hold a Ph.D. degree or equivalent with extensive experience with molecular biology techniques and have the ability to work independently in a team environment.

Letters of intent or applications consisting of a vitae, a summary of research interests and three letters of reference should be sent to:

William J. Kimberling, Ph.D.
Director, Center for Hereditary
Communication Disorders
Boys Town National Research Hospital
555 North 30th Street
Omaha, NE 68131

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POSITIONS OPEN

RESEARCH ASSISTANT for university in central Ohio. Performs research on resistance of cells to anticancer drugs using biochemical and molecular genetic techniques. Studies drug resistance, gene amplification, and aberrant DNA replication using radioactive isotopes. Maintains records. Supervises cell culture facility. Maintains normal cell lines and cancer cell lines with different oncogenes. Uses gel electrophoresis, transforms bacteria with various plasmids, isolates plasmid and cellular genes using restriction enzymes. Uses flow cytometry and cell sorting. DNA hybridization of cellular DNA with specific radiolabeled genes and detection by autoradiography and laser densitometry. Supervises and trains laboratory assistants. No experience required in job described, but applicants will qualify with the following: M.S. pharmacology or toxicology; at least 2 years of researching diseases in living animals and in laboratory studies of diseased cells and tissues from pathological lesions; use of centrifuges, ultracentrifuges, spectrophotometers, photofluorometers, scintillation counters and microscopes, DNA and RNA isolation and radiolabeling; Southern and Northern blot techniques and staining techniques. Forty hours per week, 8 a.m. to 5 p.m. Monday to Friday; \$17,760 per year. Must have proof of legal authority to work permanently in the United States. Send résumés in duplicate (no calls) to: J. Davies, JO#1219733, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

SUPERVISORY PHARMACOLOGIST OR RESEARCH CHEMIST, GM-14

Supervisory Pharmacologist or Research Chemist, GM-14, to serve as chief of the Pharmacodynamics Team, Biochemical Pharmacology Branch, U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, Maryland. Responsible for supervising and managing fundamental research on mechanisms of action of toxic agents, and the development of concepts of prophylaxis and therapy. Qualified applicants must have established expertise in pharmacokinetic modeling, neurotransmitter pharmacology, enzyme kinetics, toxicokinetics, or molecular biology, as indicated through peer-reviewed publications. Demonstrated ability to effectively manage and supervise research in the above areas is highly desirable. Salary range \$50,342 to \$65,444 per annum. Position requires bachelor's degree (or higher) and appropriate professional experience in chemistry of pharmacology. Ph.D. desired. U.S. citizenship is required and the applicant must be able to obtain a security clearance. Résumés must be received by 31 July 1990 and sent to: Commander, U.S. Army Aberdeen Proving Ground Support Activity, Attention: STEAP-CP-RT (Ms. C. Davis), Aberdeen Proving Ground, MD 21005-5001. Equal Opportunity Employer.

RESEARCH INVESTIGATOR / MACROMOLECULAR to collaborate across disciplines in the development of programs with a macromolecular focus in an effort to assess molecular interactions between polynucleotides, polysaccharides, proteins, and small molecules; apply the AMBER-based molecular dynamics technique of thermodynamic perturbation to predict quantitative binding free energies for macromolecular-ligand complexes; maintain and enhance the AMBER suite of programs within the software collections of drug design; design novel compounds arising from the macromolecule-small molecule interaction leading to potential pharmaceutical products; employ the entire range of techniques and principles of theoretical and computational chemistry in the characterization of the properties of new chemical entities; employ molecular dynamics and the perturbation method for problems arising in biological sciences and the agricultural arm of the company. Applicants must possess a Ph.D. degree in molecular biophysics plus 3 years of experience in job offered or 3 years as postdoctoral research chemist. Research as a postdoctoral chemist must have included AMBER and Gaussian 80 computational chemistry techniques in specific applications of molecular mechanics, molecular dynamics, and free energy perturbation simulations in the areas of (i) nucleic acid structures, (ii) drug-nucleic acid interaction, and (iii) protein-substrate interactions and conformational analysis of small molecules. Forty hours per week, Monday to Friday, 8:00 a.m. to 4:30 p.m.; \$45,900 per annum. Please send résumé to: Illinois Department of Employment Security, 401 South State Street-3 South, Chicago, IL 60605. Attention: L. Donegan, Reference #1298-D. An employer-paid ad.

POSITIONS OPEN

The Division of Liver Transplantation, Department of Surgery of UCSF is seeking an **ASSISTANT RESEARCH SCIENTIST** to establish and direct a microsurgery facility for the purpose of contributing to the research program in progress, serving as a resource for the department, and training residents in microsurgical techniques. The primary function of this person will be to perform successful liver allografts in rats and mice, as a model for our studies of immunosuppression and rejection mechanisms, and also to develop research projects. Qualified applicant must have an M.D. degree with demonstrated proficiency in murine transplantation. Candidates should send curriculum vitae to: Nancy Ascher, M.D., Ph.D., Department of Surgery, University of California (UCSF), San Francisco, CA 94143-0780. UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

MEETINGS

WORKSHOP ON EPITHELIAL CELL GROWTH AND TRANSFORMATION 6-10 SEPTEMBER 1990 IN SAN FRANCISCO

Sponsored by the NIH and Cardiovascular Research Institute (CVRI) at the University of California, San Francisco.

Workshop covers: Isolation, growth, characterization, and in vitro transformation of cultured human epithelial cells. Emphasis on cells relevant to cystic fibrosis. Instructors: C. B. Basbaum, C. L. Bell, M. Bissell, R. J. Debs, W. E. Finkbeiner, D. C. Gruenert, M. C. Iannuzzi, C. Logsdon, J. A. Nadel, M. M. Reddy, P. M. Quinton, M. R. Van Scott, A. S. Verkman, J. Wine, J. H. Widdicombe, R. Wu, J. R. Yankaskas. The workshop is limited to 30 participants. For further information and registration contact: Dr. D. C. Gruenert, Epithelial Cell Growth and Transformation Workshop, CVRI, Box 0130, University of California, San Francisco, CA 94143. Deadline for applications is 15 July 1990.

ANNOUNCEMENTS

ALFRED P. SLOAN FOUNDATION

POSTDOCTORAL FELLOWSHIPS IN MOLECULAR STUDIES OF EVOLUTION. Up to ten awards. Total compensation: \$25,000 plus \$10,000 research funds per year. Tenable for 1 to 2 years at universities or nonprofit research institutions in the United States or Canada. Applicant should be prospective or recent Ph.D. in molecular biology, evolutionary biology, or related discipline. Deadline: 7 September 1990. For details, contact: Dr. Michael S. Teitelbaum, Alfred P. Sloan Foundation, 630 Fifth Avenue, New York, NY 10111. Telephone: 212-649-1649.

BLEPHAROSPASM RESEARCH FUNDS AVAILABLE

The Benign Essential Blepharospasm Research Foundation announces the availability of **RESEARCH GRANTS** providing up to \$60,000 annual support for research relevant to the cause and treatment of blepharospasm and related conditions including Meigs's syndrome. The deadline is October 1990. For further information and applications, please write to: Benign Essential Blepharospasm Foundation, Inc., P.O. Box 12468, Beaumont, TX 77726-2468.

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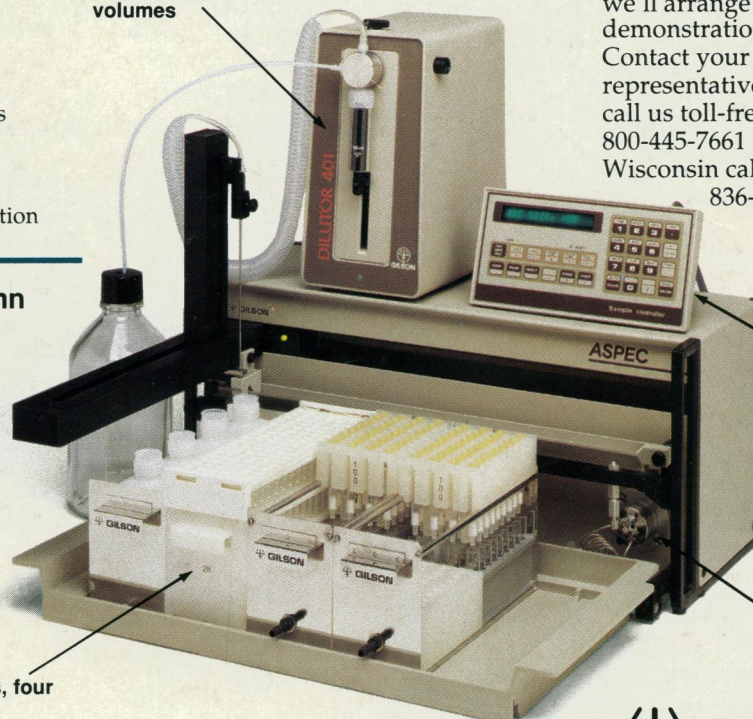
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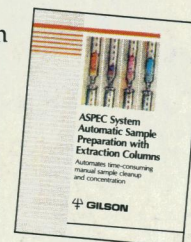
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