

Products & Materials

Cell Lysis Reagent Simplifies DNA Release

GeneReaser cell lysis reagent releases DNA from whole blood, cell cultures, bacterial colonies, and the like. Lysis is accomplished directly in the amplification tube on a thermocycler. Typically, 1 μ l of specimen is lysed in a total volume of 20 μ l. Amplification reagents are subsequently added to initiate amplification. GeneReaser sequesters cell lysis products that might inhibit polymerases and improves amplification yield and specificity. It simplifies the amplification of genomic DNA by avoiding the requirement to purify DNA. BioVentures Inc. Circle 320.

Particle Size Analyzer

Model 2010 Particle Size Analyzer combines direct particle sizing and shape analysis. It measures all types of particles in all media quickly and automatically. Its innovative approach to particle diagnostics combines a scanning laser measuring system with an advanced shape analysis system. This approach provides sample information more quickly and accurately than any other instrument available, according to the manufacturer. Particle size measurement cell modules are available for many applications. Brinkmann Instruments. Circle 321.

DNA Insertion Marker

CloneCheck Plasmid Insert QC Marker is a DNA molecular weight marker designed for the rapid determination of the successful insertion of DNA into all commonly used plasmid vectors. CloneCheck can replace traditional DNA markers, which typically lack an adequate distribution of bands in the region of 2000 to 4000 bp for distinguishing between unmodified vector versus vectors containing the insert. CloneCheck overcomes this problem by containing bands of 1000, 1500, 2000, 2500, 3000, and

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.

4361 bp. The bands are of equal intensity by ethidium bromide staining and cover the appropriate base-pair range for accurate sizing of modified plasmid vectors and inserted DNA. BioVentures Inc. Circle 322.

Light Box

A thin, stainless steel framed light box comes with a flush-mounted acrylic top that allows the user to look at items that are larger than the top. The boxes can be used to look at photographic slides, chromatograph papers, and electrophoresis gels; to do tracings; and more. Three sizes are available. Laboratory Supplies Co. Circle 323.

Nanoliter Injector

This microprocessor-controlled Nanoliter Injector is for oocyte injection and other applications in the 4- to 70-nl range. It features a hydraulic mechanism rather than



pneumatic injection, so there is no need for calibration even if a different size of micropipette tip is used. It can be controlled from an injection button on the control box or a footswitch. World Precision Instruments. Circle 324.

Centrifugal Ultrafiltration Devices

The MICROSEP microconcentrator line has been expanded to include new molecular weight cutoffs. The 1K MICROSEP device can concentrate and desalt low molecular weight biomolecules such as peptides, oligonucleotides, and growth factors. The 50K MICROSEP device is applicable to concentrating and desalting monoclonal antibodies, purification of nucleic acids, and separation of primers from amplified DNA. Filtron Technology Corp. Circle 325.

Photon-Counting Spectrofluorometer

The PC1 steady-state photon-counting spectrofluorometer is a compact benchtop optical unit controlled from a personal computer. The photon-counting capability gives higher sensitivity than traditional analog instruments. The optical components of the PC1 are easily accessible through the instrument cover, which makes the instrument hardware easily reconfigurable for different experimental requirements. The instrument is completely automated, including computer control of the monochromators, polarizers, cuvette positioner, shutters, and temperature of the sample. ISS. Circle 326.

Premixed Electrophoresis Buffers

Premixed buffers allow standardization of electrophoresis runs and save buffer preparation time. They are available in four different formulations. Bio-Rad Laboratories. Circle 327.

Literature

Solutions to Filtration and Water Purification contains information on the Solution 2000 reagent-grade water systems. The compact systems can be bench- or wall-mounted. Solution Consultants. Circle 328.

Millipore Bioinstrumentation, Waters Chromatography and Capillary Electrophoresis Systems for Bioresearch is an 80-page, first-edition catalog that highlights instruments, columns, and reagents for nucleic acid synthesis, peptide synthesis, protein sequencing, chromatography, and capillary electrophoresis. It is organized into five primary research areas: proteins, peptides, amino acids, DNA, and complex carbohydrates. Waters Chromatography Division of Millipore. Circle 329.

Bulletin 1563 details a number of ways to improve high-performance liquid chromatography results, focusing on operating tips for sample injectors. Bio-Rad Laboratories. Circle 330.

The 5027 Sampler is a brochure on a unit designed for simple and safe automatic operation on a wide range of analytical systems. Tecator. Circle 331.

Synthesizing Peptides in Your Own Lab is a ten-page primer that describes the principles of solid-phase peptide synthesis, how synthesizers work, and the chemistry and actions of synthetic peptides. Waters Chromatography Division of Millipore. Circle 332.

SCIENCE

PERSONNEL PLACEMENT

LINE CLASSIFIED ADVERTISEMENTS

• **Deadlines:** Ads are due by Thursday, 10 a.m., 2 weeks prior to the issue date. *Science* is published each Friday, except the last Friday of the year. Call for holiday deadlines. Advertisements must be submitted in writing.

• **How to Submit a Classified Ad:** Prepare double-spaced typewritten copy. Do not include any abbreviations. *Science* will edit and typeset ads according to *Science* guidelines. Deadline for applications stated in ad must be at least 2 weeks after date of publication. Include billing information, and desired publication date. Available categories: Positions Open, Meetings, Announcements, Courses and Training.

• **Mail or FAX materials to:**
Science Classified Advertising
 1333 H Street, N.W., Room 814
 Washington, DC 20005
 Telephone: 202-326-6555
 FAX: 202-682-0816

• **Rates:** Ads are \$42 per line; \$420 minimum. One line equals 52 characters and spaces; centered headings equal 32 characters and spaces. A 3% cash discount is granted to all prepaid ads. If you would like *Science* to give estimated cost, indicate on letter.

• **Ads from Outside the U.S.:** Prepayment made in U.S. dollars by checks drawn on U.S. banks is required.

• **Credit Cards:** *Science* accepts MasterCard and VISA. Discount does not apply to credit cards.

• **Cancellations:** Deadline for cancellation is 10 a.m., Tuesday, 10 days prior to issue date.

DISPLAY PERSONNEL ADVERTISEMENTS

For rates and information about fractional display ads (all ads 1/4 page and larger) and all Marketplace listings, contact:

Science Classified Advertising
 Daniel Moran, Traffic Manager
 Telephone: 202-326-6541

Janis Crowley, Recruitment
 Advertising Manager
 Telephone: 212-496-7704
 FAX: 202-682-0816

CONDITIONS: Personnel advertising is accepted only with the understanding that the advertisers do not discriminate among applicants on the basis of race, sex, religion, age, color, national origin, handicap or sexual preference. The AAAS encourages employers to actively recruit and employ underrepresented minority groups. *Science* reserves the right, at its discretion, to decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT PROFESSOR, ANATOMY

Applications are invited for a faculty position at the level of assistant professor in the Department of Anatomy. A Ph.D. degree and 1 to 2 years of postdoctoral training are required. Primary duties will include participating in teaching neuroscience to first-year medical students with secondary duties in gross anatomy. Research interests are open. Development of research program with eventual independent funding is strongly encouraged. Philadelphia College of Osteopathic Medicine (PCOM) is dedicated to teaching excellence. Please send a letter, curriculum vitae, and three references by 1 March 1992 to:

Tage N. Kvist, Ph.D.
 Professor and Chairman
 Department of Anatomy
 Philadelphia College of Osteopathic Medicine
 4150 City Avenue
 Philadelphia, PA 19131

Starting date, 1 July 1992. PCOM is an Equal Opportunity Employer.

BROWN UNIVERSITY ASSISTANT PROFESSOR IN MOLECULAR PHARMACOLOGY

The Division of Biology and Medicine is seeking a full-time, tenure-track molecular pharmacologist with research interests in the structure-function relationships of such physiological targets of drug action as ion channels, cell surface receptors, or enzymes. Individuals with particular expertise in the application of molecular biological techniques such as site-directed mutagenesis and heterologous expression are encouraged to apply. We are seeking individuals with a doctoral degree, at least 2 years of postdoctoral training, potential for excellence in teaching, and the ability to develop an independent, externally funded research program. General teaching responsibility includes the pharmacology course for medical students, as well as participation in undergraduate and graduate instruction. Opportunities exist for interactions with a wide range of faculty in the Division of Biology and Medicine and in the university. The appointment will begin on or after 1 July 1992. Applicants should submit a résumé including research and teaching experience, future research plans, and a list of publications; enclose representative reprints; and have three letters of reference sent to: **Dr. Edward Hawrot, Section of Molecular and Biochemical Pharmacology, Box G-B487, Division of Biology and Medicine, Brown University, Providence, RI 02912.** Applications are expected by 2 March 1992. Screening will begin on that date and will continue until a successful candidate has been identified or the search is closed.

An Equal Opportunity/Affirmative Action Employer.

BOTANIST: ASSISTANT PROFESSOR

Tenure track, September 1992. Required: Ph.D. in botany or related plant sciences; broad training in field botany and appropriate academic experience to teach: mycology, plant morphology, plant anatomy. Additional teaching responsibilities may include: biology/botany core courses for majors and nonmajors and course in area of specialization. Evidence of teaching ability and post-doctoral experience preferred. Research involving students expected. Submit curriculum vitae, transcripts, and three letters of recommendation to: **W. L. Ezell, Department of Biological Sciences, St. Cloud State University, St. Cloud, MN 56301; telephone: 612-255-2037.** Applications postmarked by 13 March 1992. *Women and minorities urged to apply.*

TENURE-TRACK APPOINTMENT PLANT CELL BIOLOGY INTERNATIONAL CHRISTIAN UNIVERSITY (ICU)

Biology Department has an opening for one position at the rank of **ASSISTANT PROFESSOR** or above to begin in the fall of 1992. Candidates must hold the Ph.D., submit excellent research and teaching credentials, and provide evidence of their commitment to the major purposes of ICU. Teaching will be in English. Initial 3-year appointment, with the possibility of tenure after faculty vote of reappointment. Send curriculum vitae and the names of two references by 31 March 1992 to: **Professor Akihiro Nozaki, Chair, Division of Natural Sciences, ICU, 3-10-2, Osawa, Mitaka, Tokyo 181, Japan.**

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY

Tenure-track position beginning August 1992. Responsibilities include teaching undergraduate cell/molecular biology and mammalian physiology, directing undergraduate research, and research. Ph.D. required. Teaching experience at the undergraduate level preferred. Send curriculum vitae, transcripts and names and addresses of three references by 28 February 1992 to: **Dr. Beatrice Robinson, Department of Biology, Le Moyne College, Syracuse, NY 13214.** *Le Moyne College is a nationally recognized institution in the Jesuit tradition and is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF MEDICINE, Section of Infectious Diseases, Yale University School of Medicine. Position available for an M.D. or Ph.D. to devote at least 80% time to basic investigation. Newly renovated laboratory space is available, contiguous with other laboratories within the Section of Infectious Diseases. Salary support and start-up funds will be provided for a period of 2 years through the Section of Infectious Diseases/Department of Internal Medicine. Individuals studying host defense mechanisms, microbial virulence determinants or viral pathogenesis at the molecular level are particularly encouraged to apply. The Section of Infectious Diseases at Yale University has a strong collaborative tie with the Department of Cell Biology, the Section of Immunobiology, and with the MacArthur Group in Molecular Parasitology within the Department of Epidemiology and Public Health. Applicants must have evidence of research productivity in the specified field. Interested applicants should send curriculum vitae and three letters of recommendation to: **Keith Joiner, M.D., Chief, Section of Infectious Diseases, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510,** by 13 March 1992. *Yale is an Equal Opportunity/Affirmative Action Employer. Applications from women and minority group members are encouraged.*

BIOLOGISTS

GENERAL BIOLOGY SPECIALIST. Tenure-track position at the **ASSISTANT PROFESSOR** level beginning August 1992. We seek a person having a broad background in biology, high motivation for teaching, and excellent organizational skills to coordinate introductory courses for majors and nonmajors. The successful candidate will be expected to coordinate involvement of other faculty in these courses, present introductory biology lectures and laboratories, develop and test innovative laboratory exercises and teaching methods, publish in peer-reviewed journals on the subject of biology education, and seek external funding to support professional activities.

BIOLOGY INSTRUCTORS. Two full-time, non-tenure-track teaching appointments in introductory biology. One position is renewable for up to 3 years. The second is a 9-month, nonrenewable sabbatical replacement. Candidates for both positions will teach majors and/or nonmajors courses beginning August 1992.

The mission of Northeast Missouri State University is to provide an outstanding liberal arts and sciences education to an academically talented student body while remaining economically accessible. Northeast is committed to challenging and supporting students in their learning, and it subscribes to the AAHE's "Seven Principles for Good Practice in Undergraduate Education." Active learning is a major component of the educational environment—in the classroom or laboratory, in advising sessions, in collaborative research, and in service to the university and community. As a part of their teaching responsibilities, all tenure-track faculty members are expected to serve as academic advisers.

Candidates for all three positions should have a Ph.D. or equivalent and demonstrate a strong commitment to undergraduate education. Send cover letter indicating the position(s) for which you are applying, statement of teaching philosophy ("specialist" applicants should also include statement of educational research goals), curriculum vitae, undergraduate and graduate transcripts, and three letters of reference to: **Dr. George Shinn, Biology Search Committee, Division of Science, Northeast Missouri State University, Kirksville, MO 63501.** Consideration of completed applications will begin 2 March 1992 and continue until positions are filled. *Northeast Missouri State University is an Equal Opportunity Employer, and women, minorities, the disabled, and veterans are encouraged to apply.*

POSITIONS OPEN

ASSISTANT PROFESSOR

The Division of Cellular and Molecular Biology at the Dana-Farber Cancer Institute and the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School are conducting a search for an assistant professor. We are interested in identifying applicants who are addressing contemporary issues in cell biology or development using model systems that are amenable to genetic or biochemical analysis like, but not confined to, yeast or mice. In addition to developing a basic research program the successful candidate will be expected to participate in educational activities at the Dana-Farber Cancer Institute and Harvard Medical School.

Interested candidates should submit curriculum vitae, brief research description, and three letters of reference to: **Dr. Richard Kolodner, Search Committee Chairman, Division of Cellular and Molecular Biology, Dana-Farber Cancer Institute, Mayer Building, Room 849, 44 Binney Street, Boston, MA 02115.**

The Dana-Farber Cancer Institute and Harvard Medical School are Equal Opportunity/Affirmative Action Employers. Women and minority candidates are particularly encouraged to apply.

ASSISTANT PROFESSOR

The Department of Biological Sciences invites applications for a tenure-track position at the assistant professor level beginning August 1992. Ph.D. required; preference will be given to those with teaching and research experience. Responsibilities include teaching human anatomy and physiology and other courses in area of expertise. Establishment of an active independent research program involving undergraduates and M.S.-level students is expected. Research area is open; however, expertise in developmental biology, biological toxicology, fish physiology or physiological ecology is desirable. *Women and minorities are especially encouraged to apply.* Please send curriculum vitae, copies of undergraduate and graduate transcripts, a statement of research and teaching interests and three letters of recommendation by 10 March 1992 to: **Dr. Martin J. Mitchell, Department of Biological Sciences, Murray State University, Murray, KY 42071.**

Murray State does not discriminate on the basis of race, color, national origin, sex, or handicap in its programs and activities. The following person has been designated to handle inquiries regarding the university's nondiscrimination policies: **Dr. Doreen Rauch, Director of Affirmative Action, 318 Wells Hall, Murray State University, Murray, KY 42071. Telephone: 502-762-3155.**

ASSISTANT PROFESSOR DEPARTMENT OF ZOOLOGY

Applications are invited for a tenure-track position at the assistant professor level in the Department of Zoology, University of British Columbia. Starting date will be 1 July 1992. Salary will be commensurate with education and experience. Appointment is subject to final budgetary approval.

The Department of Zoology currently comprises 40 faculty members, approximately 35 postdoctoral fellows and research associates, and 140 graduate students. Preference will be given to candidates with at least 2 years of postdoctoral experience and with demonstrated excellence in research that complements the present strengths in the department. We require an individual who is using molecular biology to answer basic questions in evolution/population biology or in cell signaling (e.g. endocrinology/neurophysiology). The appointee will be expected to develop a strong research program, and teach in appropriate undergraduate courses.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. The University of British Columbia encourages applications from all qualified women and minority applicants.

Curriculum vitae, the names of three referees and a brief research outline, should be submitted to: **Dr. J. E. Phillips, Head, Department of Zoology, University of British Columbia, #2354—6270 University Boulevard, Vancouver, BC, Canada V6T 1Z4.** Closing date for applications is 31 March 1992.

POSITIONS OPEN

ENVIRONMENTAL STUDIES. Brown University's Center for Environmental Studies seeks a **VISITING ASSISTANT PROFESSOR** for a 1-year appointment. Responsibilities include teaching two courses in the fall semester and one course in the spring, and sponsoring senior thesis research. Applicants should have had some direct experience in solving environmental problems and be able to integrate science with policy. A doctoral degree, an advanced professional degree or comparable experience is required. A letter of application, a résumé and three letters of reference should be submitted to: **Professor Harold Ward, Brown University, Box 1943, Providence, RI 02912.** Applications will be reviewed as soon as they are complete.

FACULTY POSITION IN GENERAL/CLINICAL MICROBIOLOGY. The Department of Biology, Middle Tennessee State University (MTSU), invites applications for a tenure-track teaching position (**ASSISTANT PROFESSOR, Ph.D.**) available August 1992. The successful applicant must have a strong background in general and clinical microbiology, and shall teach lecture and laboratories in general and other areas of microbiology at the undergraduate and graduate level and direct research. Research/public service is expected. *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Deadline for application is 6 March 1992. Send application, transcripts and three letters of reference to: **Dr. Mary Reyes, Committee Chair, Box 335, MTSU, Murfreesboro, TN 37132.** Position contingent on funding availability.

FACULTY POSITIONS

The Center for Extracellular Matrix Biology at the Institute of Biosciences and Technology, Texas A&M University, located at the Texas Medical Center, Houston, Texas, invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member and have research interests in the area of extracellular matrix biology. Preference will be given to candidates with training in biochemistry and/or cell biology and experience in molecular biology.

Applicants should send a letter outlining their research interests, their curriculum vitae and three letters of reference to: **Dr. Magnus Hook, c/o Bill Alley, Institute of Biosciences and Technology, 2121 Holcombe Boulevard, Houston, TX 77030.**

The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT PROFESSOR OF PEDIATRICS DIVISION OF IMMUNOGENETICS

The University of Pittsburgh School of Medicine, Department of Pediatrics, has an opening for an assistant professor with expertise and several years of experience in the field of molecular biology.

Priority will be given to an individual with M.D./Ph.D. degree with a proven record of investigation in the areas of MHC-restricted and non-restricted cytotoxicity involved in anti-tumor and autoimmune response. Cloning of the genes involved in this process and the use of their products in designing screening tests for clinical diagnostic purposes are the most needed requirements. The individual will be expected to closely interact on a daily basis with the physicians and support personnel of the department.

A salary in the range of \$25,000 to \$35,000 will be available as of 1 March 1992.

Applicants should send their curriculum vitae, including a list of publications, reprints of up to five representative papers, summary of research focus and names and addresses of three references, before 1 May 1992, to:

**Dr. Mark Sperling
Chairman, Department of Pediatrics
University of Pittsburgh School of Medicine
Children's Hospital of Pittsburgh
3705 Fifth Avenue
Pittsburgh, PA 15213**

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

POSITIONS OPEN

MARINE BIOLOGIST. The Biology Department is offering a full-time, tenure-track **ASSISTANT PROFESSOR** position in marine biology beginning September 1992. A specialization in marine vertebrates and/or estuarine and marine ecosystems is preferred. This individual will teach introductory biology for nonmajors, develop and/or teach courses in marine science, and be involved with the development of computer-assisted instruction. Kutztown University is a member of the Marine Science Consortium at Wallops Island, Virginia.

College teaching and Ph.D. required. Applications will be considered after résumé, three letters of recommendation, and official transcripts have been received. Send all materials to: **Dr. J. Wesley Bahorik, Chairman of the Search Committee, Biology Department, Kutztown University, Kutztown, PA 19530.** *Kutztown University is an Affirmative Action/Equal Opportunity Employer and actively solicits applications from qualified minority applicants and women.* Last date for receiving applications is 31 March 1992.

FACULTY POSITION IN MOLECULAR PLANT VIROLOGY

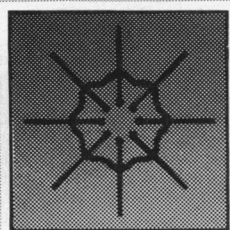
Applications are invited for an 11-month tenure-track position available 1 July 1992 as **ASSISTANT PROFESSOR** of plant pathology in the College of Natural and Agricultural Sciences (15%) and **ASSISTANT PLANT PATHOLOGIST** in the Agricultural Experiment Station (85%) at the University of California (UC), Riverside. Salary will be commensurate with qualifications and experience and based on the UC pay scale. Appointee is to develop a research program that explores applications of molecular biology to the study of plant viruses. Plant resistance to viruses, mechanisms by which viruses overcome disease resistance, and the molecular basis of virulence and host specificity are examples of research areas of interest. Several complementary virology programs within the department and the interdepartmental programs in genetics and microbiology offer strong opportunities for interaction. Teaching responsibilities include an advanced graduate course in molecular virology and participation in an entry level graduate course in plant virology. Ph.D. required with postdoctoral training and experience in virology, molecular biology, and plant pathology desired. Curriculum vitae, statement of research interests, reprints of relevant publications, and three confidential letters of recommendation should be sent to: **Dr. D. A. Cooksey, Search Committee Chairman, Department of Plant Pathology, University of California, Riverside, CA 92521.** The application deadline is 15 April 1992, or later if a suitable candidate has not been selected from the original pool. *Women and minority candidates are encouraged to apply. An Equal Opportunity/Affirmative Action Employer.*

DEPARTMENT OF ANATOMY JAMES H. QUILEN COLLEGE OF MEDICINE EAST TENNESSEE STATE UNIVERSITY

CELL/DEVELOPMENTAL BIOLOGIST. Applications are invited for the position of **ASSISTANT PROFESSOR** of anatomy. Candidates should possess either the M.D. or Ph.D. degree. Preference will be accorded those candidates with postdoctoral training and with documented research expertise in either cell biology, developmental neurobiology or developmental biology. The successful candidate will be expected to participate in the education program for medical students, although the specific discipline will be commensurate with the career interests of that individual. The department has eight faculty members whose interests represent a diverse mixture of research areas. These include: neurobiology, neurotoxicity, developmental toxicology and cell biology. They participate in the Graduate Program in Biomedical Science and in the multidisciplinary Program in Molecular Biology. The position will be available on or before 1 July 1992. Interested applicants should submit curriculum vitae and the names of at least three references to:

**Richard G. Skalko, Ph.D.
Professor and Chairman
Department of Anatomy
James H. Quillen College of Medicine
East Tennessee State University
Johnson City, TN 37614-0582**

East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.



ENZON, Inc.

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Adding Time To Life®

The excitement is contagious when a company with outstanding products and a vision of the future begins to come into its own. ENZON is such a company. Our core technology enhances the delivery of protein-based drugs; it offers the promise of new life to patients and a unique opportunity for the innovative and imaginative professionals who participate in the development. The first phase of our new expansion — our protein engineering lab in Gaithersburg, Maryland — is facilitating the rapid development of further applications of our technology.

If you are a highly motivated research professional who's interested in developing new therapies for life threatening diseases, join us at one of our research facilities.

We offer a fast-paced environment where creativity is valued, and independent thinking, as well as collaboration, is encouraged. In addition to strategic industry and academic affiliations, we offer unparalleled support for your scientific standing, and a generous compensation and benefits package. Please send your resume, referencing the appropriate department, to:

**Corporate
Human Resources,
Enzon, Inc.,
40 Cragwood Road,
South Plainfield, NJ 07080.**
An equal opportunity employer.

GAITHERSBURG, MARYLAND

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Director of Research

As the director of our scientific/engineering group's research design and development activities, you'll establish and implement strategic research plans and goals. PhD in Biochemistry or a related field, with 10+ years' pharmaceutical/biotechnology experience, 5+ years of research management experience, and a high scientific profile via patents and publications. **Dept. DR.**

Associate Director of Research Molecular Biology

Applying molecular biological approaches to the development of our novel recombinant pharmaceutical proteins, you'll oversee the genetic engineering programs, and propose/review new projects. PhD in Molecular Biology, Biochemistry,

Genetics, Immunology or Microbiology; 10+ years' relevant experience, including supervision of research groups; and a proven record of scientific accomplishments and publications. **Dept. ADR/MB.**

RESEARCH ASSOCIATES BS/MS LEVEL

Mammalian and Insect Cell Culture

Working with Molecular Biologists and Protein Chemists, you'll develop and optimize lab-scale cell culture processes, using recombinant and non-recombinant DNA-derived mammalian and insect cell lines; and assist in the scale-up of cell culture-derived products from lab to pilot plant scale. Degree in Cell Biology, Microbiology or

Biochemical Engineering, and 2+ years' experience operating bioreactors. **Dept. RA/MICC.**

Fermentation Microbiology

Optimize and develop lab-scale fermentation processes using recombinant and non-recombinant microorganisms; and assist in fermentation scale-up efforts from lab to pilot plant scale. Degree in Microbiology or Biochemical Engineering; 2+ years' experience operating fermentation equipment. **Dept. RA/FM.**

Fermentation

Hands-on experience operating and maintaining large-scale fermentation and down-stream processing equipment. Degree in Microbiology, Chemistry, Biochemistry or equivalent experience. **Dept. RA/F.**

SOUTH PLAINFIELD, NEW JERSEY

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SCIENTISTS PhD LEVEL

Synthetic Organic Chemistry

As a member of our multi-disciplinary, discovery chemistry team, you'll design, synthesize and characterize complex molecules and participate in collaborative research efforts. An Organic or Medicinal Chemistry degree; and 2+ years' laboratory experience, preferably performing original research in a pharmaceutical or industrial setting. Post-doctoral experience strongly preferred. **Dept. S/SOC.**

Method Development/ Scale-Up

Design, develop and implement therapeutic product purification protocols, and assist in transferring them into a cGMP product purification environment. Degree in Chemistry, Biochemistry, or equivalent; with 2+ years' experience in a research environment. **Dept. S/MDSU.**

RESEARCH ASSOCIATES BS/MS LEVEL

Synthetic Organic Chemistry

Working with a Senior Chemist, you'll be involved in the design and synthesis of novel, therapeutic compounds. Chemistry degree, 2+ years' industrial experience; and the

ability to conduct multistep synthetic sequences. Familiarity with IR, NMR and HPLC is a plus. **Dept. RA/SOC.**

Scale-Up Protein Purification

Assist in the design, development and implementation of purification protocols that produce therapeutic-grade proteins at the research and scale-up levels. Degree in Chemistry or Biochemistry, with 1-2 years' protein purification experience in a GMP manufacturing environment. **Dept. RA/SUPP.**

Cell Biology Group

Collaborating with our research team, you'll maintain cell lines, and perform in vitro cell proliferation and cytotoxicity assays. Related tissue culture/cell fusion/monoclonal antibody experience, and/or a scientific degree. **Dept. RA/EG.**

DIRECTOR, EVOKED POTENTIALS LABORATORY

**Salary Range
\$49,907-\$64,876**

The Brooklyn VA Medical Center seeks a Ph.D. level neurophysiologist to head its evoked potential laboratory. This laboratory is equipped with state-of-the-art instrumentation and is used for clinical and research applications. Applicants must have expertise in evoked potential recording techniques and must be familiar with computer programming languages.

**Call or send resume to:
Dianne Russ, Personnel Dept. (05)
718-630-3663 or 718-630-3660**

The Department of Veterans Affairs

800 POLY PLACE, BROOKLYN, NY 11209

Position subject to random drug testing

An Equal Opportunity Employer



U.S. Citizenship Required

STUDY DIRECTORS Chronic Dog Toxicology and Teratology

Miles Inc.'s Agriculture division with toxicology facilities in Stilwell, Kansas (Kansas City) is currently searching for two toxicologists in the areas of chronic dog toxicology studies, and teratology studies. Responsibilities for both positions include:

- Planning and directing toxicology studies in respective area.
- Scientific interpretation and analysis of study results and technical report preparation.
- Supervision of technical personnel.
- Evaluation of Toxicology data for product safety.

Qualified candidates should possess Ph.D. in toxicology, or a DVM/Ph.D. Experience with industry is desired.

Send Resume to: Miles Inc., Attn: Gail Rothrock, P.O. Box 4913, Kansas City, Missouri 64120.



Agriculture Division

An Equal Opportunity Employer

POSITIONS OPEN

The Department of Pediatrics at the University of Illinois at Chicago seeks a Ph.D. or M.D. with substantial background in molecular biology of the globin gene system as an **ASSISTANT PROFESSOR OF GENETICS IN PEDIATRICS**. DNA cloning, mutagenesis, and transgenic experience are highly desirable. Tenure-track academic position with research and some teaching responsibilities. Opportunity for appointments in the Graduate College and Department of Genetics. Contact: **George R. Honig, M.D., Ph.D., Professor and Head, Department of Pediatrics (m/c 856), 840 South Wood Street, Chicago, IL 60612.** The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

Position: **ASSISTANT PROFESSOR OF WILDLIFE TECHNOLOGY** at the DuBois Campus. Tenure-track, 9-month position (36 weeks). The DuBois campus: A 15-acre site located in DuBois. The surrounding area is rural with extensive national and state forest lands nearby. The campus enrolls a total of 700 full-time and 300 part-time students. Starting date: August 1992, or as negotiated. Responsibilities: Teaching, research, and advising students in a 2-year associate degree program in wildlife technology. The teaching component will consist of courses in fish and fisheries management, wildlife management techniques, and statistics. Teaching load is 14 contact hours one semester and 7 to 10 in the other semester. The research program should complement the teaching effort. Qualifications: A Ph.D. in wildlife management or a related area. Field experience with a state or federal agency desirable. Salary: Competitive, commensurate with background and experience. An attractive benefits package is available. Application: Applicants should submit a letter of application, résumé, academic transcripts, and the names and addresses of three professional references to: **Dr. Alfred D. Sullivan, Director, School of Forest Resources, The Pennsylvania State University, 113E Ferguson Building, University Park, PA 16802. Telephone: 814-863-7093** Closing date for applications: 1 April 1992, or until the position is filled. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH ASSISTANT PROFESSOR. Full-time research position for biochemist/cell biologist in a team approach to neurodegenerative diseases. Expertise in enzymology, molecular genetics, or receptor biology preferred. M.D. or Ph.D. and postgraduate experience required. Send curriculum vitae and names of three references to: **Scott VandenBerg, M.D., Ph.D., Director of Neuropathology, University of Virginia Health Science Center, Box 214, Charlottesville, VA 22908.** The University of Virginia is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN MOLECULAR PHARMACOLOGY

The Department of Pharmacology (School of Medicine) and the Molecular Biology Program at the University of Missouri-Columbia (MU) invite applications for a tenure-track **ASSISTANT PROFESSOR** position. We are seeking an individual who applies molecular approaches to problems in pharmacology or related areas. The successful candidate will reside in the Department of Pharmacology and will participate in the interdisciplinary Molecular Biology Program. This campus-wide program supports pre- and postdoctoral fellows and provides core facilities for DNA synthesis and sequencing, peptide synthesis, protein sequence analysis, generation of transgenic animals, hybridoma production, flow cytometry, and confocal microscopy. The successful candidate should have a strong record of research accomplishment, the potential to develop an externally funded research program, and the ability to participate in departmental teaching. Research areas of interest include, but are not limited to: membrane receptors; transport proteins and ion channels; mechanisms of signal transduction, gene expression, and cell differentiation; actions of drugs, neurotransmitters, and growth factors; and immunopharmacology. Review of applications will begin 15 March 1992. Please send curriculum vitae, a brief description of research plans, and the names of three references to: **Dr. Hyun Dju Kim, Professor and Chairman, Department of Pharmacology, University of Missouri-Columbia, School of Medicine, M517B Medical Sciences Building, Columbia, MO 65212.** An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

MOLECULAR IMMUNOLOGIST. The Immunology Division of the Department of Pathology and Laboratory Medicine seeks an immunologist for the position of **ASSISTANT PROFESSOR** in the tenure track. Candidates should possess a Ph.D. and/or M.D. degree, and have demonstrated strong research potential in molecular immunology. The successful candidate will be expected to generate a vigorous research program and participate in graduate/medical student training. Potential for clinical service exists for appropriately qualified candidates. Interested individuals should send their curriculum vitae, a summary of research interests, and the names of three references to: **Michael P. Cancro, Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, 284 John Morgan Building, 36th and Hamilton Walk, Philadelphia, PA 19104-6082.** Equal Opportunity/Affirmative Action Employer.

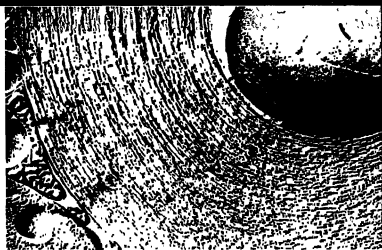
Positions available for an immunologist and a molecular, cell or reproductive biologist at the **RESEARCH ASSOCIATE, RESEARCH INSTRUCTOR OR RESEARCH ASSISTANT PROFESSOR** level in anatomy and cell biology at the University of Virginia Medical School. Individuals will join a team studying the cell and molecular biology of human spermatogenesis and the secretory immune response of the primate oviduct to recombinant contraceptive vaccines based on sperm antigens. Candidates should have a Ph.D. or M.D. degree and a strong record of publications involving any or several approaches: recombinant DNA, protein expression, monoclonal antibody-antigen characterization, secretory immunity or primate reproductive biology. Send curriculum vitae and names of three references to: **Dr. John C. Herr, Department of Anatomy and Cell Biology, Box 439 Medical Center, University of Virginia, Charlottesville, VA 22908.** The University of Virginia is an Equal Opportunity/Affirmative Action Employer.

TWO ASSISTANT PROFESSOR positions available at the University of Colorado School of Pharmacy in the Division of Pharmaceutical Sciences. Applicants for these tenure-track positions must have a Ph.D., at least 2 years of postdoctoral research experience and a demonstrated commitment to a career in teaching and independent research. Training in pharmacy or the pharmaceutical sciences is beneficial. We are seeking candidates with a background in a discipline complementing current research strengths of the faculty such as molecular and biochemical and approaches to the fields of pharmacology, toxicology and pathophysiology. Successful candidates will be responsible for instruction at the undergraduate level in general pharmacology or pathophysiology and at the graduate level in their field of expertise. Appointments are expected to begin August 1992. Applicants should submit curriculum vitae, a brief description of future research plans and the names of three references by 15 March 1992 to: **Faculty Search Committee, Division of Pharmaceutical Sciences, School of Pharmacy, University of Colorado, Boulder, CO 80309-0297.** The University of Colorado is committed to Equal Employment Opportunity and Affirmative Action.

RESEARCH ASSOCIATE/ASSISTANT PROFESSOR. The Department of Surgery of the University of Minnesota invites applications for two academic professional positions at the rank of associate professor/assistant professor (nontenure track). Candidates should have a Ph.D. or M.D. with experience in molecular biology or protein chemistry. The successful applicants will be expected to establish independent research programs and to collaborate with a multidisciplinary group in studying wound healing, regeneration and tumorigenesis. Preference will be given to individuals with interest in the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of bioactive factors and matrix molecules, and mechanisms of gene regulation. Interested individuals should submit curriculum vitae, a brief statement of research interests and future plans and the names of three references by 15 April 1992 to:

**Rosalie Cihlar
Executive Secretary
Department of Surgery
University of Minnesota
Box 195 UMHC
Minneapolis, MN 55455**

The University of Minnesota is an Equal Opportunity Educator and Employer.



Ph.D. Scientist Pharmacology

If you're an experienced professional who would like to have a hand in shaping the future of the pharmaceutical industry, then The Liposome Company, a growing biotechnology firm specializing in novel, lipid-based drug delivery systems, has an outstanding opportunity for you.

We are presently seeking a Pharmacologist or Bioanalytical Chemist with experience in pharmacokinetic studies and drug/metabolite analysis in biological fluids to become an active member of our pre-clinical and clinical drug development team. The successful candidate will be developing and validating bioanalytical methods for our novel dosage forms and assisting in the design, implementation and analysis of pre-clinical and clinical pharmacology studies.

The qualified candidate will possess a PhD in Pharmacology, Biochemistry or related discipline with 0-5 years' experience. Experience with radioisotopes and HPLC is required. GC-mass spec and knowledge or experience in cardiovascular, anti-inflammatory, infectious diseases and/or oncology areas would be desirable.

In addition to a creative work environment, we offer a competitive salary and comprehensive benefits package.

*Please send your resume to:
Human Resources, The Liposome Company, Inc., One Research Way,
Princeton, NJ 08540.
An Equal Opportunity Employer.*

**The Liposome
Company, Inc.**

The recent opening of the new Glaxo Inc. Girolami Research Institute, located in Research Triangle Park, NC, represents Glaxo's monumental commitment in the pharmaceutical industry to the discovery of drugs for unmet patient needs. Scientists engaged in Glaxo's expanding research and development programs at the Center have a premier facility in which to work. The following opportunities are now available.

MOLECULAR DEVELOPMENTAL CELL BIOLOGIST Cancer Gene Targets Group

We seek a Molecular Biologist with experience in cell biology for our Cancer Gene Targets Group. Emphasis is on an interdisciplinary approach to the regulation of cancer gene expression, both at the DNA and RNA level. This individual will work independently within the group to establish novel molecular and cell biological approaches to understand how chemically-modified oligonucleotides regulate gene expression.

Qualifications include a Ph.D. plus a minimum of 2 years of relevant post-doctoral experience. Experience using *in situ* approaches to quantitate cellular gene expression is preferred, but strong candidates in the areas of mammalian developmental biology or molecular genetics are invited to apply.

Please refer to Job # 9125B112-SC on all resumes.

POST-DOCTORAL FELLOW Transgenics

This position, within our Pharmacology Department, will work in a laboratory on developing mouse models for cancer research. Work will be primarily focused on transformation, including cell cycle genes, but also genes involved in cellular transformation, tumor formation and metastasis. The successful candidate will have the opportunity to learn transgenic and embryonic stem cell technology. Knowledge of these two techniques is useful but not necessary. The successful candidate will have a Ph.D. with 0-3 years experience.

Please refer to Job # 9116T003-SC on all resumes.

Join Glaxo and enjoy an excellent salary, flexible benefits, an on-site recreation and fitness center, a spirit of enthusiasm and teamwork and outstanding opportunities for career satisfaction. Equally appealing is our world famous scientific, industrial and academic community in Research Triangle Park, NC. Send your resume, INDICATING THE CORRESPONDING JOB # and salary history, to: Human Resources Department, Glaxo Inc., P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please.) An Equal Opportunity Employer M/F/H/V.

Glaxo Inc.

Experimental Pathologist/ Pharmacologist

Organon Teknika/Biotechnology Research Institute conducts research for the Pharma Division of Akzo, N.V., a multinational pharmaceutical and diagnostics company.

An immediate opportunity now exists for a creative, highly motivated individual to head its expanded *in vivo* pre-clinical studies program in targeted cancer immunotherapy with human monoclonal antibodies. Qualified applicants will have a Ph.D. degree in Experimental Pathology or a related area of medical research and experience in working with animal models (mice) for human cancer. Evidence of expertise and productivity in the form of published work is expected. Prior experience with models for radioimmunotherapy or immunochemotherapy, knowledge of drug pharmacokinetics or knowledge of radiation dosimetry would be useful.

BRI offers competitive salaries and excellent benefits including health and dental insurance, partially matched savings program, retirement fund, as well as opportunities for professional growth in science. For prompt consideration, please submit a C.V. to: Organon Teknika Corporation, Biotechnology Research Institute, 1330-A Piccard Drive, Rockville, MD 20850. EOE M/F/H/V



POSITIONS OPEN

FACULTY POSITION IN PATHOLOGY UNIVERSITY OF VIRGINIA HEALTH SCIENCES CENTER

The Department of Pathology is seeking an M.D. or M.D./Ph.D. anatomic pathologist with a major interest in experimental pathology. This is a tenure-track position at the **ASSISTANT OR ASSOCIATE PROFESSOR** level. The position will include duties in autopsy pathology. Preference will be given to candidates with strong research potential who can establish an independent, externally funded research program.

Applicants should submit curriculum vitae, statement of research interests, and names of three references to: **Dr. T. W. Tillack, Chairman, Department of Pathology, University of Virginia Health Sciences Center, Charlottesville, VA 22908. The University of Virginia is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT/ASSOCIATE PROFESSOR, ANESTHESIOLOGY. The Uniformed Services University of the Health Sciences (USUHS) is seeking full-time, tenure-track, research faculty with opportunity for a second appointment in a basic science department. Successful candidate must possess doctoral degree and postdoctoral experience in research relating to one or more areas: neural systems implicated in pain mechanisms; pharmacology of anesthetic agents; tolerance to opiate analgesic drug actions. Emphasis on cellular and molecular approach desirable. Knowledge of pharmacokinetics, epidural and intrathecal analgesics is beneficial. Research assistance includes laboratory space, start-up funds, and technical support. Send curriculum vitae, summary of research interests, and three letters of recommendation to: **Civilian Human Resources Management, (ANE-PH), USUHS, 4301 Jones Bridge Road, Bethesda, MD 20814-4799.** Applications must be received by 28 February 1992. *Equal Opportunity/Affirmative Action Employer.*

COLUMBIA UNIVERSITY CENTER FOR RADIOLOGICAL RESEARCH

Applications are invited for a faculty position at the **ASSISTANT PROFESSOR OR ASSOCIATE RESEARCH SCIENTIST** level. The center seeks a research scientist who is interested in using cell cultures of human and rodent origin to investigate radiobiological problems relevant to clinical radiotherapy. The center is well equipped for radiobiological studies. Adequate start-up funds will be available. Candidate should have a Ph.D. degree and postdoctoral experience. Salary will be commensurate with experience. Send curriculum vitae, reprints, and names of at least three references to: **Dr. Eric J. Hall, Director, Center for Radiological Research, College of Physicians and Surgeons, Columbia University, 630 West 168th Street, New York, NY 10032. An Affirmative Action/Equal Opportunity Employer.**

FACULTY POSITION UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE DEPARTMENT OF PATHOLOGY AND LABORATORY MEDICINE SECTION OF CLINICAL MICROBIOLOGY

The Section of Clinical Microbiology within the Department of Pathology and Laboratory Medicine is recruiting a faculty member in the tenure track at the **ASSISTANT PROFESSOR** level. The appropriate candidate will devote approximately 75% effort to developing an extramurally funded research program. Although research in any area of microbiology will be considered, candidates who are pursuing research in microbial pathogenesis at the molecular level would be desirable. In addition to research, the faculty member will serve as an attending faculty member in the Clinical Microbiology Laboratory approximately 3 months per year. Candidates should have an M.D. and/or Ph.D. degree with appropriate training in laboratory medicine with an emphasis on clinical microbiology, postdoctoral training in an ABMM-approved program in clinical microbiology, or equivalent alternate training. Candidates should submit curriculum vitae, statement of research interests and goals, and the names of three references to: **Steven Spitalnik, M.D., Co-Director, Division of Laboratory Medicine, University of Pennsylvania School of Medicine, Department of Pathology and Laboratory Medicine, 3400 Spruce Street, Philadelphia, PA 19104-4283. Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

ASSISTANT PROFESSOR OF MEDICINE, Section of Infectious Diseases, Yale University School of Medicine. Position available for an M.D. with training in infectious diseases to devote at least 80% time to basic investigation and also have attending responsibility at Yale-New Haven Hospital. Newly renovated laboratory space is available, contiguous with other laboratories within the Section of Infectious Diseases. Salary support and start-up funds will be provided for a period of 2 years through the Section of Infectious Diseases/Department of Internal Medicine. Individuals studying host defense mechanisms, microbial virulence determinants or viral pathogenesis at the molecular level are particularly encouraged to apply. The Section of Infectious Diseases at Yale University School of Medicine has a strong collaborative tie with the Department of Cell Biology, the Section of Immunobiology, and with the MacArthur Group in Molecular Parasitology within the Department of Epidemiology and Public Health. Candidates must be certified or eligible for certification by the American Board of Internal Medicine in the subspecialty of Infectious Diseases. Applicants must have evidence of research productivity in the specified field. Interested applicants should send curriculum vitae and three letters of recommendation to: **Keith Joiner, M.D., Chief, Section of Infectious Diseases, Yale University School of Medicine, P.O. Box 3333, New Haven, CT 06510, by 13 March 1992. Yale is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority group members are encouraged.**

TENURE-TRACK ASSOCIATE/ASSISTANT PROFESSOR OF BIOMEDICAL ENGINEERING (BME) at Worcester Polytechnic Institute (WPI). WPI offers M.S. and Ph.D. degrees in BME. Close cooperation exists with the University of Massachusetts Medical School (UMMS), Tufts University School of Veterinary Medicine, local hospitals, and the Massachusetts Biotechnology Research Park. The BME Department also operates a research Nuclear Magnetic Resonance imaging and spectroscopy laboratory in collaboration with the Radiology Department at UMMS. Ph.D. in BME, physical science or a related discipline required. Preferred areas of specialization are: medical imaging, biomedical signal processing and application of optics to biomedicine, but all specialties will be given consideration. Applicants should be able to teach a physiological systems course/laboratory. Applicants should be interested in developing a strong research program and be committed to quality teaching. WPI is located near the heart of the high technology focus of New England, yet offers opportunities for urban, suburban, or rural lifestyles. *Women and minorities are encouraged to apply.* Send résumé and names of three or more references to: **Dr. Robert A. Peura, Chairman, BME Department, Worcester Polytechnic Institute, 100 Institute Road, Worcester, MA 01609. Telephone: 508-831-5447; FAX: 508-831-5483. WPI is an Affirmative Action/Equal Opportunity Employer.**

ASSISTANT PROFESSOR DEPARTMENT OF PHYSIOLOGY EAST TENNESSEE STATE UNIVERSITY JAMES H. QUILLEN COLLEGE OF MEDICINE

Tenure-track position at the assistant professor level is to begin 1 June 1992. Applicant must have a doctoral degree with extensive training in physiology and have two or more years of postdoctoral experience. Potential to develop and sustain a fundable, independent research program will be an important selection criteria. Area of expertise is open, but currently the department has six faculty members whose interests represent a wide range of cellular and systems-oriented research in the physiological sciences. There are opportunities for collaboration throughout the department and college with research groups interested in cell biology of the vascular wall, neuroscience, membrane transport, electrophysiology, cardiovascular control, and cell and molecular biology. East Tennessee State University provides a growing research community, ample start-up funds, modest teaching loads, and a beautiful physical location. Candidates should submit curriculum vitae, names of three references, and a brief research prospectus to: **Dr. William L. Joyner, Professor and Chairman, Department of Physiology, P.O. 19,780A, East Tennessee State University, Johnson City, TN 37614.**

Screening of applicants will begin 1 March 1992. *East Tennessee State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CELL/DEVELOPMENTAL BIOLOGIST

ASSISTANT/ASSOCIATE PROFESSOR positions available for individuals with an established research program in cell/developmental biology. Successful candidates will participate in departmental teaching which includes histology, gross anatomy, and embryology. New faculty are encouraged to participate in a schoolwide program in molecular and cellular sciences. Interested candidates should forward curriculum vitae, names of referees, and a statement of research interests to: **Dr. David W. McCandless, Department of Cell Biology and Anatomy, University of Health Sciences/The Chicago Medical School, 3333 Green Bay Road, North Chicago, IL 60064.**

The Chicago Medical School is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMISTRY/MOLECULAR BIOLOGY MEHARRY MEDICAL COLLEGE

Faculty positions will be available in 1992/93 in the Department of Biochemistry, at the level of **ASSISTANT OR ASSOCIATE PROFESSOR**. Applicants must have a Ph.D. or M.D. degree, or both, and appropriate formal postdoctoral research experience. Joint appointments in clinical science departments are possible. We are seeking individuals who have potential or demonstrated competence in the use of molecular biological approaches to conduct research in molecular medicine, or on fundamental biochemical/cell biological problems. Selected individuals must also be capable of, and committed to, making significant contributions to the teaching and administrative functions of the Department of Biochemistry. Successful applicants will be expected to develop/maintain a funded research program of high quality and to participate in the graduate and professional (medical, dental and allied health) school teaching programs of the department. Applicants should send curriculum vitae, names of four individuals who may be contacted for reference, and a summary (not exceeding three pages) of potential research project(s) to: **Ifeanyi J. Arizne, Ph.D., Chairman, Department of Biochemistry, Meharry Medical College, Nashville, TN 37208. Meharry Medical College is an Equal Opportunity/Affirmative Action Employer.**

ASSISTANT OR ASSOCIATE PROFESSOR BIOCHEMISTRY/MOLECULAR BIOLOGY

The Department of Biochemistry at the Uniformed Services University of the Health Sciences (USUHS) invites applications for two 12-month salaried tenure-track positions available in 1992. Outstanding candidates in all areas of biochemistry and molecular biology are encouraged to apply. Candidates at the assistant professor level must have postdoctoral experience and will be expected to develop a vigorous basic research program. Applicants for associate professor should have an ongoing extramurally funded research program, and have teaching experience. Faculty will participate in the training of medical and graduate students. Please send curriculum vitae, reprints of two to three publications, a statement of future research plans, and at least three letters of recommendation by 5 March 1992 to: **Department of Biochemistry Search Committee, c/o Uniformed Services University of the Health Sciences, Civilian Personnel Office, (LD-BIOCHEM), 4301 Jones Bridge Road, Bethesda, MD 20814. USUHS is an Equal Opportunity Employer.**

ASSISTANT/ASSOCIATE PROFESSOR, DEVELOPMENTAL/MOLECULAR BIOLOGY. The Department of Biological Sciences at The Wichita State University is actively recruiting gifted individuals with demonstrated research and teaching skills in molecular biology for two tenure eligible positions at the assistant/associate professor level. A research emphasis in developmental biology or genetics/immunology is preferable. Both positions require significant postdoctoral training, a record of productive research, and the ability to interact collegially. Appointment at the associate level requires a demonstrated record of funded research activity. Salary competitive with start-up funds available. Deadline for applications is 15 March 1992 or the first of the month until the positions are filled. Submit curriculum vitae, summary of current and future research, and names of three references to: **Chairperson, Search Committee, Department of Biological Sciences, Campus Box 26, The Wichita State University (WSU), Wichita, KS 67208-1595. WSU is an Affirmative Action/Equal Opportunity Employer.**

**THE AARON DIAMOND FOUNDATION
POSTDOCTORAL RESEARCH FELLOWSHIPS
in the Biomedical and Social Sciences**

AIDS OR DRUG ABUSE RESEARCH

The Aaron Diamond Foundation announces the availability of Postdoctoral Research Fellowships in the biomedical and social sciences focusing on AIDS or drug abuse. The purpose of the Fellowships is to attract promising investigators to academic and research institutions in New York City, and to encourage increased research into understanding and solving two of today's most pressing public health problems. The New York State Health Research Council, aided by a distinguished group of scientists comprising The Aaron Diamond Foundation Fellowship Selection Committee, administers the Fellowship Program.

STIPENDS

Fellows are paid annual stipends beginning at \$36,000. Each Fellowship is for two years, with an option for a third year.

ELIGIBILITY

Applicants should have received an MD or PhD within the past seven years. MD's should have completed at least two years of clinical training. PhD's are eligible immediately after graduation or after limited research experience.

The Fellowships are open to U.S. citizens and permanent residents. Women and members of minority groups are especially encouraged to apply.

MENTORS

A potential Fellow must be sponsored by a Mentor at a New York City institution. Mentors who have already expressed interest in participating in the Fellowship Program are listed in the application materials. The Mentor's institution receives \$30,000 annually to cover the Fellow's research costs, travel, tuition and fringe benefits.

APPLICATION DEADLINES

July 31, 1992 and July 30, 1993

INFORMATION AND APPLICATION FORMS

Ellen L. Rautenberg, Program Director, The Aaron Diamond Foundation Postdoctoral Research Fellowships, New York State Health Research Council, 5 Penn Plaza, Room 308, New York, NY 10001
(212) 613-2525

CHAIR, PHARMACOLOGY DEPARTMENT

St. Jude Children's Research Hospital, a private research institute, is recruiting a new chairperson for its established Department of Pharmacology. The appointee will be expected to lead an internationally recognized program in his/her area of interest and to shape the future direction of research within the institution, through faculty recruitment and by contributions to the institution's overall scientific leadership, as a member of the Institution's Executive Committee. The institute is currently undergoing major expansion, and has recently occupied a new 240,000 sf research tower, where substantial laboratory and office space has been reserved for the pharmacology chair. The department currently has 9 faculty, all of whom are NIH funded investigators, and the new chair will be expected to recruit additional faculty. The current departmental budget is approximately \$3 million. The department interfaces with established basic science programs in Virology and Molecular Biology, Biochemistry, Immunology, and Tumor Cell Biology, and established clinical research programs in Hematology/Oncology, Pharmaceutical Sciences and Infectious Diseases. Appointment to the University of Tennessee graduate faculty is also possible. The Chair's salary will be provided through committed endowment funds, together with additional resources commensurate with the needs of a dynamic and productive individual.

Applicants should submit a curriculum vitae and the names and addresses of four references to: Dr. William E. Evans, Chair, Pharmacology Search Committee, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, Tennessee 38105



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

VISIONARY

Chemist/ NMR Spectroscopist

The Du Pont Merck Pharmaceutical Company is seeking an NMR Spectroscopist or a Chemist who is ready to work in a multi-disciplinary environment aimed at drug discovery.

We currently have an exciting and challenging position in the Structural Biology section of the Biotechnology Department. The candidate we seek will collaborate with peptide and medicinal chemists to solve molecular geometry problems through multi-dimensional NMR experiments and their interpretation. In some instances this may involve computer modeling based on NMR data. In addition, you will assist in the maintenance of Varian VXR500S NMR spectrometer and associated off-line processing computer hardware and software.

The qualified candidate will have a BS or MS in a Life, Physical or Computer Science with at least 1-3 years' experience in either NMR spectroscopy, peptide chemistry or computer modeling. Excellent organizational, people and communication skills are also required. Some background in electronics or UNIX computers is highly desirable.

Our location, near Wilmington, DE, offers an attractive lifestyle with easy access to all the cultural, academic and recreational activities of the Eastern Seaboard. The Du Pont Merck Pharmaceutical Company can offer you an excellent compensation and benefits package. To be considered, please forward your resume to: **Employment Office, Dept. SCI-27, The Du Pont Merck Pharmaceutical Company, Du Pont Experimental Station E400/6220,**

**Wilmington,
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The Du Pont Merck Pharmaceutical Company
Merging Strengths . . . Emerging Opportunities.

Opportunities with Monsanto Company

Research Immunology

Today's Monsanto is a company with an exciting future in high-value, high-performance products. We have the following opportunities available in our Immunology Department of Monsanto Corporate Research Laboratories to work in the areas of antigen processing/presentation, T cell recognition, T cell activation and gene transcription:

Immunologist/Research Scientist

We are seeking an individual to lead a team of four to seven scientists working to develop a research program leading to new products for autoimmune diseases.

Qualifications include a M.D. or Ph.D. degree and three to five years of postdoctoral experience in either academia or industry, providing in-depth technical knowledge and a proven track record in molecular or cellular immunology. Problem-solving skills and experience in supervising research activities and leading a group research effort are required.

Postdoctoral Positions

This is an opportunity for qualified candidates in the areas of IL-4 physiology, HLA class II structure-function relationships, development of *in vivo* models of autoimmunity, intracellular trafficking, mechanisms of cellular activation, mechanisms of tolerance, receptor biology, bone resorption and osteoclast function and differentiation. Cellular or molecular immunology/biology experience is desirable.

Please send your résumé with references to: Monsanto Company, Mail Zone BB5B-BS, Attn: Dr. Ben Schwartz, 700 Chesterfield Village Parkway, St. Louis, MO 63198. We're an equal opportunity employer. M/F/H/V.

Opportunity.

We've got it down to a science.

Monsanto

OPPORTUNITIES IN ELECTROPHYSIOLOGY & MOLECULAR BIOLOGY

Neurogen Corporation, a young, dynamic company in the field of neuroscience, is currently expanding its staff in Electrophysiology and Molecular Biology. Neurogen scientists are developing novel therapeutics for neurological & psychiatric disorders.

RESEARCH ASSOCIATE Electrophysiology

The position involves evaluation of drug effects on neurotransmitter receptors in oocytes using two-electrode voltage clamp technique & in cultured cells using the whole cell patch clamp technique. A BS or MS degree in biology, physiology, or a related field plus 1 yr. experience using electrophysiological recording set-up are required.

RESEARCH ASSOCIATES Molecular Biology

Two positions are available in the area of receptor cloning research. A BS or MS degree in biology, physiology, or a related field plus 1 yr. experience with the techniques of DNA sequencing, PCR, screening, subcloning or transfection are required.

Neurogen is located in Branford, CT, near New Haven. We offer a stimulating intellectual environment & state-of-the-art laboratory facilities. Neurogen has a comprehensive compensation program consisting of competitive salary, equity participation, 401K plan, health & medical programs, as well as relocation assistance. Interested candidates should send resume, with cover letter indicating position of interest, to: Director of Human Resources, Neurogen Corp., 35 N.E. Industrial Rd, Branford, CT 06405. see mt

NEUROGEN CORPORATION

Geisinger Clinic

Postdoctoral And Associate Scientist Positions

Positions available for Associate Scientists (three years postdoctoral experience) and postdoctoral fellows. The successful applicants will be engaged in research on the biochemical and molecular mechanisms by which angiotensin peptides and other hormonal and pharmacological stimuli mediate cardiac muscle cell growth under the direction of Dr. Kenneth M. Baker. There will also be the opportunity to engage in research defining the role of a localized intracardiac renin-angiotensin system in mediating cardiac muscle cell growth, with an emphasis on the regulation of the precursor genes for this system, and cloning the expression of the relevant receptors.

Competitive salary and fringe benefits are available. Please send CV and three names or letters of reference to: Human Resources Dept (KB), Geisinger Clinic, 100 North Academy Avenue, Danville, PA 17822-3024. Equal Opportunity Employer M/F/H/V.

Geisinger

POSITIONS OPEN

Tenure-track **ASSISTANT/ASSOCIATE PROFESSOR** position starting August 1992 in science education and biology, botany or zoology. Requires Ph.D. in biological science and a teaching credential or willingness to seek one. Teach biology, science education methods, supervise student teachers. Send application to: Life Science Education Search Committee, Biology Department, Humboldt State University, Arcata, CA 95521. Telephone: 707-826-3245. Completed applications should be received by 17 March 1992 for full consideration. *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

DEPARTMENT OF MICROBIOLOGY AND THE COMPREHENSIVE CANCER CENTER

Applications are invited for a vacant faculty position in molecular immunology jointly supported by the Department of Microbiology and the Ohio State University Comprehensive Cancer Center. Preference will be given to established investigators applying for a position at the **ASSOCIATE PROFESSOR OR PROFESSOR** level. The successful applicant will be expected to maintain an internationally recognized, molecular-oriented research program in cancer immunology and to participate in graduate and undergraduate teaching. This is one of several new cancer-related positions that will be filled in the near future to expand the research program of the Ohio State University Comprehensive Cancer Center coincident with the establishment of the Arthur G. James Cancer Hospital and Research Institute.

Applicants should submit curriculum vitae, statement of current research interests and future plans, and the names of three references to: Professor John N. Reeve, Chair, Department of Microbiology, The Ohio State University, Columbus, OH 43210; telephone: 614-292-2301 or FAX: 614-292-1538. Review of applications will begin immediately and continue until the position is filled. *Women and minority candidates are very strongly encouraged to apply. The University is an Affirmative Action/Equal Opportunity Employer.*

UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE

The Department of Biochemistry and Biophysics and the Johnson Research Foundation at the University of Pennsylvania School of Medicine invite applications from outstanding candidates for full-time tenure-track faculty at the **ASSISTANT PROFESSOR** level. The search will focus on individuals with interests in molecular biophysics and structural biology applying methods including diffraction, magnetic resonance, and other spectroscopies. Candidates should forward their curriculum vitae, a summary of research interests, and arrange for three letters of recommendation to be sent to: Ms. Marianne Goldstein, Department of Biochemistry and Biophysics, University of Pennsylvania School of Medicine, B501 Richards Building, Philadelphia, PA 19104-6089. The deadline for applications is 15 April 1992. *The University of Pennsylvania is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT/ASSOCIATE/FULL PROFESSOR FACULTY POSITION IN GEOCHEMISTRY/Rutgers University. The Institute of Marine and Coastal Sciences of Rutgers University invites applications for a tenure-track position in the area of geochemistry.

Applicants must have a Ph.D. and a strong record of published research and grant support. The successful candidate will be expected to teach courses primarily at the senior and graduate student level, as well as to establish an innovative, forward-looking research program in inorganic or organic geochemistry. Appointment will be at a level commensurate with prior experience.

Curriculum vitae, a statement of research interests, and the names of four references should be sent prior to 31 March 1992, to: Dr. Frederick Grassle, Director, Institute of Marine and Coastal Sciences, P.O. Box 231, Rutgers University, New Brunswick, NJ 08903-0231.

Rutgers University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

UNIVERSITY COLLEGE OF SWANSEA CHAIR IN PSYCHOLOGY

Applications are invited from candidates with a strong record of research for the second Chair in the Department of Psychology, which Chair has been established to enhance the research profile of a rapidly expanding department. Those with interests in any area of the subject are encouraged to apply. The appointment will commence from 1 October 1992 or as soon as possible thereafter and the salary will be in accordance with normal university practice. Further particulars may be obtained from the **Personnel Office, University College of Swansea, Singleton Park, Swansea, SA2 8PP, United Kingdom**, to which office applications (ten copies) should be sent by Tuesday, 31 March 1992.

CHAIRPERSON AND PSYCHIATRIST-IN-CHIEF DEPARTMENT OF PSYCHIATRY NEW YORK HOSPITAL- CORNELL MEDICAL CENTER

The New York Hospital-Cornell Medical Center seeks a distinguished psychiatrist for appointment as professor and chairperson, Department of Psychiatry, Cornell University Medical College, and psychiatrist-in-chief, The New York Hospital. Candidates must present evidence of experience and accomplishment in teaching, research, clinical services and administration.

Send current curriculum vitae, which includes a list of publications, to: **Dr. E. Darracott Vaughan, Chairman, Psychiatry Search Committee, Room F-105, Cornell University Medical College, 1300 York Avenue, New York, NY 10021.**

An Equal Opportunity Employer.

NORTHWESTERN UNIVERSITY CHICAGO, ILLINOIS SOLOVY-ARTHRITIS RESEARCH SOCIETY CHAIR

The Division of Arthritis-Connective Tissue Diseases is seeking to fill an endowed position with an accomplished investigator. We are seeking a Ph.D. or M.D. with interests in basic cellular and molecular immunology. The individual should qualify at the rank of a **SENIOR ASSOCIATE** or **FULL PROFESSOR**. The position offers an opportunity to collaborate with basic and clinical scientists within an exciting environment. If interested, please send curriculum vitae, a statement of research interests and the names of three references to: **Richard M. Pope, M.D., Department of Medicine, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, IL 60611.** Northwestern University is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSISTANT MEMBER**. The successful candidate will have demonstrated outstanding potential for a research career and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and three letters of reference. Please send applications, which we would appreciate receiving by 31 March 1992, to:

Dr. Kenneth J. Mariani
Chairman

Program in Molecular Biology
Sloan-Kettering Institute
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021

SKI/MSKCC is an Equal Opportunity Employer.

Visiting Scientist Research Unit

The Swedish Cancer Society announces support for qualified guest research in Sweden.

Our intention is to provide facilities for a small research unit led by a well qualified foreign scientist working within a recognized Swedish Department or Clinic concerned with cancer research.

The Swedish Cancer Society will provide cost for travel (including family), salary matching the qualifications of the applicant and contribute to laboratory expenses. Funding will take the form of a lump sum which could, in addition to the expenses mentioned, also include the salaries of one or two technical assistants. The successful applicant will be responsible for the direct economic administration of his/her grant in general conformation with the policy of the respective university. The grant runs for 3 years with possibility of a one year prolongation.

The key part of the application should be a joint research program by the host department/clinic and the applicant. It should clearly outline the objectives, methods and relevance for cancer of the project. We are particularly interested in plans which pursue original or otherwise fruitful avenues of research where a synergistic effect can be expected between the host laboratory and the visiting scientist. The Swedish Cancer Society has a tradition of supporting cancer research in a broad sense. Supportable projects could range from basic studies to clinically oriented ones including epidemiology, prevention of cancer and psycho-social aspects of the disease. We require the receiving laboratory/clinic to provide free access to all necessary basic facilities and expect the visiting scientist to participate in activities of the Swedish Cancer Society when appropriate. Barring unforeseen circumstances the awardee is expected to continue his/her scientific work uninterrupted during at least three years at the location chosen in Sweden.

The application must further contain a CV from the applicant and an estimate of total yearly expenses.

The Swedish Cancer Society will set aside a maximum of 3×10^6 SEK/year (corresponding to \$500,000) for this initiative. Providing that adequate quality requirements are met, one grant will be reserved for Eastern Europe (Soviet Union including all its Federal Republics, Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Roumania, Yugoslavia).

Applications will be received not later than February 28, 1992. A special selection committee will be organized by the Swedish Cancer Society. Applicants will if necessary be subject to personal interviews either in Sweden or at other suitable locations.

Applications should be forwarded to the **Swedish Cancer Society, Box 17096, 104 62 STOCKHOLM, Sweden**. Further information on telephone 08-772 28 00.



Magainin Pharmaceuticals Inc.

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

Assistant Director of Clinical Research/Regulatory Affairs – Advanced degree required in the biological sciences and at least 3-5 years experience as a Clinical Research Associate in design, administration, monitoring of human clinical trials of investigational drugs and relevant experience in the area of topical anti-infective drugs. Experience in presentations, submissions and other communications with Federal Regulatory Agencies (FDA) is required. Candidate must have a working understanding of Good Clinical Practices as applied to the management of clinical trials, database management, data analysis and the regulatory submissions associated with IND's and NDA's.

Peptide Chemist – Ph.D. with 1-4 years experience or MS with 5+ years experience in the pharmaceutical industry or biomedical research. Candidates should have interest and experience in peptide synthesis, structure activity studies, isolation, purification & characterization of peptides, medicinal chemistry modification of peptides.

Steroid Chemist – Ph.D. with 5+ years experience in industry or as academic faculty for design and synthesis of novel steroid therapeutics.

Drug Metabolism/Pharmacokinetics – Ph.D. with 3-4 years experience in areas of drug metabolism and pharmacokinetics. Responsible for development and utilization of analytical chromatographic and RIA methods for monitoring drugs and metabolites in biological samples. Isolate and identify metabolites utilizing instrumental methods.

For consideration, please submit curriculum vitae, (indicate position desired), description of research interests and salary requirements to: **Director of Human Resources, MAGAININ PHARMACEUTICALS INC., 5110 Campus Drive, Plymouth Meeting, PA 19462.**

Magainin Pharmaceuticals Inc., is located in new state-of-the-art facilities in suburban Philadelphia. We offer excellent salaries, benefits, outstanding scientific interactions and the opportunity to change the future of therapeutics. An Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR OF SURGERY UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON

Applications are invited for a tenure-track appointment as assistant/associate professor of surgery within the Department of Surgery/Division of Immunology and Organ Transplant. This American Board of Surgery-qualified surgeon will assist the Chief of the Liver Transplant Service in all aspects of liver transplantation including donor selection, organ procurement, recipient selection, pre- and postoperative care, immunosuppressive therapy, and out-patient follow-up. Prior experience in a liver transplant program is preferred, but not required. Submit application, including curriculum vitae and letters of recommendation, no later than 1 March 1992 to:

R. Patrick Wood, M.D.
Associate Professor of Surgery
Chief, Liver Transplant Service
University of Texas Health Science Center
at Houston
6431 Fannin Street
Suite 6.240
Houston, TX 77030
Telephone: 713-792-5678. FAX: 713-792-5917
The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

INDIANA UNIVERSITY SCHOOL OF MEDICINE TERRE HAUTE CENTER

Is seeking an individual to assume the tenure-track position of **ASSISTANT DEAN** and **DIRECTOR** of the Terre Haute Center for Medical Education. In cooperation with Indiana State University in Terre Haute, the center is one of eight which provides the first- and second-year medical curriculum as part of the Indiana University System of Statewide Medical Education. The center also provides education and training for graduate students in the Department of Life Sciences at Indiana State University. Candidates should possess an M.D. and/or Ph.D., be knowledgeable in scientific research and have a keen interest and experience in medical education and administration, together with an aptitude for community involvement. Salary is negotiable. Send curriculum vitae and references to: **Lindley H. Wagner, M.D., Chairman, Search Committee, Dean's Office, Fesler Hall 302, 1120 South Drive, Indianapolis, IN 46202-5114.**

Affirmative Action/Equal Opportunity Employer, M/F.

DIRECTOR MICHIGAN STATE UNIVERSITY (MSU) U.S. DEPARTMENT OF ENERGY (DOE) PLANT RESEARCH LABORATORY (PRL)

Applications for the position of Director of the MSU-DOE Plant Research Laboratory at Michigan State University are invited from plant scientists with an outstanding record of research achievement. We seek an individual who will maintain an active research program, who is capable of providing scientific leadership and is willing to oversee the administration of the 12 to 14 active research groups which comprise the Plant Research Laboratory. Since the mission of the Plant Research Laboratory involves the solution of energy-related problems in the plant sciences, the Director should be appreciative of both basic and applied research in the plant sciences and should have a desire to participate in the formulation and implementation of research initiatives in these areas. The Director will be appointed as a tenured professor in an appropriate academic department at Michigan State University. The salary is intended to be attractive, and access to laboratory space, research facilities and levels of ongoing research support are exceptional.

Inquiries or applications stating full professional details and names of at least three referees should be directed to: **C. R. Somerville, Chair, PRL Search Committee, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824-1312. Telephone: 517-355-5159.** Applications should be received by 15 April 1992, but the search will continue until a suitable candidate is identified.

Michigan State University is an Equal Opportunity Affirmative Action Employer.

POSITIONS OPEN

CANCER CYTOGENETICIST. The City of Hope (COH) National Medical Center is seeking an ABMG-certified or Board-eligible cytogeneticist for the position of **ASSOCIATE DIRECTOR**. The candidate must have a doctoral degree (M.D. or Ph.D.) and a strong interest in clinical service work; experience in molecular cytogenetic techniques is desirable. COH is a 220-bed institution dedicated to the diagnosis and treatment of hematologic malignancies and solid tumors. Limited teaching. Inquiries, curriculum vitae and references (three) should be submitted to: **Dr. Marilyn Slovak, City of Hope National Medical Center, Cytogenetics, N.W. Building, Room 2255, 1500 East Duarte Road, Duarte, CA 91010. Affirmative Action/Equal Opportunity Employer.**

BIOCHEMISTRY, FACULTY POSITION. Tenure-track position in the Department of Chemistry at Auburn University beginning September 1992 to participate in undergraduate and graduate teaching, and to initiate a high-quality fundable research program. Research experience and interests may be in any area of biochemistry, but nucleic acid biochemistry is preferred. Ph.D. and postdoctoral research in biochemistry required; teaching experience is desirable. Send curriculum vitae (noncitizens must include current visa status), statement of research interests and goals, and letters from three references to: **Dr. J. H. Hargis, Department of Chemistry, Auburn University, AL 36849. Auburn University is an Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.**

FACULTY POSITIONS—ZOOLOGY WEBER STATE UNIVERSITY (WSU)

The Department of Zoology invites applications for two tenure-track positions at the **ASSISTANT PROFESSOR** level starting in September 1992. Candidates with exceptional qualifications and experience will be considered at the **ASSOCIATE** level.

(1) **VERTEBRATE ZOOLOGIST:** Teaching responsibilities include general education and upper division classes, e.g., comparative anatomy or course in specialty area.

(2) **MOLECULAR BIOLOGIST:** Teaching responsibilities include general education and upper division classes, e.g., courses in cell biology or specialty area. Participation in biotechnician training program desirable.

Active research programs (preferably involving undergraduates) expected. Send cover letter addressing teaching philosophy and research interests, curriculum vitae, and up to three reprints, and have three letters of reference sent to: **Dr. Samuel Zeveloff, Chair, Department of Zoology, c/o Human Resources, Weber State University, Ogden, UT 84408-1016. Telephone: 801-626-6165; FAX: 801-626-7445. Deadline is 3 March 1992. WSU is an Affirmative Action/Equal Opportunity Employer.**

ASSOCIATE/FULL MEMBER MEMORIAL SLOAN-KETTERING CANCER CENTER

The Program in Molecular Biology, Sloan-Kettering Institute (SKI), Memorial Sloan-Kettering Cancer Center (MSKCC), invites applications for a position as **ASSOCIATE MEMBER** or **FULL MEMBER**. The successful candidate will have an outstanding record of research accomplishment and will be using a combination of modern biochemical, cell biological, or molecular genetic approaches to study the regulation of cellular growth processes in higher eukaryotes. Areas of interest include: genome structure and function, cellular signaling mechanisms, replication, transcription, translation, oncogenesis, and developmental control mechanisms. Applications should include curriculum vitae, a summary of current research activities and future research plans, and the names, addresses, and telephone numbers of at least four references. Please send applications, which we would appreciate receiving by 31 March 1992 to:

Dr. Kenneth J. Mariani
Chairman
Program in Molecular Biology
Sloan-Kettering Institute
Memorial Sloan-Kettering Cancer Center
1275 York Avenue
New York, NY 10021
SKI/MSKCC is an Equal Opportunity Employer.

POSITIONS OPEN

THE BEN-GURION UNIVERSITY OF THE NEGEV

TENURE-TRACK OPENING in the Program of Biotechnology. Main research should be related to bioreactors. Send curriculum vitae, three references and research plans to: **Professor J. C. Merchuk, Department of Chemical Engineering, Ben-Gurion University, Beer Sheva 84105, Israel.**

UNIVERSITY OF VIRGINIA DEPARTMENT OF PHYSICS

The Department of Physics of the University of Virginia invites applications for a tenured or tenure-track faculty position in the area of experimental condensed matter physics. Exceptional candidates in other fields will also be considered. The position may be available in September 1992. Applicants should be demonstrably able to carry out an independent research program and be committed to excellence in undergraduate and graduate education. Apply to: **Daniel Larson, Chairman, Physics Department, University of Virginia, McCormick Road, Charlottesville, VA 22901. The University of Virginia is an Affirmative Action, Equal Opportunity Employer and encourages applications from women and minority candidates.**

INDIANA UNIVERSITY SCHOOL OF MEDICINE EVANSVILLE CENTER

Is seeking candidates for the tenure-track position of **ASSISTANT DEAN**, School of Medicine and **DIRECTOR**, Evansville Center for Medical Education. In cooperation with the University of Southern Indiana and the University of Evansville, the center provides the first- and second-year medical curriculum as part of the Indiana University System of Statewide Medical Education. An interdisciplinary faculty is involved in teaching and in basic and clinical research. New facilities are currently under construction. Candidates must have an M.D. and/or Ph.D. and be experienced in medical education, research and administration. Salary is negotiable. Send curriculum vitae and references to: **George T. Lukemeyer, M.D., Chairman, Search Committee, Dean's Office, Fesler Hall 302, 1120 South Drive, Indianapolis, IN 46202-5114.**

Affirmative Action/Equal Opportunity Employer, M/F.

DIRECTOR ENVIRONMENT AND SUSTAINABLE AGRICULTURE

Winrock International, a leading nonprofit agricultural and rural development firm, seeks a Director for its Center for Environmental and Sustainable Agriculture to provide program leadership, coordinate program strategy, mobilize resources for center activities, and provide technical support for overseas projects. Ph.D. required in ecology, natural resource management or agriculture-related field, and at least 10 years of experience including work in developing nations related to sustainable agricultural systems. Salary commensurate with experience. Excellent benefits. Send cover, résumé and three references by 29 February 1992 to: **Dr. E. Ospina, Winrock International, Route 3, Box 376, Morrilton, AR 72110. Equal Employment Opportunity/Affirmative Action. Women, minorities, persons with handicaps and veterans are encouraged to apply.**

DIRECTOR OF RESEARCH

Applications are invited for the position of director of research in the Department of Obstetrics and Gynecology at the Albert Einstein Medical Center. The successful candidate will develop an independent research program, oversee other research activities within the department, and participate in teaching programs for medical students and resident physicians. Well-equipped laboratories, technician support, and a faculty appointment at Temple University School of Medicine is available. Candidates must have a Ph.D. degree, several years of productive postdoctoral research experience, and interests in molecular or cell biology as related to reproductive function. Applications should include curriculum vitae, statement of research interests, copies of recent publications, and names of three references. Send to: **Dr. Sze-ya Yeh, Chairman, Department of Obstetrics and Gynecology, Klein POB Suite 410, Albert Einstein Medical Center, 5401 Old York Road, Philadelphia, PA 19141.**

SENIOR RESEARCH BIOLOGIST/TOXICOLOGIST

Merck Sharp and Dohme Research Laboratories has an immediate opening in its Agricultural Research and Development Department for a Biologist/Insect Toxicologist.

The successful candidate will be responsible for the evaluation and characterization of novel insecticide leads from our basic research programs and for making recommendations for further product development. The candidate will be expected to design and validate new bioassays for the discovery of synthetic chemical and natural product insecticides with unique mechanisms of action and to introduce these assays into high volume screens within our basic research program.

The successful candidate should have a Ph.D. or equivalent in Biology or related field with direct experience in Insect Toxicology/Biochemistry. Familiarity with techniques to evaluate mode of action and toxicokinetics of insecticides is essential.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles south of New York City. Please forward a curriculum vitae with a cover letter to: **Human Resources Mgr., Dept. S-31, Merck Sharp and Dohme Research Lab, P.O. Box 2000, WBC-155, Rahway, New Jersey 07065-0900.**

EEO/AA/VH/Employer



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A century of value
and vision.

DEPARTMENT OF BOTANY University of British Columbia

The Department of Botany at The University of British Columbia is seeking applications to fill two tenure track positions. The first is in the area of **Departmental Botany**. Preference will be given to individuals employing a variety of approaches (molecular, genetic, cytological) to fundamental problems in plant development. The second is for a **Bryologist, Phycologist or Mycologist** whose research interests emphasize biodiversity, systematics, evolution or evolutionary ecology.

Candidates for these positions must have a Ph.D. degree and published evidence of research ability. The expected date of appointment is **July 1, 1992** (or as negotiated). Application deadline is **February 29, 1992** or until such time as suitable candidates are identified.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC encourages qualified women and minority applicants. The position is subject to final budgetary approval.

Applicants should send a curriculum vitae, selected reprints, a statement of research interests and have at least three letters of reference sent to:



Dr. David H. Turpin, Head
Department of Botany
University of British Columbia
#3529 - 6270 University Blvd.
Vancouver, B.C. CANADA, V6T 1Z4

Senior Toxicologist

Atlantic Richfield Company (ARCO), a Fortune 50 natural resources company and a leader in the petroleum industry, is seeking a Senior Toxicologist to add to its Environment, Health and Safety Department staff. The position will be located in the company's Los Angeles headquarters.

The successful candidate will perform toxicologic hazard and risk assessments, assure product safety regulatory compliance, represent the company on trade association committees and oversee product safety testing programs.

Applicants should possess a doctoral degree in Toxicology or a related public/environmental health science. In addition, at least five years of experience in regulatory toxicology is required. Specific familiarity with chemical or petroleum industry issues is preferred. Board certification is desirable. Frequent internal and external interactions will make excellent communication skills critical.

A competitive salary, benefit and relocation package will be offered. Confidential treatment of all inquiries can be assured.

Resumes should be directed to: **ARCO, P.O. Box 2679, AP4285, Los Angeles, CA 90071.**

ARCO representatives anticipate the interviews will be conducted at the upcoming Society of Toxicology meeting (February 23-28). Prompt replies are encouraged. If this is not convenient, other arrangements can be made.

Atlantic Richfield is an Affirmative Action/Equal Opportunity Employer.

ARCO 



COLLABORATIVE RESEARCH, INC. is an active participant in the Human Genome Project, having been awarded major grants and contracts for projects to map human chromosomes and sequence the genomes of important micro-organisms. We are also a leader in developing DNA probe technology for the diagnosis of genetic diseases, for cancer testing and for use in personal identification.

Senior or Postdoctoral Scientists Molecular Biology

Several positions available for Ph.D.'s in life sciences with molecular genetics experience and a strong interest in one or more of the following aspects of the Human Genome Project: multiplex sequencing and technology development; improving YAC vectors and constructing YAC libraries; physical and genetic mapping of human chromosomes; developing identity tests.

Computational Molecular Biologist

Will design innovative algorithms for genetic mapping, physical mapping and DNA sequence analysis for genome research. A Ph.D. or equivalent in Biology, Mathematics or Computer Science is required as well as a strong interest in genetics or molecular biology. Experience in FORTRAN, C, VMS, and UNIX is also required as is experience with relational and/or object oriented databases. Strong leadership and excellent communication skills are essential.

CRI's research facilities are located in Waltham, Massachusetts, a suburb of Boston. We have state-of-the-art laboratories and interact with the academic community and biotech industries which are prevalent in this area. We offer a very competitive compensation and benefits package.

Interested candidates should submit their curriculum vitae along with three references to: **Collaborative Research, Inc., Attn: Human Resources, 1365 Main Street, Waltham, MA 02154.**



An Equal Opportunity Employer M/F/H/V

ELEANOR ROOSEVELT INSTITUTE 1992 SOMATIC CELL AND MOLECULAR GENETICS WORKSHOP

The Eleanor Roosevelt Institute is offering a Somatic Cell and Molecular Genetics Workshop, July 13-26, 1992. This NCI supported course provides a combined somatic cell and molecular biology workshop experience, designed to provide a "hands-on" introduction to the methodology and concepts of current molecular biology procedures for scientists who need to exploit these techniques for their continuing research programs. The content of this workshop also provides the basic techniques needed for researchers interested in initiating genome mapping studies. Included in the curriculum are: somatic cell hybridization and mutant isolation, yeast molecular biology, isolation and analysis of DNA and RNA, preparation and *in vitro* translation of poly-adenylated mRNA, DNA-mediated gene transfer, PCR, pulse-field gel electrophoresis, DNA sequencing, Western, Northern, and Southern analyses, fluorescence *in situ* hybridization (FISH), and the construction, analysis, and screening of genomic libraries. Principal investigators whose research interests focus on malignancy are particularly invited to apply. A registration fee of \$200 will be charged and a per diem stipend is provided. Applicants should submit a letter describing how the workshop will assist their current research, along with a curriculum vitae which lists publications (no abstracts) for the past five years only, to: **Peggy J. Woodson, Somatic Cell & Molecular Genetics Workshop, Eleanor Roosevelt Institute, 1899 Gaylord Street, Denver, CO 80206.** Please **DO NOT** send registration at this time. Application deadline: March 31, 1992. *The Eleanor Roosevelt Institute is an equal opportunity/affirmative action institution and invites and encourages applications from women and minorities. Open to U.S. Citizens and Permanent Residents only.*



CENTER FOR
ADVANCED
BIOTECHNOLOGY
AND
MEDICINE

Postdoctoral Research Fellow: Transcriptional Regulation in the Nervous System

Highly motivated postdoctoral researchers sought to study the regulation of gene expression in the developing nervous system of mouse. Specific areas of interest include:

- (i) Characterization of the DNA binding and transcriptional activities of neuronal-specific transcriptional regulatory proteins.
- (ii) Identification and characterization of the regulatory elements that control the expression of neuronal target genes.

The CABM is a newly established molecular biology research institute with state-of-the-art facilities available. Interested candidates should send CV and arrange to have three letters of reference sent to:

**Dr. Cory Abate
CABM**

**679 Hoes Lane
Piscataway, NJ 08854**

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Jointly Administered by the University of Medicine and Dentistry of New Jersey and Rutgers, The State University of New Jersey

engineering/technical

SELF ASSESSMENT & QUALITY ASSURANCE OFFICER (Position #TP3301)

The Continuous Electron Beam Accelerator Facility (CEBAF) is the nation's highest priority nuclear physics research site. Currently, a significant position exists within our Office of Technical Performance for the knowledgeable professional who will guide the Self Assessment and Quality Assurance activities of our laboratory. Our successful Officer will develop and implement programs and policies • monitor and report on all facets of program implementation/progress • identify/analyze areas of improvement • interact with DOE officials • interpret agency orders and regulations.

Credentials must include a knowledge of the following disciplines plus a B.S. degree in one of them: mechanical, electrical, and civil engineering, engineering physics, and applied physics. Master's or Ph.D. is preferred. Five (5) years of applicable experience in the construction and/or operation of a complex technical facility are essential, as are effective negotiation skills and a familiarity with government regulations. We offer attractive salary (\$43,500-\$86,100), benefits and professional development. For consideration please direct your confidential resume with salary history---specifying position number and job title---to: **CEBAF, Employment Manager, Dept. TP, 12000 Jefferson Ave., Newport News, VA 23606.** An Equal Opportunity, Affirmative Action Employer.

CEBAF

The Continuous Electron Beam Accelerator Facility

SENIOR BIOLOGIST

Wyeth-Ayerst Research, a worldwide producer of biologicals and pharmaceuticals, has a current opening for a Senior Biologist in its Radnor, Pennsylvania headquarters.

This position will be responsible for the maintenance of cell lines, virus propagation and purification, virus titrations and serological assays, including virus neutralizations, RIAs, ELISAs and Western Blotting. Additional responsibilities will include the ordering of reagents and equipment maintenance. A BS or MS in Biological Sciences (Microbiology, Immunology, Virology) and 4-5 years laboratory experience are required. Experience in cell culture techniques, virology and immunology are also necessary.

We offer competitive salaries and compensation programs in a modern, professional setting. For immediate consideration, forward your resume with salary requirements to: **Wyeth-Ayerst Research Personnel, Position #12, P.O. Box 8299, Philadelphia, PA 19101.** An equal opportunity employer, M/F/H/V responses encouraged. Principals only.

WYETH AYERST

Leading The Way For A Healthier World.

CELLULAR AND MOLECULAR GENETICIST IN FISSION YEAST

The Laboratory of Molecular Virology of the Division of Cancer Etiology, National Cancer Institute is seeking a molecular geneticist for a permanent position. The candidate must have an M.D. and/or Ph.D. degree or equivalent experience and have postdoctoral experience in molecular biology and molecular genetics using *Schizosaccharomyces pombe*. The candidates strong background and knowledge of fission yeast and gene regulation in mammalian cells is required to support ongoing projects involved in isolating genes encoding transcription factors of mammalian and viral genes by complementation analysis. The position has a salary range of \$38,861 to \$46,631 depending on experience and qualifications. If interested, please send a curriculum vitae and relevant publications in scientific journals by **March 6, 1992** to:

Ms. Kathleen McBrien
Program Administrative Officer
BCP, DCE, NCI
National Institutes of Health
Building 41, Room A100
9000 Rockville Pike
Bethesda, MD 20892

U.S. Citizenship Required
NIH is an Equal Opportunity Employer

Share Our Worldwide Commitment To Discovery.

As one of the world's leading pharmaceutical companies, Eli Lilly and Company has a vision for tomorrow: to enhance the discovery of pharmaceuticals and expand our knowledge of medical research to benefit people the world over. We've had a direct presence abroad for more than 70 years, and today our products are available in more than 110 countries.

Supported by a research budget in excess of \$700 million, our 4,000 research scientists and technicians are pursuing a wide range of important research projects. We're developing innovative therapies for cancer; cardiovascular, pulmonary, and skeletal diseases; diabetes; CNS conditions; and bacterial, fungal, and viral infections.

We are seeking qualified scientists for our discovery research and development divisions. Applicants should have an MS or BS and research experience in biochemistry, pharmacology, physiology, behavioral pharmacology, aquatic toxicology, environmental toxicology, neuroscience, molecular biology, yeast genetics, or cell biology.

If you share our vision for the future and our commitment to scientific excellence, we invite your inquiry. For prompt consideration, please forward your resume to: Scientific Recruitment, Dept. S-292, Eli Lilly and Company, Lilly Corporate Center, Indianapolis, IN 46285. An equal opportunity employer.



Geisinger Clinic

Postdoctoral Fellow/ Associate Scientists

Positions are available in Dr. Lawrence Rothblum's laboratory studying the mechanism of transcription and the regulation of gene expression, with specific focus on the mammalian ribosomal RNA genes. The positions require a Ph.D. with experience in protein chemistry and/or molecular biology. Candidates for the position of associate scientist should have at least 2 years of relevant postdoctoral training. Experience in tissue culture methodologies would also be desirable.

The Research Center is housed in a modern, completely equipped facility, within convenient driving distance of New York City, Philadelphia and Washington, D.C. and several major universities, yet it still offers the benefits of a small town environment. Interested candidates should send copies of their curriculum vitae and the names of three references to: **Human Resources Dept (LR), Geisinger Clinic, Danville, PA 17822-3024. E.O.E. M/F/H/V.**

Geisinger

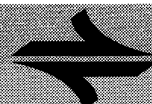


Amylin Pharmaceuticals, Inc. in San Diego, CA, is a development stage pharmaceutical company working on products for diabetes and related metabolic disorders, initially based on amylin, a recently discovered pancreatic beta cell protein hormone (see *Cooper et al, Biochemica et Biophysica Acta (1989) 1014:247-58*). The Department of Physiology is currently recruiting for a:

SENIOR SCIENTIST METABOLIC RESEARCH

The selected candidate will have a demonstrated record of achievement in the study of metabolism and metabolic control. Candidates should have more than 5 years' postdoctoral experience, and will have a working knowledge of the biochemistry of fuel homeostasis at levels of biological organization ranging from the cell to the whole organism. The research programs include the study of the effects of the pancreatic B-cell hormone, amylin, on key enzymes and metabolic pathways.

Amylin Pharmaceuticals, Inc. offers a stimulating and challenging opportunity to participate in a new area of biomedical science, as well as an excellent benefits package which includes equity participation. Please send your curriculum vitae and names and addresses of three references to: **Ms. Audrey McGovern, Human Resources Administrator, Dept. 310, Amylin Pharmaceuticals, Inc., 9373 Towne Centre Dr., Suite 250, San Diego, CA 92121 or FAX (619) 552-2212. Amylin Pharmaceuticals, Inc. is an Equal Opportunity Employer.**



AMYLIN

POSITIONS OPEN

TENURE-TRACK FACULTY POSITION IN COMPLEX SYSTEMS AND BRAIN SCIENCE is anticipated (pending legislative approval) at Florida Atlantic University (FAU) assigned to a new NIMH-sponsored multidisciplinary training program for pre- and postdoctoral fellows. Level of appointment is open. We seek an outstanding individual capable of generating extramural support wishing to research and teach in an explicitly interdisciplinary setting. Two areas of research are of special interest: (1) human sensorimotor control with ability to integrate behavioral, neural and computational/robotics approaches, and (2) experimental studies of neural circuitry and its modulation that subserve pattern generation in vertebrates or invertebrates. A postdoctoral **RESEARCH ASSOCIATE** position with interests in the above areas is also anticipated.

Please send curriculum vitae, representative reprints and four letters of reference by 16 March 1992 to: J. A. S. Kelso, Florida Atlantic University, Center for Complex Systems, P.O. Box 3091, Boca Raton, FL 33431. FAU is an Equal Employment Opportunity/Affirmative Action Employer.

FACULTY POSITION UNIVERSITY OF PITTSBURGH

The Department of Behavioral Neuroscience is seeking candidates for a tenure-track position available July 1992. The successful candidate will be required to establish a research program in one of two areas: (1) in vivo hippocampal electrophysiology, preferably with behavioral expertise in memory and learning, and (2) synaptic physiology, preferably in the area of physiology and biophysics of synaptic transmission in the vertebrate brain. Applicants should have a Ph.D. or M.D. degree and postdoctoral experience. Faculty rank, salary, space, and seed money will be commensurate with experience. Please send curriculum vitae, a one-page statement of research goals, name of three references, and three representative publications to:

Dr. German Barriónuevo
Search Committee Chairperson
Department of Behavioral Neuroscience
446 Crawford Hall
University of Pittsburgh
Pittsburgh, PA 15260

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

HEAD DEPARTMENT OF ANIMAL SCIENCE IOWA STATE UNIVERSITY

Iowa State University is seeking candidates for the position of Head, Animal Science Department. Candidates must have an earned doctorate in animal science or closely related field of animal agriculture and demonstrated excellence in research, teaching, and/or service. Candidates must have demonstrated leadership qualities, public relations skills and administrative experience. A strong understanding of undergraduate and graduate teaching, research, and extension programs is essential. Experience in soliciting and obtaining extramural funding is highly desirable. The ability to communicate effectively with professional and academic communities and with agribusiness is required. The successful candidate must qualify for the rank of professor with tenure in the Animal Science Department.

The Department of Animal Science consists of 52 tenure-track and adjunct faculty and 116 support staff persons. The department offers B.S. degrees in animal science and in dairy science; M.S. and Ph.D. degrees in animal breeding, animal nutrition, meat science, muscle biology, nutritional physiology, poultry nutrition, poultry products technology and physiology of reproduction; and the M.S. degree in animal production. The department currently has more than 500 undergraduates and 100 graduate students.

To apply, candidates should provide a letter of application, résumé, and the name, address and telephone number of three references qualified to comment on the applicant's qualifications. Completed applications must be received by 1 April 1992 or until position is filled. Position is available 1 July 1992. Send applications to: Dr. James Gilley, Chair, Search Committee, 122 Curtiss Hall, Iowa State University, Ames, IA 50011.

Iowa State University is an Equal Opportunity/Affirmative Action Institution. Women, minorities and members of other protected groups are encouraged to apply.

POSITIONS OPEN

VICE CHAIRPERSON. The Department of Pathology at Wayne State University invites applications for a Vice Chairperson to direct an experimental pathology section. The position includes teaching pathology residents, directing a graduate program and involvement with second-year medical students organizing the medical student teaching program. The individual will also be charged with building a cancer-related research group. Wayne State University Medical Center is a comprehensive cancer center, which is comprised of six hospitals with 45 pathologists and 20 Ph.D.'s. Interested applicants should submit their curriculum vitae and references to: John D. Crissman, M.D., Professor and Chair, Department of Pathology, Harper Hospital, 3990 John R, Detroit, MI 48201. An Equal Opportunity/Affirmative Action Employer, M/F.

ASSISTANT STAFF POSITION SECTION OF DIGESTIVE DISEASE RESEARCH THE CLEVELAND CLINIC FOUNDATION

Two new positions at the Assistant Staff (Professor) level are available in the Section of Digestive Disease Research, Research Institute, Cleveland Clinic Foundation. Positions are targeted for expansion of basic investigation in inflammatory bowel disease. The candidates must have a Ph.D. or M.D. degree and potential for an independent career in research. Their area of expertise can include molecular biology, cell biology, immunology, biochemistry, etc., but they must be interested in the gastrointestinal tract as a target organ and/or inflammation as a mechanism of disease. Package includes laboratory space, equipment, supplies, and salary for the staff and technician/fellows, and it is negotiable depending on qualifications. Interested individuals should send curriculum vitae and correspondence to:

Dr. Claudio Fiocchi
Section of Digestive Disease Research
Research Institute NNI-26
The Cleveland Clinic Foundation
9500 Euclid Avenue, Cleveland, OH 44195

The Cleveland Clinic Foundation provides a smoke-free environment and is an Equal Opportunity Employer.

RESEARCH FACULTY POSITIONS BOSTON BIOMEDICAL RESEARCH INSTITUTE

Applications are invited from scientists with a Ph.D. or M.D. degree and postdoctoral training to conduct independent research in the broad area of molecular/cellular biology. Candidates are expected to obtain extramural funding. Start-up costs and initial support are available. The institute is an independent nonprofit research organization with excellent research facilities and a stimulating scholarly environment. Interested candidates should send curriculum vitae, a statement of research interests and names of three references to: Search Committee, c/o Miss Mary Caulfield, Boston Biomedical Research Institute, 20 Staniford Street, Boston, MA 02114. Boston Biomedical Research Institute is an Equal Opportunity Employer.

BIOLOGY FACULTY. The Department of Biology at the University of Southwestern Louisiana (USL) invites applications for two tenure-track positions to support the doctoral program in environmental and evolutionary biology. We seek a microbiologist with research interests in aquatic microbial ecology and a cell biologist with research interests in neurobiology or immunobiology. Biology faculty are expected to develop an active research program, seek extramural funding and participate in graduate and undergraduate education. Research interests of the faculty range from molecular to ecosystem studies. USL has an exceptionally well-equipped Electron Microscopy Center and a Center for Advanced Computer Studies. Other resources include the Primate Research Center, Center for Crustacean Research, Louisiana Universities Marine Consortium (LUMCON) marine laboratory and research vessels, and U.S. Fish and Wildlife Service's National Wetlands Research Center. Applicants should submit curriculum vitae, a concise statement of research goals, and the names, addresses and telephone numbers of three references by 1 March 1992 to: Faculty Search, Department of Biology, University of Southwestern Louisiana, Lafayette, LA 70504-2451. Applications will be reviewed starting 1 March 1992 and continue until the positions are filled. Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

FACULTY POSITION IN ANATOMY AND PHYSIOLOGY. The Biology Department, Middle Tennessee State University (MTSU) invites applications (Ph.D.) for two tenure-track teaching positions beginning August 1992. Successful applicants must have strong backgrounds in anatomy and physiology, and shall teach lecture and laboratories in human anatomy and physiology and direct research. Also, applicants must be able to teach at least one of the following courses: general physiology, embryology, histology, parasitology. Research/public service is expected. *Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.* Application deadline is 6 March 1992. Send application, transcripts and three letters of reference to: Dr. Brian T. Miller, Committee Chair, Box 328, MTSU, Murfreesboro, TN 37132. Position contingent on funding availability.

BIOLOGY: THREE FACULTY POSITIONS. Applications are invited for three assistant professor positions beginning August 1992 (Ph.D. required). (1) Geneticist to teach general genetics, (2) physiologist to teach human physiology and anatomy, and (3) general biologist to teach in the freshman program. Ability and willingness to teach freshman biology is required of all candidates. In addition to teaching duties, candidates are expected to advise majors. *Xavier University is a predominantly African-American, Catholic, liberal arts institution, and is an Equal Opportunity Employer.* Application deadline: 28 February 1992 (or until filled). Send résumé, official graduate transcripts, and three letters of recommendation to: Willie J. Caffey, Jr., Chairman, Search Committee, Biology Department, Box 85-B, New Orleans, LA 70123.

DEPARTMENT OF PHYSIOLOGY SCHOOL OF MEDICINE MEHARRY MEDICAL COLLEGE

TWO TENURE-TRACK POSITIONS are available immediately in the Department of Physiology. Applications are invited for individuals with interest in the areas of **CARDIOVASCULAR PHYSIOLOGY** and **NEUROSCIENCE**. The department has rather broad interest but would encourage applications from individuals who incorporate cellular and molecular biological approaches in their research. Candidates should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a demonstrated record of excellence in research. The successful candidate will be expected to participate fully in the department's teaching program and to develop an independent extramurally funded research program.

The college has a strong commitment to research and offers excellent start-up funds and well-equipped facilities. Applicants are asked to provide curriculum vitae, a summary of research plans, reprints of three representative publications, and three letters of reference to:

Dr. James G. Townsel
Professor and Chairperson
Department of Physiology
Meharry Medical College
1005 D. B. Todd, Jr. Boulevard
Nashville, TN 37028
Telephone: 615-327-6288

POSTDOCTORAL POSITION available to study the catalytic and regulatory properties of pterin-dependent hydroxylases. A combination of enzyme kinetics, spectroscopy, protein chemistry, and site-directed mutagenesis is being used to determine the mechanism of catalysis, the role of the active site iron, and the effects of phosphorylation on catalysis and structure. Ph.D. in biochemistry of related field required. Send curriculum vitae and names of three references: Dr. Paul Fitzpatrick, Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX 77843.

POSTDOCTORAL POSITIONS IN COMPUTATIONAL BIOLOGY. Available immediately and up to 3 years to work on the development of an object-oriented database, query language, and verification tools to be used with the Protein Data Bank (PDB). A knowledge of protein structure and object, oriented programming techniques is preferred. Send FAX, or Email curriculum vitae and the names of three references to: Dr. Philip E. Bourne, Department of Biochemistry and Molecular Biophysics, Columbia University, 630 West 168th Street, New York, NY 10032. FAX: 212-305-7970; Email system@cuhhca,hhmi.columbia.edu.

POSITIONS OPEN

POSTDOCTORAL POSITION IN RPE-PHOTORECEPTOR CELL TRANSPLANTATION STUDIES IN THE DISEASED AND AGING RETINA

Available for a recent Ph.D. who is interested in retinal pigment epithelium/photoreceptor cell relationships. Sound training in molecular biology techniques required. Competitive salary. Send curriculum vitae and three letters of recommendation to: **Dr. James E. Turner, Department of Neurobiology and Anatomy, Wake Forest University Medical Center, Winston-Salem, NC 27157.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately to study transcriptional responses induced by genotoxic stress in mammalian cells. Studies will focus on the regulation of HIV-1 expression by genotoxic stress and on HIV-1 regulatory features shared with cellular stress-response genes. Salary is \$25,000 to \$28,000 per year. Experience in molecular biology preferred. Send curriculum vitae and names of three references to: **Dr. A. J. Fornace, Jr., Laboratory of Molecular Pharmacology, Building 37/Room 5C09, National Institutes of Health, Bethesda, MD 20892.** *An Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS

Available to study the structure and function of the cystic fibrosis gene product (CFTR). Successful applicants will join a multidisciplinary research program applying molecular, biochemical, optical and electrophysiological techniques to characterize the mechanisms by which CFTR regulates Cl-conductance and vesicle trafficking in epithelial cells and defects in these mechanisms in cystic fibrosis. Individuals with an M.D. or Ph.D. in physiology, biochemistry, cell biology or a related discipline are invited to submit their curriculum vitae to: **Dr. R. A. Frizzell, Department of Physiology and Biophysics, University of Alabama at Birmingham (UAB), 1918 University Boulevard (BHSB 798), UAB Station, Birmingham, AL 35294-0005.** *UAB is an Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study regulatory mechanisms involved in alternative RNA splicing in mammalian systems. Experience in molecular biology and work with proteins is highly desirable. Send curriculum vitae and names of three references to: **Dr. P. J. Grabowski, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA 15260.**

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

POSTDOCTORAL AND STAFF POSITIONS BIOMACROMOLECULE MODELING AND SIMULATION GROUP

Proteins: One or more postdoctoral positions will be available starting September 1992 to study enzyme/protein structure/function/dynamics using molecular modeling and simulation methods. Current focus is on enzyme/protein redesign to alter specificity and/or efficiency in order to improve environmental remediation. One or more staff positions, requiring at least 2 years of relevant experience, may also be available starting 1 October 1992. Nucleic acids: One postdoctoral position is available immediately for studies of native and damaged DNA structure/dynamics using molecular modeling and simulation methods. This position is a joint appointment between the Life Sciences Center and Molecular Science Research Center. A second postdoctoral appointment for methods development and validation may be available in October 1992. Significant interactions with experimental collaborators and publication productivity are essential for success in these positions. Depending on experience the postdoctoral salary range is \$36,000 to \$42,000. Battelle's Pacific Northwest Laboratories are located in a beautiful semirural desert setting on the banks of the Columbia River in southcentral Washington State, with the Cascade Mountains just to the west and the Blue Mountains just to the east. Send curriculum vitae, a brief description of research interest, two or three representative publications, names (including telephone numbers) of three professional references to: **Dr. Rick L. Ornstein, Molecular Science Research Center, Pacific Northwest Laboratory, Department 6125BAH, P.O. Box 999, Richland, WA 99352.** FAX: 509-375-6916. *Equal Opportunity Employer, M/F/H/V.*

7 FEBRUARY 1992

GENE EXPRESSION SCIENCES/MOLECULAR GENETICS

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has opportunities for scientists to join the high eucaryotic section of its Gene Expression Sciences (GES) and its Molecular Genetics Department.

GENE EXPRESSION SCIENCES: SENIOR EUKARYOTIC SYSTEMS MOLECULAR BIOLOGIST

The research efforts of GES focus on maximizing heterologous gene expression in mammalian and insect cell systems by gaining an understanding of transcriptional, translational and post-translational regulatory elements. In addition, the role of cellular physiology in optimizing gene expression and product quality is also studied. The successful candidate will have a Ph.D. in Molecular Genetics, Cell Biology, Biochemistry, or a related field, with a minimum of two to three years of postdoctoral experience. Candidates must have a strong publication record, excellent communication skills and expertise in the area of gene expression in eucaryotic systems. Ability to conduct basic research directed at improving existing and developing new expression systems is also required. #L0103

MOLECULAR GENETICS: MOLECULAR IMMUNOLOGIST

The research efforts of the Antibody Engineering Group focus on the cloning, manipulation and expressing of monoclonal antibodies for use as human therapeutics agents. The selected candidate will join our ongoing effort in antibody engineering. The individual will have a Ph.D. in Molecular Biology or Immunology and at least three years postdoctoral training in a leading academic laboratory. A strong publication record and experience in immunoglobulin cloning, manipulation and expression are required. Industrial experience is preferred as well as experience with PCR cloning, cell fusion, human MAbs, antibody humanization or combinatorial antibody library screening. #L0104

Our state-of-the-art research facilities are located in suburban Philadelphia, near Valley Forge, PA. We offer a competitive compensation/benefits/relocation package, as well as a stimulating work environment in which to grow and excel. For confidential consideration, please submit your C.V., indicating the appropriate job #, and the names of three references to: **M. Leggieri, Employment Associate, SmithKline Beecham Pharmaceuticals, P.O. Box 1539, King of Prussia, PA 19406-0939.** We are an Equal Opportunity Employer, M/F/H/V.



SmithKline Beecham
Pharmaceuticals



Gliatech, Inc.

POSTDOCTORAL FELLOWS ALZHEIMER'S DISEASE RESEARCH

Gliatech, Inc., a growing pharmaceutical company dedicated to understanding and utilizing the unique properties of neuroglial cells in treating nervous system disorders, has two openings for post-doctoral fellows in our Alzheimer's disease research program. The successful candidates will have received their Ph.D. degrees and have experience in either 1) neuropharmacology with an emphasis on receptor-ligand interactions, 2) neuronal-glial interaction using cell culture techniques, or 3) the biochemistry of proteoglycans. Appointments are for one year renewable for a second year.

Gliatech is located in suburban Cleveland and maintains close interactions with Case Western Reserve University. In addition to a competitive salary and benefits package, Gliatech also encourages scientific publications. Qualified candidates are encouraged to submit their curriculum vitae to: **Gliatech, Inc., Corporate Recruiting, 23420 Commerce Park Rd., Cleveland, OH 44122.**

The Agricultural Research Service of the United States Department of Agriculture provides national leadership, conducts research on broad regional and national agricultural problems, and is committed to excellence in agricultural research.

Opportunities exist for 4 Research Associates in the Food and Feed Safety Research Unit of the Food Animal Protection Research Laboratory in College Station, Texas. We are seeking motivated scientists (recent PhD's) to join one of 3 highly productive research teams in:

- Hybridoma—Monoclonal Antibodies to agricultural chemicals for development of on-site test kits. Dr. Larry Stanker. 2 positions.
- Drug targeting/erythrocyte encapsulation and immunotoxicology. Dr. John R. DeLoach.
- Mycotoxin/Fumonisin and toxicology. Dr. Roger B. Harvey.

For information on the research program contact the appropriate scientist on (409) 260-9484.

For additional information on application procedures, contact **Carol Gramlich at USDA-ARS-PD-POB, 6305 Ivy Lane, Room 314A, Greenbelt, MD 20770-1435, telephone number (301) 344-0128.** Applications in response to this advertisement should be marked (5-2-007).

ARS is an Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Positions are immediately available for fellows to work on immunobiology of HIV or T-cell/NK cell recognition of bacterial antigens. Send curriculum vitae and references to: **Dr. Gary R. Klimpel, Department of Microbiology J-19, University of Texas Medical Branch, Galveston, TX 77555-1019.** *UTMB is an Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.*

POSTDOCTORAL POSITION JOHNS HOPKINS UNIVERSITY

A postdoctoral position is currently open for an individual interested in parasite biochemistry. The focus will be on glucose catabolism in trypanosomes which cause African sleeping sickness. Applicants should have a strong background in protein biochemistry with some molecular biological experience. Send curriculum vitae, and names of three references to: **Dr. Peter L. Pedersen, Department of Biological Chemistry, School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205.** *Equal Opportunity Employer.*

A position is available at the McGill AIDS Centre, Lady Davis Research Institute, Montreal, Quebec, for a **POSTDOCTORAL FELLOW** to work on molecular genetic analysis of parvovirus replication and gene expression and/or HIV integrative recombination. A background in molecular biology is required. The position is available for July 1992. Please send curriculum vitae and letters of reference to: **Dr. Emmanuel A. Faust c/o 158 Braeside, Dollard Des Ormeaux Quebec, H9A 2B3, Canada.**

A **POSTDOCTORAL POSITION** is available for an individual with expertise in molecular biology or protein chemistry. This research focuses on molecular and cellular mechanisms of activation and signal transduction by bacterial endotoxin and other inflammatory mediators leading to eicosanoid and cytokine production. The studies involve molecular biology and protein purification techniques. Send curriculum vitae and names of three references to: **Dr. James A. Cook, Professor of Physiology, Medical University of South Carolina (MUSC), 171 Ashley Avenue, Charleston, SC 29425.** *MUSC is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION. A postdoctoral position is available to study regulation of cardiac myocyte ion currents and contractions by neurotransmitters, amphiphiles and intracellular messengers. Candidates with recent Ph.D. or M.D. should have broad preparation and expertise in cellular electrophysiology and signal transduction. Send curriculum vitae and three letters of reference by 1 April 1992 to: **Achilles Pappano, Ph.D., The University of Connecticut Health Center, Pharmacology Department, Farmington, CT 06030-3605.**

An Affirmative Action/Equal Opportunity Employer, M/W/H.

POSTDOCTORAL OR RESEARCH ASSOCIATE POSITION. Available to study molecular interactions between human leukemia and immune cells and tumor pathogenesis, including characterization of cytokines from tumor and lymphocytes and molecular biology. The candidates must have a recent Ph.D. or an equivalent degree and must be familiar with protein chemistry, immunology and/or biochemistry. Send curriculum vitae and names of three references to: **J. W. Chiao, Department of Medicine, New York Medical College, Valhalla, NY 10595.**

POSTDOCTORAL FELLOW

Position is available immediately at the Louisiana State University (LSU) Eye Center for an individual with training in synthetic chemistry and drug delivery. The applicants must have a strong background in organic/polymer chemistry with practical experience in gas/liquid chromatography and NMR/mass spectroscopy. Preference given to individuals with evidence of research productivity. Send curriculum vitae and names of two references to:

**Dr. Bahram, LSU Eye Center
2020 Gravier Street, Suite B
New Orleans, LA 70112**

LSU Eye Center is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIPS for NIH-funded studies of human antibodies that inactivate coagulation factor VIII, structure-function analysis of factor VIII, and studies of the nature of the molecular defects in hemophilia A. Immediate openings within our Transfusion Medicine Research SCOR for two candidates with M.D. or Ph.D. in molecular biology, cell biology or biochemistry. Salary: \$23,000 to \$33,000 depending upon experience. Send curriculum vitae, including a summary of research accomplishments and publications to: **Dorothea Scandella, Ph.D. or Leon W. Hoyer, M.D., Holland Laboratory, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855.** *Equal Opportunity Employer, M/F/V/H.*

POSTDOCTORAL FELLOWSHIP IN STRUCTURAL BIOLOGY. Ph.D. or M.D. with interest in structure determination by cryoelectron microscopy to join an ongoing project on the structure of microtubular-based motile assemblies. Experience in image processing and/or electron microscopy desirable. Available immediately. Send letter of interest, curriculum vitae and names of three references to: **Dr. John Murray, University of Pennsylvania, Department of Anatomy, #206, Philadelphia, PA 19104-6058.** Telephone: 215-898-3045. FAX: 215-898-9871.

POSTDOCTORAL POSITION available to study structure/function relationships in an aminoacyl tRNA synthetase. The research will include the use of protein engineering to construct mutant enzymes having altered functional properties. Experience in enzymology, protein chemistry, or molecular biology is required. Send curriculum vitae and names of references to: **Dr. K. A. W. Hill, Department of Biochemistry, Loma Linda University, Loma Linda, CA 92350.**

POSTDOCTORAL TRAINING POSITIONS to study signal transduction pathway from insulin receptor to 56 kinases [*J. Biol. Chem.* 266, 16281 (1991)] and nucleus [*Nature* 353, 670 (1991)]. Experience with recombinant DNA and mammalian expression systems required. Start 1 March 1992 and thereafter. Send curriculum vitae, summary of past work and three references to: **J. Avruch, Chief, Diabetes Research Laboratories, MGH East, Building 149, 13th Street, Charlestown, MA 02129.** Telephone: 617-726-6909. FAX: 617-726-5669.

POSTDOCTORAL FELLOW in molecular endocrinology to work in the area of Thyroid Molecular Biology including TSH Receptor Structure and Gene Regulation. Strong laboratory background required. *U.S. citizen or permanent resident only.* Send curriculum vitae to: **Dr. Terry F. Davies, Director, Division of Endocrinology and Metabolism, Box 1055, The Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10029-6517.** *An Equal Opportunity Employer.*

TYROSINE PHOSPHATASES

NIH-funded postdoctoral position at Joslin Diabetes Center and Harvard Medical School to characterize the role of tyrosine phosphatases in insulin action using cDNA cloning and expression [see: *J. Cell. Biochem.* 48, 33 (1992)]. Recent Ph.D. with experience in cell transfection and/or phosphorylation signaling. Send curriculum vitae with three references to: **Dr. Barry J. Goldstein, Research Division, One Joslin Place, Boston, MA 02215.**

PREDOCTORAL GENOME ANALYSIS AND INFORMATICS TRAINING PROGRAM

Applications are sought from exceptional individuals for an interdisciplinary Ph.D. graduate training program in genome analysis and informatics emphasizing the interplay between molecular biology and information science. The program includes faculty from several University of California, San Diego (UCSD), departments, the Salk Institute, and the San Diego Supercomputer Center. Graduate students are accepted by one of the following participating UCSD departments: Biology, Chemistry, Computer Science and Engineering, Applied Mechanics and Engineering Sciences, Mathematics, Philosophy, Physics, Neurosciences, or Physiology/Pharmacology. *Minorities are particularly encouraged to apply.* Request information from: **Biology Student Affairs, C-046, UCSD, La Jolla, CA 92037-9986.** Please indicate choice of department.

POSITIONS OPEN

NEUROSCIENCE FELLOWSHIPS

Two postdoctoral fellowships are available at the University of Washington Medical Center. The first position is to study the morphology and physiology of animal models of temporal lobe epilepsy. Emphasis is placed on selective vulnerability and neuronal plasticity of hippocampus. Experience with in vitro physiology desirable. This position is available immediately, but may be deferred for an appropriate candidate.

The second position is to study hippocampal selective vulnerability to ischemia in organotypic slice cultures. Experience with tissue culture techniques and/or single-cell physiology is preferred. This position will be available in spring/summer of 1992.

Send curriculum vitae, copies of recent publications, and names of three references to: **Dr. Jo Ann Franck, Department of Neurological Surgery, RI-20, University of Washington, Seattle, WA 98195.** *The University of Washington is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION available starting 1 July 1992 for recent Ph.D. with skills in whole-cell voltage-clamp recording and neural modeling. Research will involve the characterization of voltage-gated currents in stellate cells isolated from the guinea pig antero-ventral cochlear nucleus, and development of computational models of the receptive field properties of these cells. Salary support is currently available for 3 years. Send curriculum vitae and three references to: **Raimond L. Winslow, Department of Biomedical Engineering and Center for Hearing Science, The Johns Hopkins University (JHU) School of Medicine, Ross Research Building, Room 424, 720 Rutland Avenue, Baltimore, MD 21205.** *JHU is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL FELLOW OR RESEARCH ASSOCIATE (ASSISTANT PROFESSOR) IN CELLULAR AND MOLECULAR BIOPHYSICS OF INSULIN SECRETION

THE UNIVERSITY OF CHICAGO

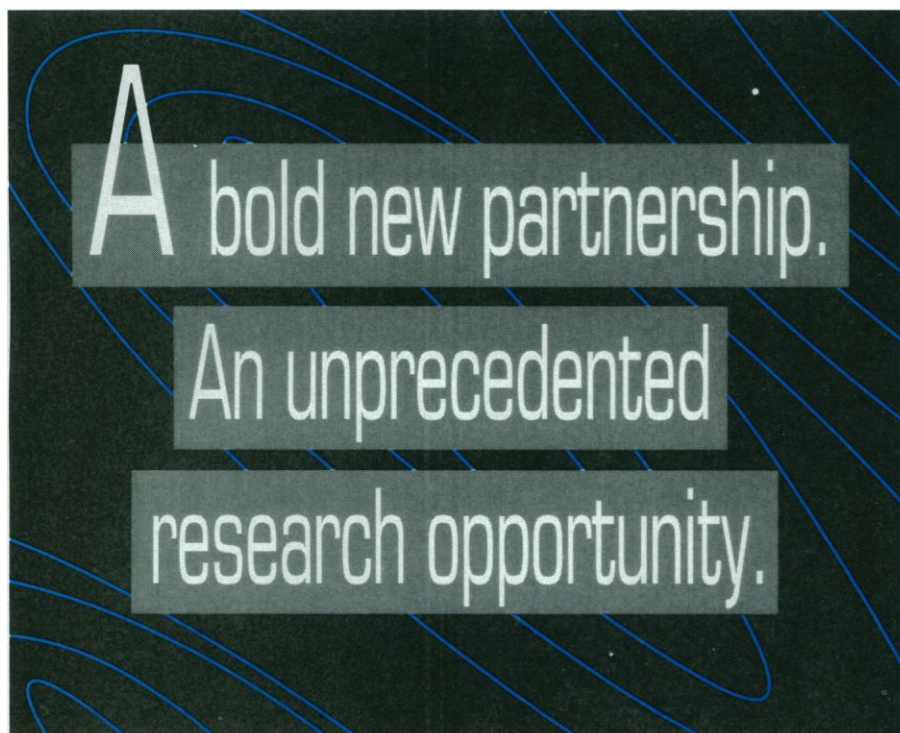
Positions are available for scientists with a Ph.D. or M.D. degree with experience in cellular biophysics to study the molecular biology of insulin secretion. We are particularly interested in individuals with experience with the patch clamp technique and fura-2 fluorimetry who would like to participate in a multidisciplinary research program to study the molecular and cellular biology of insulin secretion. Applicants should send curriculum vitae, names and addresses of three references and a summary of relevant research experience to:

**Graeme I. Bell and Richard J. Miller
University of Chicago
5841 South Maryland Avenue—MC1028
Chicago, IL 60637**

POSTDOCTORAL RESEARCH/RESEARCH ASSOCIATE

Position open for researcher with knowledge of and experience in physiological optics and/or vision science. Project involves study of effects of photopic and scotopic luminance on human pupil size, visual acuity, and perception of brightness, utilizing a wide field of view and new experimental approaches. Affiliations with University of California through Berkeley School of Optometry and San Francisco School of Medicine. Salary depending upon experience. For further details, send résumé to: **Don L. Jewett, M.D., D. Phil., Abratech Corporation, 150 Shoreline Highway, Building E, Mill Valley, CA 94941-6610.** FAX: 415-331-4537.

POSTDOCTORAL RESEARCH IN PHARMACOLOGY (Three positions). Dr. John J. McGuire: (1) biochemical and molecular aspects of antifolate action and resistance in human leukemia models with emphasis on poly(γ -glutamate metabolism), some molecular biology experience preferred; (2) characterization of the biochemical and cellular pharmacology of newly developed antifolates (both salaries negotiable). Dr. Molly Kulesz-Martin: molecular and cellular studies of malignant conversion and abnormal differentiation in epidermal keratinocytes (salary negotiable). Applicants should send curriculum vitae, a brief statement of research interests and letters of recommendation to one of the above at: **Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, NY 14263.** *Roswell Park is an Affirmative Action/Equal Opportunity Employer.*



POST-DOCTORAL POSITIONS

NIA-Drug Discovery Group-Alzheimer's Disease

Bio-Organic Chemistry - Design and synthesis of probe and inhibitor molecules to identify and study proteases involved in neurodegenerative processes. Experience in synthetic chemistry and inhibitor enzymology are essential. Skills in protein purification and analysis, and/or molecular modeling are also desirable. Positions with Dr. Grant Krafft, DDG-AD Principal Investigator, in the Structural Biology group at Abbott. **Reply to: Job Code BOC.**

Protein Biochemistry - Fractionation and isolation of proteases associated with neurodegenerative processes and studies of neural proteases as pre-mortem markers of Alzheimer's disease. Experience in protein isolation from tissue, enzyme assays, immunoassays and protein analysis is essential. Knowledge of protease biochemistry and familiarity with human brain anatomy and handling of brain tissue will be valuable. Position with Dr. Hossein Ghanbari, head of Neuropsychiatric Markers research at Abbott. **Reply to: Job Code PB.**

Physical/Analytical Protein Biochemistry - Purification and characterization of proteinases associated with neurodegenerative processes. Experience in analytical and preparative protein separations is essential. Skills in peptide mapping, sequencing, chemical modification, or

capillary electrophoresis are desirable. Additional experience in protein fluorescence/CD spectroscopies, protease kinetics, protein folding, glycoprotein characterization or protein mass spectroscopy will be beneficial. Positions with Dr. Thomas Holzman, head of the Protein Biochemistry group at Abbott. **Reply to: Job Code P/A PB.**

Molecular Neurobiology - Design, expression and analysis of wild type and mutant amyloid precursor protein (APP) constructs in cell culture and transgenic animals to establish models of Alzheimer's disease. Extensive experience in molecular biology and knowledge of cellular biology are essential. Skills in protein analysis (Western blots, immunofluorescence) and familiarity with production and breeding of transgenic animals are desirable. Positions with Dr. Donald Frail in Corporate Molecular Biology at Abbott, in collaboration with Dr. Phil Iannoccone at Northwestern University Medical School. **Reply to: Job Code MN.**

Cellular Neurobiology - Mechanisms triggering and underlying the aberrant breakdown of APP, studied in human and animal cell models of neurodegeneration. A productive background in molecular cell biology of membranes and cytoskeletons would be most suit-

Today, two of Chicago's most respected names in research, **ABBOTT LABORATORIES** and **NORTHWESTERN UNIVERSITY**, are undertaking a major new initiative to expedite and expand the development of effective drugs for the treatment of Alzheimer's Disease. Designated a national research center by the National Institute on Aging (NIA), this is a unique opportunity to experience the resources of these two institutions.

able, although individuals with other experience but excellent ability in biochemistry or molecular biology also would be appropriate. Positions with Dr. William Klein, Professor of Neurobiology at Northwestern University. **Reply to: Job Code CN.**

Both Abbott Laboratories and Northwestern University are located in attractive suburban areas on the shores of Lake Michigan, just north of Chicago. Find out more about the excellent salary and benefits this collaborative environment has to offer. For consideration, please send a curriculum vitae indicating position of interest (to facilitate handling, please indicate appropriate Job Code on the envelope), including the names and addresses of three references, to: **Patricia Handy, Corporate Placement, Dept. NU, Abbott Laboratories, One Abbott Park Rd., Abbott Park, IL 60064.** Affirmative Action Employer/Smoke-Free Environment.

ABBOTT LABORATORIES



**Quality
Health Care
Worldwide**
1888-1992

Assistant Professor

University of Wisconsin Hospital and Clinics is seeking an Assistant Professor, Molecular Diagnostics to work in the Department of Pathology and Laboratory Medicine.

Responsibilities of this non-tenure track position will include supervision, research and development in the newly organized Molecular Probe Laboratory (participation in the Clinical Flow Cytometry Laboratory is additionally anticipated). Specifically, this includes the application of molecular genetic techniques, including Southern and polymerase chain reaction methodologies, in the diagnosis of malignant and infectious diseases. Candidate will also participate in scholarly activities including clinical applied research, education of medical residents and fellows, graduate and medical students and medical technology students. Development of new assays and procedures; improvement of current procedures; interpretation and application of current literature and establishment of quality control and quality assurance programs also required. Ph.D. with a background in molecular biology preferred.

If interested and qualified, send curriculum vitae and names of three references, to be received prior to February 28, 1992 to: **Karl Voelkerding, University of Wisconsin Hospital and Clinics, Division of Laboratory Medicine, 600 Highland Avenue B4/249 CSC, Madison, WI 53792.**



Equal Opportunity Employer



NEUROGENETIC CORPORATION

Neurogenetic Corporation is a rapidly growing biotechnology company involved in the discovery and cloning of neurotransmitter receptors and other sites of drug action. By pioneering advances in the basic neurosciences, we are creating a pathway to the next generation of neuropsychiatric treatments. Current expansion of our Cellular and Molecular Biology Programs has created opportunities for Ph.D. scientists with postdoctoral experience in the following area:

Cell/Molecular Biologist:

This position requires experience in running a mammalian cell biology laboratory. The ideal candidate would have experience in the design and implementation of recombinant cell culture expression systems, and familiarity with second messenger systems, mass cell culture techniques, expression vectors, and transfection technologies. This position also provides opportunities for involvement in molecular biology projects. (dept 128)

Senior Cell Culture Associate:

Responsibilities include the continuous culture of mammalian cell lines for pharmacological assay as well as overall management of the laboratory. A BS or MS in the biological sciences and 3-5 years experience in mammalian cell culture are required. (dept 129)

Neurogenetic Corporation occupies well-equipped, modern laboratories in a suburban environment near New York City. We offer a stimulating multidisciplinary environment, competitive salaries and benefits.

Please include department code with application.
For consideration, please submit your Curriculum Vitae to:

**Human Resources Manager
Neurogenetic Corporation
215 College Road
Paramus, New Jersey 07652**

The quality of R&D depends on the quality of the resources.

There are a number of components to success in the pharmaceutical research process. The most important is our people. At Schering-Plough, we hire the best talent in our industry. Then, we provide them with the technical resources they need to do their best work: the most advanced instrumentation; the latest computerized systems; modern lab facilities. Finally, we spend over \$400 million annually on R&D, and are completing a \$300 million R&D facility.

Commitment of this scope has helped us achieve over \$3 billion in annual sales around the world.

ONCOLOGY Associate Scientist

Opportunity to explore the role of oncogenes in tumorigenesis and help discover novel anti-cancer agents using transgenic mouse models of human disease. Requires experience in molecular biology techniques (e.g. restriction digests, Southern blots, Northern blots, plasmid preps, DNA sequencing, and enthusiasm for learning new techniques) and working with transgenic mice. Experience with transgenic mouse technology a plus, but not required. Refer to 92-00-1.

ATHEROSCLEROSIS RESEARCH

Post-Doctoral Fellow

The Atherosclerosis Research Group seeks a post-doctoral fellow to research aspects of cellular cholesterol and lipoprotein metabolism. Qualified

applicants should have a degree in biochemistry, cellular physiology, or a related field with proven expertise in lipid research. Refer to 92-01.

BIOASSAY DEVELOPMENT Associate Scientist

Become part of a team responsible for the development and validation of novel cytokine bioassays. Candidate should have experience in tissue culture and cell biology. Knowledge of signal transduction desirable. Refer to 91-97.

All positions offer highly competitive salaries, superior benefits, and all the challenge and growth potential an international industry leader can offer. Applicants should submit their cv, indicating position of interest to: George Czuba, Human Resources Dept., Schering-Plough Research, 60 Orange Street, Bloomfield, NJ 07003. We are an equal opportunity employer.

The science of success



Schering-Plough

Geisinger Clinic

POSTDOCTORAL POSITION

Applications are invited from candidates with backgrounds in molecular biology, protein biochemistry or cell biology to participate in research focused on low molecular mass GTP-binding proteins involved in vesicular transport and signal transduction in mammalian cells under the direction of Dr. William Maltese. Specific emphasis is placed on defining the influence of post-translational modifications (e.g., isoprenylation) on the functions of these proteins.

The Weis Center is a well-equipped modern research facility located in an attractive region of central Pennsylvania. We offer competitive stipends, excellent benefits and opportunities for collaborative interactions. For consideration, please send curriculum vitae, brief statement of interests and names of three references to: **Human Resources Dept, Weis Center for Research, Geisinger Clinic, Danville, PA 17822-3024.** Equal Opportunity Employer M/F/H/V.

Geisinger

SCIENTISTS • RESEARCH ASSOCIATE

Athena Neurosciences, Inc., is a biotechnology company committed to the discovery and development of new products to diagnose and treat diseases of the central nervous system. We are seeking individuals to fill the following research positions.

Scientist • Transgenic Group

As the group leader, you will develop and analyze models of various aspects of Alzheimer's Disease. Includes validating models for use as drug development tools. Requires a Ph.D. and at least four years' related postgraduate experience.

Scientist • Immunochemistry

You will oversee characterization, purification and immunoassay development of polyclonal and monoclonal antibodies to be utilized in our diagnostic and therapeutic programs in the Company. Requires a related degree and at least three years' immunochemistry/immunoassay design experience. A Ph.D. is preferred.

Scientist • Enzymology/AD Therapeutics

You will use biochemical, immunochemical and enzymological techniques to isolate and characterize enzymes and proteins relevant to amyloid formation, from cell cultures and primate tissue. Requires a Ph.D., two years' experience and a broad background in protein chemistry or enzyme characterization.

Research Associate • Transgenics/Molecular Biology

We are seeking an individual with a BS or MS and 2+ years' experience in the generation of transgenic mice. Additional experience in molecular biology or immunochemistry is also desired. This position will be involved with modelling certain aspects of Alzheimer's Disease and related neurodegenerative diseases.

We offer an innovative and exciting scientific environment with competitive salaries and benefits. Reference job title when sending your CV: Athena Neurosciences, Inc., 800F Gateway Boulevard, South San Francisco, CA 94080. EOE.



SYSTEMIX



Research Scientists

SyStemix, an expanding new biotechnology company, is developing revolutionary technology for the study of human disease processes and treatments. To keep pace with growth, we are currently seeking two experienced Research Scientists.

Supervising scientists and research associates, you'll be responsible for the the production of monoclonal antibodies and the planning and development of screening and research strategies.

We require a PhD with extensive training in antibody production, antigen purification and screening assay development. The ability to thrive in a team environment is essential as are excellent communication skills. Management experience is desired.

You'll be rewarded with the resources you need to ensure a successful career, as well as a competitive benefits package and stock option plans. Please send your resume and salary requirements to SyStemix, Inc., Attn: Human Resources, 3400 W. Bayshore Road, Palo Alto, CA 94303. EOE.

Pharmaceutical Research & Development Positions

Genentech, a leader in the biotechnology industry and headquartered in South San Francisco, has exceptional opportunities within our Pharmaceutical R&D department for both a **Scientist** and **Research Assistant**.

The studies these researchers will focus on involve the development of new dosage forms and delivery systems for protein and peptide drug entities. This includes the physical and chemical characterization of proteins with regard to compatibility with pharmaceutical excipients and delivery systems as well as the assessment of dosage form stability.

The **Scientist** position requires a PhD in Physical Chemistry, Biochemistry or Pharmaceutical Chemistry with emphasis on physical/analytical concepts and either industrial experience in pharmaceutical formulation R&D or at least a year of postdoctoral experience in protein physical biochemistry or analytical biochemistry. Experience with proteins and a fundamental knowledge of analytical biochemistry techniques are also required.

The **Research Assistant** position requires a BS/MS in Physical Chemistry, Biochemistry or Pharmaceutical Chemistry, experience with proteins and knowledge of analytical biochemistry techniques. A minimum of one year of related industrial or academic experience is also required.

Our progressive company offers an extensive benefits package which includes fully paid dental/medical/vision coverage for you and your dependents, child care facilities and free health club membership. For immediate consideration, send your resume to Genentech, Inc., Human Resources Dept. LPMP, 460 Point San Bruno Blvd., South San Francisco, CA 94080. We actively support and promote affirmative action and equal employment opportunity.

Genentech, Inc.

POSITIONS OPEN

The Departments of Medicine and Microbiology and Immunology at Loyola University Medical Center are seeking a Ph.D. **IMMUNOLOGIST** to assist in establishing a basic research program in the immunobiology of cardiac transplantation. The successful candidate will be granted a salaried full-time tenure-track faculty position at a level commensurate with qualifications and experience. Please submit curriculum vitae, two copies of relevant research publications, description of research goals, and three letters of recommendation to:

Maria Rosa Costanzo-Nordin, M.D.
Medical Director, Cardiac Transplant Program
Loyola University Medical Center
Maywood, IL 60153

Loyola University Chicago is an Equal Opportunity Employer.

TECHNICAL STAFF—ATMOSPHERIC SCIENCE. Ph.D. atmospheric sciences. One year of experience in the job offered or 1 year of experience as a research assistant. Education and/or experience should include the specialty of micrometeorology. Conduct atmospheric scientific research on the air-surface exchange of heat, mass, and momentum at land and water surfaces. Develop mathematical descriptions of air-surface exchange processes for both site-specific and regional-scale models. Experimental, theoretical, and numerical studies are involved. Salary: \$3500 per month; 40 hours per week, 8:30 a.m. to 5:00 p.m. Send résumés to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605, Attention: Mary Millea, Reference #V-IL 4908-M.** No calls. *Must have proof of legal authority to work permanently in the United States. An employer-paid ad.*

CLINICAL PROJECT MANAGER, HEPATITIS/AIDS. Design and carry out clinical investigation/projects on the diagnosis, therapeutic monitoring and treatment of AIDS, specifically in retroviral research involving the organization and supervision of a Bio-Safety Level 2 facility. Identifies and contacts potential clinical investigators, examines the facilities and negotiates with the investigators on budgets, equipment, personnel, laboratory arrangements, etc. Reports study results at national and international level in top class journals and conferences. Ph.D. in biological chemistry and 1 year, 6 months of experience as clinical project manager, hepatitis/AIDS or 1 year, 6 months of experience as postdoctoral fellow required. Other special requirements include 1-1/2 years experience in retroviral research involving the organization and supervision of a Bio-Safety Level 2 facility as well as the use of ecotropic and amphotropic viruses in tissue culture, whole animals and human cells. Forty hours, 8:15 a.m. to 4:55 p.m.; \$3875 per month. *Must have proof of legal authority to work permanently in the United States.* Send résumés to: **Illinois Department of Employment Security, 401 South State Street—3 South, Chicago, IL 60605. Attention: Annette Fox, Reference #V-IL-4338-N.** No calls. Two copies of your résumé required. *An employer-paid ad.*

CHARLES DARWIN RESEARCH STATION

The Charles Darwin Research Station (CDRS) is a nonprofit, international organization that conducts scientific research and educational programs to promote the conservation of the Galápagos Islands, Ecuador. The CDRS requires the following personnel for 1992:

SCIENCE COORDINATOR: experience in coordination, supervision, and development of new research programs.

NATURAL RESOURCES ADVISER: experience in the management and protection of natural areas.

ECOLOGIST: experience in wildlife management, especially vertebrate pest control.

ORNITHOLOGIST: experience in bird censuses, basic research and protection of threatened species.

MARINE BIOLOGIST: experience in basic research and/or management of marine reserves.

Applicants should be fluent in Spanish and English. All positions carry an initial 2-year contract which can be renewed. Applicants should be available to start in June 1992.

Send letters of application and curriculum vitae, or requests for further information to: **Director, CDRS, Casilla 17-01-3891, Quito, Ecuador.**

POSITIONS OPEN

RESEARCH ASSOCIATE/CYTOGENETICS. Private laboratory in Nashville, Tennessee, seeks Ph.D. in genetics with 3 years of experience in cytogenetics research and diagnosis or 3 years of experience as research associate or fellow in cytogenetics. Experience must include 2 years of solid tumor tissue culture/diagnosis and 3 years of analysis using high resolution banding chromosome-specific DNA probes; references. Salary: \$29,746 per year. Send résumé/references to: **Mike Daniel, Job Service Program and Technical Support, Tennessee Department of Employment Security, Nashville, TN 37245-1200. #TN1235961.**

ASSOCIATE RESEARCH SCIENTIST

We anticipate one or more openings at the postdoctoral level. Research focuses on the immune response of mice to virus using molecular and cellular immunology and studies of neuro-pathogenesis. Outstanding candidates, with a background in immunology, biochemistry, cellular or molecular biology, are requested to send curriculum vitae and have at least three letters of reference sent directly to: **Dr. Carol S. Reiss, Biology Department, The Brown Building, Room 754-B, New York University (NYU), Washington Square, New York, NY 10003.** *NYU encourages applications from women and members of minority groups.*

GENE EXPRESSION RESEARCH ASSOCIATE

Position available immediately in a research program involving gene expression using laboratory animals. A B.S./M.S. degree in cell biology or molecular biology (or related discipline) is required. A minimum of 2 years of relevant research experience is desired. Applicants with experience in embryo manipulation especially encouraged to apply. Salary range: \$20,000 to \$25,000 per year plus benefits. To be considered, send curriculum vitae and the names of three references to: **Brad A. Didion, Ph.D., DEKALB Genetics Corp., 3100 Sycamore Road, Dekalb, IL 60115.**

POSTDOCTORAL RESEARCH ASSOCIATE REGULATORY LIPID BIOCHEMISTRY AND CELL BIOLOGY

A postdoctoral position is available to participate in an ongoing research program focused on the biochemical characterization and cloning of key enzymes that modulate phospholipid synthesis and degradation. Candidates with a Ph.D. degree interested in joining a multidisciplinary group applying contemporary techniques of molecular biology and biochemistry to problems related to the regulation of lipid metabolism should submit their curriculum vitae, reprints and names of three references to: **Dr. Charles O. Rock, Biochemistry Department, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101.** *An Equal Opportunity/Affirmative Action Employer.*

RESEARCH ASSOCIATE

Research in regulation of hormone genes involved in spermatogenesis. Studying the transcriptional regulation of genes. Cloning and subcloning, DNA sequencing, transfection, site directed mutagenesis and deletion analysis, gel shift assays and footprint analysis, nuclear run off assay, RNA stability study, tissue culture RIA. Supervise two technicians.

Requires Ph.D. degree in molecular biology, 1 year of experience in job offered or as medical technologist, experience in hematology, immunohematology, hormone and drug measurements, biochemical analysis, semen analysis, and automated analyzers and knowledge of plasmid techniques, microbial genetics, virology, biochemistry regulation, advanced cell biology, advanced immunology, protein biochemistry, viral DNA vectors, cytology and cytogenetics.

Salary: \$28,600 per year. Forty hours per week. Place of employment and interview: Torrance, California. Send this ad and your résumé to: **Job #MLM #15352, P.O. Box 9560, Sacramento, CA 95823-0560** no later than 22 February 1992.

POSITIONS OPEN

RESEARCH ASSOCIATE/TECHNICIAN IN PLANT CELL WALL POLYSACCHARIDE LOCALIZATION

The University of Georgia Complex Carbohydrate Research Center seeks a research associate or research technician interested in the use of monoclonal antibodies to localize plant cell wall polysaccharides. (The project will be carried out in collaboration with Dr. Melvin Fuller of the Department of Botany.) M.Sc. in biology or biochemistry or an equivalent combination of education and experience required. Experience with electron microscopy is desirable. Salary depends on experience; position available immediately. Applications will be reviewed after 1 March 1992. Please send curriculum vitae and letter of application to: **Drs. Alan Darvill or Peter Albersheim, Complex Carbohydrate Research Center, The University of Georgia, 220 Riverbend Road, Athens, GA 30602.** *An Equal Employment Opportunity/Affirmative Action Institution.*

POSTDOCTORAL—RESEARCH ASSOCIATE positions are available 1 May 1992 for study of (1) regulation of P-450 expression by protein kinases, (2) the role of reactive oxygen species in signal transduction, and (3) immunosuppressive properties of tumor promoters and role of immunosuppression in chemical-induced cancer. Positions require a Ph.D. and 0 to 4 years of postdoctoral experience. Positions (1) and (2) require expertise in cloning, DNA sequencing, CAT reporter constructs, transfection and PCR. Position (3) requires expertise in cellular immunology. Research will be conducted at the Institute of Chemical Toxicology, Wayne State University, Detroit, Michigan, in the laboratory of J. J. Reiners.

Applicants should send curriculum vitae to:

Dr. John J. Reiners, Jr.
M. D. Anderson Cancer Center
Science Park—Research Division
Smithville, TX 78957

Wayne State is an Equal Opportunity/Affirmative Action Employer.

INFECTIOUS DISEASE DIAGNOSTICS

A major manufacturer of products for automated infectious disease diagnostics has an opening in the R&D Department for the development of nonisotopic diagnostics.

MOLECULAR BIOLOGIST NUCLEIC ACID PROBES

Seeking R&D Scientist with postdoctoral experience in nucleic acid probes. Candidate will work with R&D groups in the United States and abroad. Hands-on experience in amplification methods and extensive knowledge of the various enzymes used is a must. Background in clinical microbiology and industrial experience are an asset.

We offer a comprehensive benefits package in a non-smoking environment. Interested candidates should send their résumé to: **bioMerieux Vitek Inc., Human Resources Department, 1022 Hingham Street, Rockland, MA 02370.**

An Equal Opportunity Employer, M/F/H/V.

BIOCHEMIST with a Pacific Northwest biotech company. The position involves development of methods of analysis for compounds in saliva and synthesis of novel compounds for the inhibition of enzymes in parasitic organisms and plant growth regulation. Annual salary: \$40,000. The position requires at least 1 year of experience with extraction, purification and quantitation of sterols and nanogram levels of other small compounds such as cotinine from biological fluids. The candidate should also have completed at least 1 year of postdoctoral research involving the synthesis of radiolabeled compounds and their use in the elucidation of sterol metabolic pathways and the mechanisms of action of the enzymes of cholesterol synthesis. Additional skills required: Experience with microscale reactions involving the handling of air/moisture sensitive and pyrophoric materials. Familiarity with the application of modern chromatographic and analytical techniques including flash chromatography, TLC, HPLC, GC, GC-MS, ¹H-NMR, ³¹P-NMR, FTIR and UV in basic research. Send résumé and salary history to: **Employment Division, Attention: Job Order #5550229, 875 Union Street, N.E., Room 201, Salem, OR 97311.**

Life Science Ph.D. Positions

The Procter & Gamble Company has openings for Ph.D. life scientists in health care technology programs at our Miami Valley Laboratories in Cincinnati, Ohio. These positions are detailed as follows:

IMMUNOLOGIST / CELL BIOLOGIST

(Dept. RS)

A Ph.D. life scientist to conduct immunology/cell biology research in understanding the role of host response mechanisms in oral diseases. Fundamental training in biochemistry of control mechanisms for eukaryotic cell systems together with demonstrated productivity in cellular and/or molecular immunology research is necessary. The successful candidate will have demonstrated the ability to conceive and progress research programs that provide creative and substantial insights into the molecular basis of complex immunology/cell biology problems. Research experience involving both *in vitro* and *in vivo* immunoassay systems is also desired.

IMMUNOLOGIST (Dept. MR)

A Ph.D. immunologist who will design and execute a research program investigating the immune and inflammatory pathogenesis of respiratory allergy, asthma, and related diseases. This position requires a Ph.D. degree and at least two years of postdoctoral and/or pharmaceutical experience in cellular and molecular immunology. The candidate should have experience in the study of regulatory mechanisms that control the immune response to antigens under both *in vivo* and *in vitro* conditions along with animal models of immunity and/or hypersensitivity. In addition to this required training and experience, we seek individuals with: 1) broad academic training in cellular/molecular biology, immunology and inflammation; 2) familiarity with clinical hypersensitivity diseases and animal models of allergic hypersensitivity; and 3) experience with various *in vivo* and *in vitro* immunoassay procedures.

CELL BIOLOGIST/ MICROBIOLOGIST

(Dept. KH)

A Ph.D. cell biologist to conduct cell biology/microbiology research investigating the interactions of eukaryotic and prokaryotic cells in the oral cavity and their relationship to health and disease states. The position requires a Ph.D. degree, preferably with training and research experience in eukaryotic/microbial cell physiology, biochemistry, and the biophysics of cell adhesion mechanisms. Emphasis will be on the understanding of tissue/microbial interactions at a molecular level and the correlation of those interactions with clinical measures, leading to the creation of innovative oral care technologies. Experience in immunology, inflammation, *in vitro* and *in vivo* animal modeling, or clinical research, is also desirable.

Procter & Gamble is a world leader in the research, development, and manufacture of consumer products, including those in health care, personal care, beauty care, and pharmaceutical areas. Sales last year exceeded \$27 billion, and the R&D budget was \$786 million. We offer competitive salaries, a benefits package in the top 5% of U.S. firms, and excellent opportunities for personal and professional growth.

Applicants must be presently authorized to work in the U.S. on a full-time basis. Specify position of interest, and send resume and list of publications to:

Dr. N.G. Howell

(List position and department code)

The Procter & Gamble Company

P.O. Box 398707

Cincinnati, Ohio 45239-8707

Allow 6-8 weeks for response. Procter & Gamble is an Equal Opportunity Employer

Procter & Gamble

POSITIONS OPEN

California Clinical Trials Medical Group has a **SENIOR POSITION IN CLINICAL DRUG RESEARCH** (CNS and cardiovascular). The successful candidate will be a published physician with a strong scientific background in pharmacology, 5 to 10 years of experience in clinical research, good motivational, interpersonal and communication skills. Benefit package, and salary will be commensurate with experience. Send curriculum vitae to: **California Clinical Trials Medical Group, 8500 Wilshire Boulevard, Lobby Suite, Beverly Hills, CA 90211; or telephone Nancee at: 310-854-4949 or FAX: 310-854-3965.**

PROGRAMMER, SCIENTIFIC (PHYSICS).

Formulate and convert data to write programs for high-speed computers to code, analyze and produce graphics for multiple time-scale analysis to solve electromagnetic wave equation and electronic beam multiple beam equation in resonant cavities. Confer with physicist regarding results and necessary program modifications. Required Ph.D. in physics and 3 years of experience in job offered or 3 years as physics researcher prior to or after Ph.D. Salary: \$37,000 per year. Forty hours per week; 9:00 a.m. to 5:00 p.m. Job in McClean. Mail résumé with copy of ad to: **VEC, Department 2, VA#1010939-8, 100 Carpenter Drive, Suite 105A, Sterling, VA 22170.**

RESEARCH BIOLOGIST (GS-401-12/13/14), Ph.D. or equivalent experience in the epidemiology of prevention and control of plague and other vector-borne zoonoses. Ability to conduct independent research and publish results is required. Salary range: \$38,785 to \$54,502. For technical questions, contact: **A. Barnes, telephone: 303-221-6450.** Send completed SF-171 or résumé to: **Ms. Janie Oddy, Centers for Disease Control (CDC), Personnel Management Office, 1600 Clifton Road, N.E., Atlanta, GA 30333.** Closing date is 29 February 1992. *CDC is an Equal Opportunity Employer and provides a smoke-free environment.*

ANNOUNCEMENTS

CIAR "REQUEST FOR PROPOSALS"

The Center for Indoor Air Research (CIAR) is requesting proposals on "System Control Strategies in Indoor Environments". The three RFPs deal with (1) system control strategies for effective use of ventilation; (2) ventilation methods for contaminant removal; and (3) relationship between psychophysiological measures of occupant exposure and physical parameters of the indoor environment. Applications will be accepted through 1 May 1992. To obtain a copy of the RFPs booklet, contact:

**Center for Indoor Air Research
1099 Winterson Road, Suite 280
Linthicum, MD 21090
Telephone: 410-684-3777
FAX: 410-684-3729**

WASTE MANAGEMENT FELLOWSHIPS

Fellowships are available for outstanding doctoral students in the following areas: waste and environmental policy, environmental science and biotechnology, and waste treatment technologies. Salary: \$12,000 stipend per year, remission of fees, and travel allowance. Application deadline is 1 March 1992. For applications contact: **Gail Farris, 327 South Stadium Hall, Waste Management Research and Education Institute, University of Tennessee, Knoxville, TN 37996-0710. Telephone: 615-974-4251; FAX: 615-974-1838.**

REQUEST FOR APPLICATIONS AVAILABLE

The Center for Indoor Air Research, sponsor of scientific research on the full gamut of indoor air topics, has available its 1992 Request for Applications booklet. Applications for 1 January 1993 funding must be received by 1 June 1992. For more information on the Center for Indoor Air Research and/or a copy of the Request for Applications booklet, telephone or write:

**Center for Indoor Air Research
1099 Winterson Road, Suite 280
Linthicum, MD 21090
Telephone: 410-684-3777
FAX: 410-684-3729**

COURSES AND TRAINING

GENETICS SHORT COURSE 20 TO 31 JULY 1992

33RD ANNUAL SHORT COURSE IN MEDICAL AND EXPERIMENTAL MAMMALIAN GENETICS. Conducted by Johns Hopkins University and The Jackson Laboratory at Bar Harbor, Maine. Morning and evening lectures covering the field are supplemented by workshops, tutorials, and demonstrations. Inquiries, applications to: **E. H. Birkenmeier, M.D., c/o Training and Education Office, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609; or V. A. McKusick, M.D., 1007 Blalock, Johns Hopkins Hospital, 600 North Wolfe Street, Baltimore, MD 21205.**

GRADUATE STUDIES IN BIOLOGY. The Department of Biology at Northeastern University invites applications for graduate study leading to M.S. or Ph.D. degrees with concentration in biochemistry, botany, ecology, marine biology, microbiology, molecular and cellular biology, physiology or vertebrate biology. Teaching assistantships (including tuition waiver) are available for qualified applicants beginning September 1992. For information contact: **Graduate Coordinator, Department of Biology, Northeastern University, Boston, MA 02115.** *Northeastern University is an Equal Opportunity/Affirmative Action, Title IX Employer.*

PRE- AND POSTDOCTORAL TRAINING IN NEUROPSYCHOPHARMACOLOGY FOR DRUG ABUSE RESEARCH. The Department of Pharmacological and Physiological Sciences at The University of Chicago invites applications for pre- and postdoctoral training positions in drug abuse research. Didactic training in general neurobiology, physiology, pharmacology and behavioral principles. Research programs include: developmental neurobiology of early drug exposure, neurotoxicity of psychostimulants, neural mechanisms of pain and analgesia, behavioral studies of the reinforcing, discriminative stimulus and subjective effects of drugs in laboratory animals and in humans. Other preclinical and clinical opportunities available. *Minorities are encouraged to apply.* Predoctoral applications available from: **J. Degroot, Department of Pharmacological and Physiological Sciences, The University of Chicago, Box 271, 947 East 58th Street, Chicago, IL 60637.** Postdoctoral applicants write to: **H. de Wit, Department of Psychiatry, The University of Chicago, 5841 South Maryland Avenue, Chicago, IL 60637.** *Equal Opportunity/Affirmative Action Employer.*

MEETINGS

SYMPOSIUM ANNOUNCEMENT 29 JUNE TO 1 JULY 1992 THE ETIOLOGY OF NEURODEGENERATIVE DISORDERS: A CRITICAL ANALYSIS

The First Berkshire Neuroscience Symposium will be held at the Jiminy Peak Conference Center, Hancock, Massachusetts. Organizing committee includes Drs. M. Flint Beal, Richard C. Henneberry, Michael V. Johnston, Robert A. Lazzarini, Daniel P. Perl, Paul R. Solomon, and Peter S. Spencer. Twenty prominent speakers will address contemporary issues in a collegial atmosphere with time reserved for workshops and discussion. Attendance limited. For information and application materials please contact: **Dr. Henneberry, Conte Institution for Environmental Health, 742 North Street, Pittsfield, MA 01201. Telephone: 413-447-2403.**

PROGESTERONE ANTAGONISTS NEW DEVELOPMENTS IN REPRODUCTIVE BIOLOGY AND ONCOLOGY 25 MAY TO 29 MAY 1992

This symposium to be held at a Victorian castle in New Paltz, New York, will discuss basic and clinical applications of progesterone antagonists in breast cancer, meningiomas, endometriosis, cervix ripening, fertility control, and conditioning of the uterus. For abstract forms and registration information, contact: **Jonathan R. Matias, Terra Symposia, 300 Westage Center, Suite 385, Fishkill, NY 12524. Telephone: 914-897-3238; FAX: 914-897-3218.**

COURSES AND TRAINING

POSTDOCTORAL FELLOW/GRADUATE STUDENT positions available as part of a Radiation Biology Training Program. Research areas are based in cancer research, including molecular mechanisms in carcinogenesis and mutagenesis, radiation biochemistry, cancer prevention and radiation oncology.

Qualified applicants (*U.S. citizens, permanent residents*) should send inquiries to: **Dr. Ann Kennedy, Department of Radiation Oncology, University of Pennsylvania School of Medicine, 195 John Morgan Building, 37th and Hamilton Walk, Philadelphia, PA 19104-6072.**

CAREER CHANGE OPPORTUNITY

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

MARKETPLACE



Buckyball materials. Celebrate the third allotrope of carbon and Molecule of the Year! Computer graphic of buckminsterfullerene structure and systematic name on attractive porcelain coffee mug. \$10@, postpaid. Write for info. **M & M Design, PO Box 851516, Mesquite, TX 75185-1516.**

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Research Division. A profitable contract research division with revenue of \$3M, 35 employees working in virology, molecular biology, and cell biology and proximity to NIH is available. Excellent facilities, reputation and staff. Upside with small marketing/sales investment. Contact **BIOLINK PARTNERS, 109 School Street, Watertown, MA 02192 tele. 617-926-5450.**

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See molecular genetics
in a whole new light...

Luciferase Reporter Gene Technology

Luciferase Assay System

Firefly luciferase is widely recognized as a superior reporter of genetic activity because its assay is rapid, extremely sensitive and non-isotopic. Promega's Luciferase Assay System provides several advantages over the conventional assay method:

- Increased luminescence – 10-fold or greater
- Simpler assay procedure – eliminates the need for automated injection devices and rapid mixing protocols
- No luminometer required – adaptable to scintillation counters or photographic films

GeneLight™ Reporter Plasmids

Promega's four GeneLight reporter plasmids employ luciferase as a reporter gene for analysis of genetic promoter and enhancer elements.

They offer:

- Comparative analysis using analogous plasmids containing different genetic elements
- Insertion of DNA sequences upstream or downstream from the luciferase gene
- Analysis using nested deletions or site-specific mutagenesis

pGEM®-luc DNA

pGEM-luc DNA provides a luciferase cassette with several unique cloning sites at both ends. Applications include analysis of:

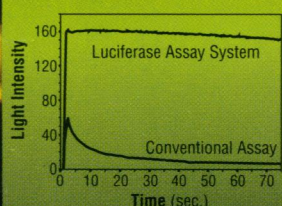
- Transcriptional regulation
- mRNA processing
- Protein structure/function analysis
- Labeling of cells and viruses



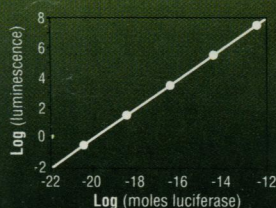
Promega's GeneLight plasmids are mammalian expression vectors containing the luciferase gene with all combinations of promoter (P) and enhancer (E).

expression vectors

Versatility

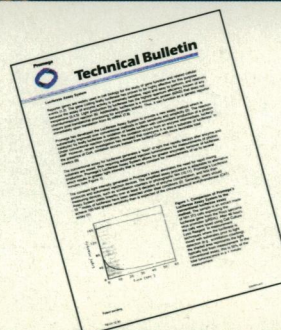


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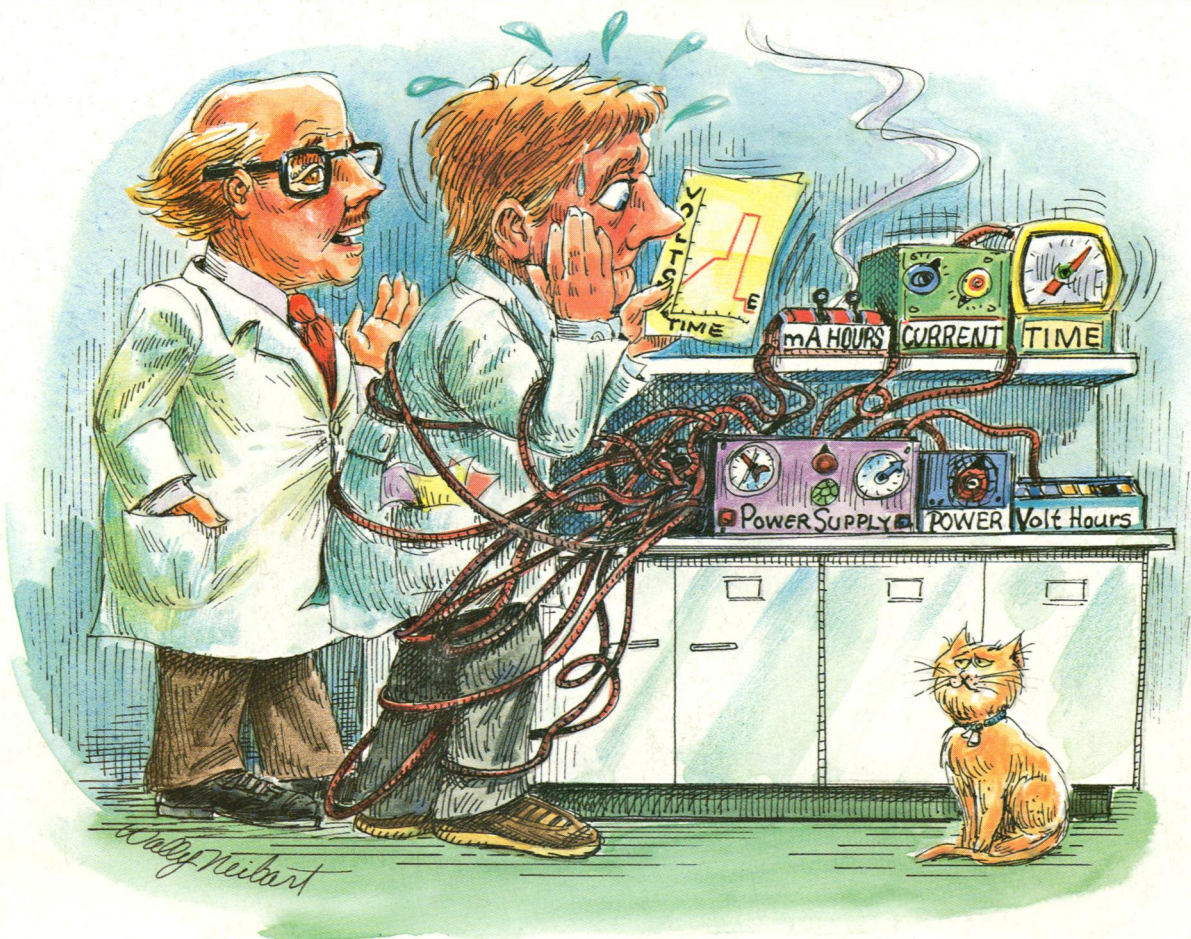
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