# PRODUCTS & MATERIALS

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#### **Embedding Kits**

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perature kits for immunolabeling, in situ hybridization, and histochemistry; and high resolution microscopy kits. Electron Microscopy Sciences. Circle 138.

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

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cases the wide dynamic range of the Capella family enables the processes and cell body to be studied simultaneously without the camera being saturated by larger signals from the cell body. **AstroCam. Circle 141.** 

#### **Protein Modeling Software**

The ChemProtein module of Chem-X features powerful homology building of three-dimensional protein models. The software enables the user to build models of partially known proteins using other proteins as templates. Now available for all Chem-X supported platforms, including Windows and Power Macintosh, it is the only desktop homology building software, according to the manufacturer. Chemical Design. Circle 142.

#### **Two New Polymerases**

TaKaRa Ex Taq Polymerase and LA Taq Polymerase are new reagents for polymerase chain reaction (PCR). TaKaRa Ex Taq has an incorporation fidelity four times greater than Taq polymerase. Depending upon the complexity of the DNA target, Ex Taq can produce from 10 to 100 times more product than Taq. It has a processivity rate that allows it to extend normal PCR capability to 10 kilobases or longer without sacrificing yield. LA Taq Polymerase and its buffer are optimized for long PCR from complex genomic targets, such as human genomic DNA. It has a sixfold higher incorporation fidelity than Taq polymerase, making it a good choice for genomic cloning, gene expression, and mutagenesis analysis. It is available in several PCR kits. Oncor. Circle 143.

## Prestained Electrophoresis Standards

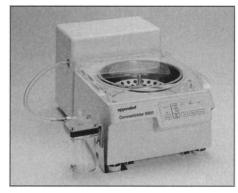
Kaleidoscope Prestained Standards are protein standards for electrophoresis and protein immunoblotting. They consist of seven individually colored proteins (6.5 to 200 kD). Every vial includes a lot-specific molecular weight calibration of each protein. They are supplied in a stable sample buffer, so no dilution or aliquoting is necessary when stored at  $-20^{\circ}\text{C}$  for up to 1 year. Bio-Rad Laboratories. Circle 144.

#### **Vacuum Concentrator**

Concentrator 5301 is for gentle concentration of DNA, RNA, nucleotides, and proteins as well as for preparing for gel electrophoresis. The user can choose between the basic concentrator model, which can be operated with the user's pump, and the com-

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plete system, which is equipped with a maintenance-free, chemical-resistant diaphragm pump. The standard delivery package includes a fixed-angle rotor for 48 2-ml test tubes. The complete system also features an



emission condensator that cleans outgoing air up to 85%. For larger numbers of samples, a 72-place rotor is available for 0.5-ml tubes or a 70-place rotor for 2-ml tubes. **Eppendorf.** Circle 145.

#### Literature

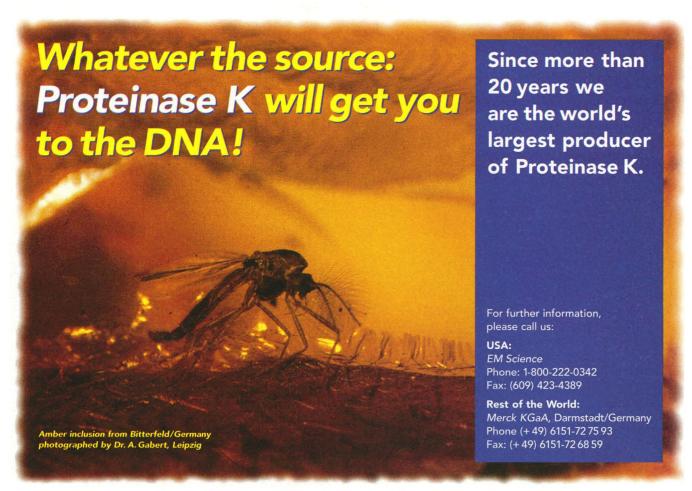
The Binding Site 1995/1996 Catalogue contains more than 3000 kits and reagents and describes many new products including human Immunoglobulin G subclass kits for use on various nephelometric/turbidimetric analyzers, isoelectric focusing kits, new antibodies, and more. The Binding Site. Circle 146.

Endogen Product Catalog 1995/1996 features more than 200 enzyme-linked immunosorbent assay (ELISA) kits and reagents for immunological research, including 75 new products. New products include human, mouse, and pig cytokine ELISA kits; mouse cytokine MiniKits; human, mouse, rat, and pig cytokines; antibodies to cytokines; and antibodies to human, mouse, and rat cell adhesion markers. Endogen. Circle 147.

Integrated GPC/SEC Systems describes new gel permeation chromatography systems. The PL-GPC210 is for ultrahigh temperatures up to 210°C. The PL-GPC110 operates at temperatures up to 110°C. Polymer Laboratories. Circle 148.

Electrophoresis 95: Power Supplies and Apparatus Catalog features systems for vertical mini gels and blots, horizontal submarine gels, isoelectric focusing, tube gels, and immunoelectrophoresis and immunodiffusion. E-C Apparatus. Circle 149.

*Prospekt* describes an on-line solid-phase extraction system. It outlines the configurations of the system to fit individual applications. **Spark Holland. Circle 150.** 



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#### **POSITIONS OPEN**

#### FACULTY POSITION Scripps Institution of Oceanography Observational Marine Physics

The Scripps Institution of Oceanography (SIO) of the University of California, San Diego (UCSD) invites applications for an ASSISTANT or ASSOCIATE PROFESSOR (tenure-track or tenured) in observational marine physics. Applicants with an interest in conducting innovative observational work in the marine environment will be given strongest consideration. Fields of interest include, but are not limited to: marine electromagnetics, ocean optics, and the ocean-atmosphere boundary layer. Applicants must hold a Ph.D. degree or equivalent and will be expected to teach and supervise students, primarily at the graduate level, conduct an extramurally funded research program, and participate in the administrative functions of SIO and UCSD. The level and salary will depend upon the experience of the successful applicant and will be based on the UC pay scale. Assistant-level candidates will be expected to show evidence of their potential through letters of recommendation and a publication record appropriate for their experience. Associatel-level candidates must show evidence of a strong research record in their specialization. Closing date for ap-plications: February 15, 1996. Please send a letter of ap-plication, curriculum vitae including teaching experience, and the names and addresses of five referees to: Chair-OMP, SIO Graduate Department, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0208. UCSD is an Equal Opportunity/Affirmative Action Employer.

# TUFTS UNIVERSITY JOINT APPOINTMENT DIRECTOR Community Health Program AND ASSISTANT OR ASSOCIATE PROFESSOR

Department of Economics

The Community Health Program and the Department of Economics seek a health economist or a health policy specialist. The position will involve a joint appointment, half time with the Department of Economics and half time as DIRECTOR of the Community Health Program, an interdisciplinary course of study for undergradutes. Candidates should have a Ph.D. or equivalent degree in economics or a related discipline and should be tenurable in the Department of Economics. Economics will be the person's disciplinary department. Evidence of successful teaching and research in the economics of health and/or health policy analysis is required, and experience in academic administration is desirable. Appointment will be at an ASSISTANT PROFESSOR OR ASSOCIATE PROFESSOR level, depending on the qualifications of the candidate. Applicants should send curriculum vitae and samples of written work and names and addresses of three references to: Dr. Margery Davies, Administrator, Community Health Program, Tufts University, 112 Packard Avenue, Medford, MA 02155. The search will continue until the position is filled.

Tufts University is committed to an aggressive program of Equal Opportunity and Affirmative Action. Candidates are encouraged to identify their status in their cover letters.

#### INVERTEBRATE ZOOLOGIST

Wabash College seeks an invertebrate zoologist with a strong field and ecological orientation. TENURE-TRACK POSITION in accord with College's guide-lines and review procedures. Ph.D. required and teaching experience is desirable. The Biology Department, with seven full-time faculty positions, encompasses molecular biology, organismal biology, and population biology. We seek a person with abilities and interests at the ecological level. Responsibilities include teaching a modern course in invertebrate zoology, participating in general biology courses, and periodic contributions to all-college interdisciplinary courses. Development of a research program involving undergraduates is expected. An endowed fund provides a summer research stipend during the first two years, and start-up funds for research are available. Send letter of application, curriculum vitae, brief statement of research and teaching interests, and three letters of recommendation by January 8, 1996, to: David T. Krohne, Chair, Biology Department, Wabash College, P.O. Box 352, Crawfordsville, IN 47933. Questions may be directed to: Krohned@Wabash.edu. Wabash College, a liberal arts college for men, encourages women and minorities to apply. Equal Opportunity Employer.

#### **POSITIONS OPEN**



FACULTY POSITIONS in Molecular Immunology. The Department of Microbiology and University of Miami has tenure-track faculty positions at the Assistant or Associate Professor level open for molecular immunologists. We are particularly interested in individuals that examine cellular signaling, transcriptional regulation or molecular mechanisms related to lymphocyte activation, development, or apoptosis. The chief criteria for a candidate is proven excellence in research and the potential to develop an externally funded research program. Quality research facilities, generous start-up funds, and salary will be made available to the successful candidates. Interested individuals are invited to write a letter of intent and enclose a curriculum vitae, list of publications, description of future research plans, and names of three references to: Chairman, Molecular Immunology Search Committee, Department of Microbiology and Immunology, University of Miami School of Medicine, P.O. Box 016960 (R-138), Miami, FL 33101. Equal Opportunity/ Affirmative Action Employer.

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The deadline for receipt of application materials is January 8, 1996. Please send a statement of research and teaching interests, a curriculum vitae, and the names and addresses of three references to: Jared L. Cohon, Dean, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT 06511.

Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.

#### BIOCHEMIST

The James Madison University Chemistry Department is committed to excellence in undergraduate instruction and research and seeks a TENURE-TRACK ASSIST-ANT PROFESSOR starting fall 1996, pending state funding. Ph.D. in biochemistry, chemistry, or related area required; postdoctoral experience desirable. Teaching responsibilities in introductory and upper-division biochemistry courses and the department's service courses and laboratories. Research with undergraduates required; collaboration with other departments encouraged. Résumé, statements of teaching philosophy and research interests, and three letters of recommendation to: Search Committee, Department of Chemistry, James Madison University, Harrisonburg, VA 22807. Complete application should be received by January 15, 1996 to ensure consideration. James Madison University is an Affirmative Action/Equal Employment Opportunity Employer and especially encourages applications from minorities, women and persons with disabilities.

#### ECOLOGY AND DEVELOPMENTAL BIOLOGY

Two TENURE-TRACK POSITIONS to begin September, 1996. 1) Ecologist: including teaching in evolution and systematics; marine biology background advantageous. 2) Developmental biologist: including teaching capabilities in comparative anatomy and embryology. Small liberal arts college with broad range of undergraduate courses and specialized courses through M.S. level. 300-acre campus on the North Shore of Long Island presents a rural setting, within an hour of Manhattan. Please send curriculum vitae, supporting material, and names of at least three references to: Dr. M. Shodell, Department of Biology, Long Island University, C.W. Post Center, Brookville, NY 11548. Closing date: January 26, 1996. Equal Opportunity Employer.

It's going to be a year when we have the chance to run again." That's Duane Roth,



# CEO of Alliance Pharmaceutical Corp. in San Diego, California. Like many watchers of California biopharma, Roth sees 1996 as a good year for investment, innovation and employment.

Californian biotechnology employs 108,000 people, which will grow to 160,000 or more by the turn of the century. After a year and a half in a holding pattern—reflecting the national health care debate and a few high-profile failures in biotech clinical trials—biomoney started to flow about halfway through 1995. "The gates are definitely open again," says Gina Kollin, director of human resources for Shaman Pharmaceuticals, Inc., of South San Francisco. "That's going to give a lot of companies the chance to stay up and running while they get a product to market."

Twenty-seven biotech products are now on the shelves, with over 290 in clinical development, and more than three times that number in preclinical. Those facts are suggestive. To be sure, the excellent discovery scientist will always be in demand. But the real need is going to be downstream—the PhDs, MSs, and BSs in clinical research, synthetic chemistry, regulatory affairs, validation, process development, manufacturing, and marketing who will help develop new drugs and speed them to market. Job-seekers dreaming of California need to retool their conceptions of the scientific career. Below we take a closer look at some of the hot fields.

Antisense, Gene Therapy, Genomics. "Antisense is one of the fields that people are very excited about," says Lester Kaplan, corporate vice president of research and development for Allergan in Irvine. "And with gene therapy, you'll see the excitement continue as well. There the big challenge lies in finding the right delivery system." And the Human Genome Project is still the mother of all collaborative efforts—but, as Kaplan points out, "there's a lot of uncertainty about how all this new knowledge is going to be applied."

Manufacturing. "All our indicators suggest a significant preparation throughout California for manufacturing," according to A. Stephen Dahms, director of the 22-campus California State University system Biotechnology Research and Education Program. He points to Vacaville, a

northern California town that now hosts manufacturing centers for both Chiron and Genentech. "The Bay Area is well ahead of Southern California in moving from a research boutique phase to true manufacturing," he says, "and that should affect the number and kind of jobs these companies will be advertising for."

Pharmacokinetics, Medicinal and Synthetic Chemistry, and Beyond. "There don't seem to be enough qualified people in these areas," says Kollin. "I keep seeing a big need for people with expertise in metabolism and formulation—really well-paid, important areas." Chemists who can actually make the salable compounds of the future—and help test them—will be key (and much sought-after) players in the future of California biopharma. Kaplan says that "combinatorial chemistry seems to offer a lot of promise as a way of speeding up drug discovery."

Regulatory Savoir-Faire. From two-thirds to three-quarters of all new biotech job listings require some knowledge of regulatory codes and procedures, according to Dahms. Every future job-seeker should learn three words, according to Roth: GCP (good clinical practice), GMP (good manufacturing practice), and GLP (good laboratory practice). "If your résumé says, 'I have a basic understanding of regulatory laws,'" Roth says, "it's a plus."

Clinical Research Associate (CRA). "The CRA is definitely the hottest job in town," says Roth. "Already you see companies competing hard for good people. Nurses are very important, but so is anyone with a BS in chemistry or biology and experience in clinical research." Pay in many cases exceeds that for PhD discovery researchers. But is the job rewarding? "There's nothing more powerful than visiting the patient who has benefitted from your product," says Roth. "Knowing you've helped save lives—that's the most powerful reward you can get."

Validation/QA/QC. A new manufacturing facility will cost a company an average of \$35 million to establish—and

fully 17% of that money is devoted to validation. "The word validation just isn't in the lexicon of most educators and scientists yet," says Dahms. "That's a shame, because these can be very rewarding careers. You get to conduct very focused research aimed at answering concrete questions, and your results contribute directly—and rapidly—to the development effort." As for quality control and quality assurance, Dahms says, "I'm seeing many job ads looking for a BS in chemistry with experience in QA."

The Experienced MS and BS. Kollin says that "whereas we're seeing a flood of molecular biology and chemistry PhDs on the market, there is probably an even greater need for the MS and BS scientist who has good lab experience." Everyone urges these useful scientists to get that experience as they get their degree. As Roth puts it, "We don't have time to train people. We need some familiarity with what we do—get that while you're getting your degree or while you work."

Creativity. Academia, industry, and individuals have to think without blinders about future careers. Dahms sees it from the university perspective: "What we need is a curriculum that produces students whose background is interesting to the industry," he says, "and we can do this largely with existing labs and lectures. We just have to think differently." Job-seekers should simply think with as wide a horizon as they can. "The more cross-trained you are, the better," Roth says. "If you work with us, you'll be asked to do a lot of things. We'll say, 'Here's a problem. What can you contribute?'"

In the meantime, companies are innovating in as many new ways as they can find. Shaman pursues what it calls an "ethnomedical research process," in which western-trained scientists collaborate with healers from indigenous tribes in the tropical rain forest to study plants and compounds that treat disease. Kollin says, "There are new platforms, new products, new kinds of work. That's what California has always been about."

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#### PRODUCT MANAGERS **Genetic & Instrument Systems**

STRATAGENE, a leader in the development and manufacture of molecular biology research products, has two immediate openings for qualified Product Managers. Responsibilities include the generation, implementation, tracking and reporting of tactical sales and marketing programs world-wide for genetic and instrument systems products. BS/BA degree in Molecular Biology or related field (or equivalent) and at least 3-5 years' experience marketing molecular biology products are required, along with laboratory experience and a strong understanding of the molecular biology

Interested candidates should send a resume to: **Stratagene**, **11011 N. Torrey** Pines Rd., La Jolla, CA 92037, Attn: Professional Staffing. Please indicate position of interest by code: Genetic . 22054-95A, or Instrument 22055-95A. AA/EOE.



#### FACULTY POSITION TENURE TRACK

**Developmental Biology Department of Biology** University of California, San Diego

The Department of Biology at the University of California, San Diego invites applications for a tenure-track faculty position at the Assistant Professor level. We are seeking exceptional candidates pursuing imaginative approaches to any basic problem in Developmental Biology. The successful candidate is expected to develop a vigorous research program and participate in undergraduate and graduate teaching.

A Ph.D. degree and two or more years of productive postdoctoral research experience are required. Salary (based on the UC pay scale) will be commensurate with qualifications and experience. This position is contingent on availability of funds.

Applicants should send curriculum vitae, statement of research interests, bibliography, and the names, fax numbers, and e-mail addresses of three referees by February 15, 1996, to:

> **Developmental Biology Search Committee** University of California, San Diego **Department of Biology 0346** 9500 Gilman Drive La Jolla, CA 92093-0346

To apply by e-mail: devbio@ucsd.edu

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

#### **Assistant Professor of Genetics**

The Department of Botany and Plant Sciences, University of California, Riverside, announces a position available July 1, 1996. The position is an 11-month, tenure-track appointment in the College of Natural and Agricultural Sciences and in the Agricultural Experiment Station. The successful candidate will be expected to develop a vigorous, innovative, independent research program in plant developmental genetics using genetics, molecular, cellular, and other techniques to elucidate fundamental mechanisms underlying plant development. Opportunities are available for interacting with researchers in plant cell, molecular, and developmental biology, plant physiology, and other disciplines. The successful candidate will be expected to become involved in undergraduate and graduate teaching as well as serve as major professor of graduate students in the Department of Botany and Plant Sciences and in the interdepartmental Genetics Program. A Ph.D. in genetics or related field is required. The candidate must possess a strong commitment to teaching excellence and a high research potential. Send letter of application, curriculum vitae, statement of research interest, and arrange to have at least three confidential letters of reference sent to: Dr. W.W. Thomson, Search Committee Chair, Botany and Plant Sciences Department, University of California, Riverside, CA 92521-0124. Phone: (909) 787-4619; Fax: (909) 787-4437; email: susanm@ucrac1.ucr.edu; WWW:http:// cnas.ucr.edu/~bps/homepage.html. The application deadline is January 26, 1996. The University of California is an Affirmative Action/ Equal Opportunity Employer.

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#### TENURE-TRACK FACULTY POSITION ASSISTANT PROFESSOR

Crump Institute for Biological Imaging Department of Molecular and Medical Pharmacology UCLA School of Medicine

The Crump Institute for Biological Imaging is a new Institute at UCLA that is committed to the merger of imaging and modern biology to examine systems ranging from cellular subassemblies up to human subjects. The Institute and the Department of Molecular and Medical Pharmacology at UCLA are seeking a junior faculty member with interests in both synthesis and protein chemistry. The successful applicant will be expected to develop an independent research program with emphasis in radiolabeled proteins and other biochemical imaging probes for positron emission tomography and confocal fluorescence microscopy. The individual we seek will also act as a member of a research consortium and should have the ability to interact with scientists of diverse interests who have come together to advance biology and medicine through the use of novel probes and bio-medical imaging modalities. The faculty includes scientists with strengths in chemistry, biochemistry, molecular biology, pharmacology, nuclear medicine, biophysics, and biomathemat-

Candidates should have a Ph.D. in Chemistry, Biochemistry, or a closely related field. Teaching of graduate and M.D./ Ph.D. students is expected. Send curriculum vitae, a description of research plans, and three letters of recommendation to: Theresa Sama, Search Coordinator, Crump Institute for Biological Imaging, JLNRC, UCLA School of Medicine, 10833 Le Conte Avenue, Los Angeles, CA 90095-1770.

# ASSISTANT PROFESSOR of CHEMISTRY University of California, Riverside

The Department of Chemistry invites applications for a tenure-track faculty position at the Assistant Professor rank starting July 1, 1996. The position requires a Ph.D. in analytical, inorganic, organic, physical, or other areas of chemistry, an ability to conduct an innovative and vigorous research program in fundamental aspects of atmospheric chemistry or related chemical/environmental areas, and excellent prospects for teaching chemistry at the graduate and undergraduate levels. Postdoctoral experience will be helpful. The successful candidate for this position will complement the ongoing research in the Department of Chemistry and the UC Riverside Statewide Air Pollution Research Center (SAPRC). The successful candidate will be a joint appointment in the Department of Chemistry and SAPRC. The SAPRC mission includes fundamental chemical studies of atmospheric processes as viewed in the broadest sense. Applicants should send a complete resume and statement of research interests, and should have three original letters of reference sent to Professor Steven R. Angle, Chemistry Faculty Search Committee Chair, Department of Chemistry, University of California, Riverside, CA 92521-0403. Evaluation of applications will begin on 15 January 1996, but the position will be open until filled. The University of California is an Affirmative Action, Equal Opportunity Employer. Additional local campus information is available at http:// cnas.ucr.edu/ and http://www.chem.ucr.edu/

#### **Research Scientist**

VICAL INCORPORATED, a leader in the development of gene-based pharmaceutical products for human gene therapy is currently seeking a Research Scientist. The incumbent will be responsible for carrying out original and applied research in the area of Cancer Gene Therapy. The incumbent will be expected to provide experimental and intellectual contributions to Vical's primary direct DNA injection technology in the area of cancer therapy with an emphasis on the immunotherapy of cancer. The ideal candidate will possess the following:

- •A Ph.D. with a minimum of 2-3 years postdoctoral experience;
- •A strong background in tumor biology and cancer immunotherapy;
- •Excellent communication skills and team skills;
- •Strong publication record in journals reporting original cancer research.

Please send your resume to Vical, Inc. Human Resources, 9373 Towne Centre Drive, Suite 100, San Diego, CA 92121 or fax to (619) 453-3452.

EOE

# OPPORTUNITIES IN CELLULAR AND MOLECULAR DIAGNOSTICS

We are seeking multiple individuals to join an expanding research group focusing on rare cell isolation and differentiation. The goal of this aggressive program is the development of methods that allow the isolation, enrichment and positive identification of rare cells for diagnostic purposes. PhD applicants with at least 5 years' related research experience and MS/BS applicants with preferably up to 5 years' related experience are encouraged to apply for positions within this group. Post-doctoral positions are also available for individuals with at least 2 years' related research experience. Knowledge and experience with one or more of the following technologies is a necessity: isolation, purification and labeling of mammalian RNAs, cDNA cloning methodologies, construction, analysis and maintenance of cDNA libraries, subtraction hybridization strategies, RT-PCR, DD-PCR, *in-situ* hybridization and M13 based sequencing. Knowledge of cell biology and bioinformatics is desirable. These individuals will be part of an exciting multidisciplinary project with an on-going world-class industrial and academic collaboration. (Ref: CMD)

#### Other Opportunities Available in R&D

**Amplification and Detection Technology** 

We also seek PhD and post-doctoral applicants with prior experience in nonisotopic nucleic acid labeling and detection. Candidates with experience in target amplification and/or novel signal amplification systems are encouraged to apply. (Ref: ADT)

Development

We also seek BS/MS/PhD applicants with a minimum of 3+ years' assay development experience in the diagnostics or pharmaceutical industry. (Ref: DMT)

Competitive salary, benefits and relocation allowance provided.

For consideration, please forward your CV to the Human Resources Department at Boehringer Mannheim Corporation, 2400 Bisso Lane, P.O. Box 4117, Concord, CA 94524–4117 or fax your resume to (510) 674-1680. Please include the reference code. Principals only please. EOE.

**Terrapin** a dynamic young organization with proprietary targets in intracellular signaling and a unique drug discovery technology located at 750 Gateway Blvd., South San Francisco, CA 94080, Fax (415) 244-9388, has the following openings:

Computational Chemist - This position is available in our Chemistry Department. The ideal candidate should have a Ph.D. and 3-5 years postdoc experience with strong background in computer aided drug design & excellent command of multivariate statistics. Knowledge of chemical databases, proteins structure & function or pharmacophore development is a plus. If you are independent & have excellent communication skills, please send your resume and references to Dr. Hugo Villar at the above address.

Senior Scientist - Hematopoesis Cell Biology - The ideal candidate should have a Ph.D. with in-depth knowledge and extensive hands-on experience in human bone marrow biology as well as a proven track record with bone marrow cultures and multi-myeloid lineage assays. Candidates with lymphoid lineages experience in a pharmaceutical company environment and the ability to lead research project will be given preference. Please send your resume and references to Dr. Deborah Higgins at the above address.

Research Assistant position available for exploring T cell mediated signal transduction. The successful candidate will have a BS/MS with 2-4 years experience in immunology or signal transduction. This position requires strong tissue culture skills and expertise in signal transduction techniques. Experience with establishment and maintenance of T cell clones is highly desirable. Please send your resume and references to Dr. Nicki Vasquez at the above address.

Research Assistant position available to run biochemical screening assays, a variety of biomedical procedures and laboratory robotics. The ideal candidate will have a BS/MS with biology and chemical science training as well as demonstrated laboratory experience in biochemical assay development or procedures. Applicant should be meticulous & capable of maintaining highly accurate record keeping as well as responsible and thorough. Please send resume and references to Dr. Richard Sportsman at the above address.

**Research Assistant** position available in Molecular Biology for an individual skilled in automated fluorescence DNA sequencing. The ideal candidate will have basic skills in molecular biology (PCR, cloning, plasmid preparation, RNA work a plus). This position requires a BA/BS with 1-2 years experience. Please send resume and references to Dr. Gene Napolitano at the above address.

Research Assistant position available in Hematopoesis Cell Biology. *In vitro* cell culture and *in vivo* experience are essential. The ideal candidate must have a basic knowledge of hematopoesis. Candidates with the ability to do bone marrow cultures & multi lineage assays will be given preference. This position requires a BS/MS in biological science and some post graduate experience. Please send resume and references to Dr. Deborah Higgins at the above address.



**Terrapin** is an Equal Opportunity Employer.

#### Detector Instrumentation Department Head

The Ernest Orlando Lawrence Berkeley National Laboratory (EOLBNL) is seeking a nationally or internationally recognized authority and leader in the field of instrumentation for radiation detection and measurement to serve as Head of the Detector Instrumentation Department. This individual should have a broad interest in instrumentation development including significant experience and demonstrated competency and achievements in one or more of the following technical areas: analog signal processing, state-of-the-art microelectronics technology, solid-state detector research and development, or large systems for radiation detection. An extensive publication record, a demonstrated ability to provide effective technical leadership to large groups and complex technical projects, and good management and communication skills are required.

The department, consisting of a staff of 25 engineers, scientists, and technicians collaborates with scientists in Berkeley Lab programs in High Energy and Nuclear Physics, Astrophysics, Materials, and Biosciences. The staff have competency in application-specific integrated circuits design, high bandwidth, low noise analog and digital systems, high speed data acquisition, and filtering systems and advanced solid-state detectors.

Reporting to the Engineering Division Director, the Head will provide overall technical leadership to the department, manage staff, determine and/or establish programmatic goals and requirements, assemble engineering and technical teams to meet those goals and requirements, and contribute technically to one or more of the detector R&D or instrumentation projects underway at the Laboratory. The Head is also expected to develop new technical initiatives within or from outside the Laboratory and carry out his/her own research activities either within the Engineering Division or one of the Berkeley Lab's programmatic divisions (e.g. Physics, Nuclear Science, Materials, Life Sciences).



Berkeley Lab provides excellent benefits and compensation packages, and the opportunity for career growth. Please mail your resume to: Ernest Orlando Lawrence Berkeley National Laboratory, Attn: Human Resources Dept., Bldg. 938A, JSC13520, One Cyclotron Road, Berkeley, CA 94720. Or fax: (510) 486-5870. E-mail: jamagee@lbl.gov. Equal opportunity employer. Women and minorities are encouraged to apply.

#### POSITION ANNOUNCEMENT

Position: Assistant Professor of Atmospheric Science, Department of Soil and Environmental Sciences, and Assistant Research Scientist, Statewide Air Pollution Research Center (SAPRC). Salary and compensation shall be determined within allowable University parameters.

Date Available: July 1, 1996

Responsibilities: This 9 month tenure-track position is 60% teaching (Soil and Env. Sci.) and 40% research (SAPRC). The individual is to carry out research in atmospheric science that will complement current research being conducted at the University of California, Riverside. A particular research area of interest is that involving atmospheric particulate matter, including research into the formation, transport and transformations of particles and particle-associated chemicals in the atmosphere. The individual will teach undergraduate course(s) in environmental science and have the opportunity to teach a graduate course in their area of specialty.

Qualifications: Candidates must have met all requirements of Ph.D. within one year of appointment in a relevant discipline, and a background in atmospheric science. Candidates must possess a strong commitment to teaching excellence, and have the ability to conduct an innovative and vigorous research program.

Application Procedures: Candidates for this position are requested to submit a curriculum vita, a statement of research interests and teaching interests, transcripts and any supporting information to Roger Atkinson, Department of Soil and Environmental Sciences, University of California, Riverside, CA 92521. Applicants must also request at least three individuals to write letters of recommendation on their behalf. Applications will be accepted until January 15, 1996.

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



#### LABORATORY FOR ASTRONOMY AND SOLAR PHYSICS

The NASA/Goddard Space Flight Center invites applications and nominations for this position, located in Greenbelt, Maryland. The vacancy may be filled as either a permanent Senior Executive Service position or on a time limited basis through an appropriate university or intergovernmental arrangement.

The Chief of the Laboratory for Astronomy and Solar Physics is responsible for developing and conducting a broad program of experimental and theoretical research, in specific areas of space science. These areas include: highly advanced state of the art studies of the properties of astrophysical sources with emphases on the Sun, comets, stars, the interstellar medium, stellar clusters, galaxies, galaxies, galaxies, galaxies, and laboratory and theoretical investigations in support of astrophysical studies from space. The incumbent participates in the overall development and implementation of the Center-wide space science objectives.

The Chief performs individual research and may act as a principal investigator, coinvestigator, or a project scientist on NASA missions. Participation on Agencywide panels and committees is also required of the incumbent.

Desirable qualifications include a Ph.D. degree with extensive post-graduate research experience as well as experience in the scientific and administrative management of research programs which has established the candidate as an authority in astronomy, astrophysics, and/or solar physics. The candidate should also possess demonstrated executive management abilities commensurate with the high level management responsibilities of this position.

Compensation is range is currently \$107,300 to \$122,040 per annum, including locality pay. Submit OF 612, "Optional Application for Federal Employment" or any other written format you choose and a supplemental statement addressing the SES Executive Core Qualifications and the Technical Qualifications of the position. Mail applications to:

Keith P. Lowe Human Resources Operations Office, Code 113.8 Office of Human Resources NASA/Goddard Space Flight Center Greenbelt, MD 20771

For more information about position requirements and application procedures, please call Mr. Lowe at (301) 286-9951 or (301) 286-7918 (TDD).

Complete application must be postmarked by January 23, 1996

Equal Opportunity Employer

U.S. citizenship required.

#### MARINE BIOLOGICAL LABORATORY 1996 Summer Research Fellowships

FULL FELLOWSHIP This fellowship covers most costs of conducting summer research, plus living and travel expenses: Fellowship- Any area of biological sciences requiring the use of advanced microscopy.

PARTIAL FELLOWSHIPS. These fellowship funds may be available individually or in concert to cover many of the costs of conducting summer research, including living and travel expenses, in the following areas:

Robert Day Allen Fellowship - cell motility and cytoarchitecture

Frederik B. Bang Fellowship Fund - for research using marine models in molecular biology or biomedicine

Frank A. Brown, Jr. Memorial Readership -

covers fees for desk rental and full privileges in the MBL/WHOI Library Charles R. Crane Fellowship Fund - independent research in any area

John O. Crane Fellowship Fund - independent research in any area

Jean and Katsuma Dan Fellowship Fund - supports scientific visits to Japan by junior American investigators Bernard Davis Fund - microbiology and evolution

Erik B. Fries Fellowship - covers laboratory or library expenses

M.G.F. Fuortes Fellowship - neuroscience

Daniel S. Grosch Fellowship and Scholarship Fund - environmental toxicology

Ann E. Kammer Fellowship Fund - for women researchers, with a preference for neuroscience

Esther A. and Joseph Klingenstein Fund - supports laboratory space expenses for research in neurobiology Stephen W. Kuffler Fellowship - neurobiology

Lucy B. Lemann Fellowship - research in any area

Frank R. Lillie Fellowship - provides a research laboratory and funds for travel and supplies

MBL Associates Fellowships - research in any area

Tames A. and Faith Miller Memorial Fund - any area, with developmental biology preferred William Townsend Porter Fellowship for Minority Investigators -

collaborative research in any area of physiology

Herbert W. Rand Fellowship - research in any are

The Evelyn and Melvin Spiegel Fellowship Fund - any area, developmental biology preferred

H. B. Steinbach Fellowship - cell biology and physiology

Application Deadline for fellowships and laboratory space rental is January 15, 1996

Applications are reviewed by the MBL Fellowship Committee. Notification of decisions will be mailed by March 15. For application forms and additional information, please contact:

> Fellowship Coordinator, Office of Research Administration Marine Biological Laboratory **MARINE**

**BIOLOGICAL LABORATORY**  7MBL Street, Woods Hole, MA 02543-1015 Tel: (508) 289-7441/Fax: (508) 457-1924/ E-mail: skaufman@mbl.edu Or download information off the Internet/World-Wide-Web at

MBL is an EEO/Affirmative Action Institution

#### **FACULTY POSITIONS**

#### Immunogenetics/ Molecular Genetics

The newly reorganized Department of Microbiology and Immunology at Vanderbilt University is continuing to expand its research base in molecular biology of the immune system with a special emphasis on immunogenetics and mo-lecular genetics. Tenure-track positions at the assistant professor level are available. In ex-ceptional cases faculty positions at the associ-ate professor and professor levels will be con-sidered. The candidates should have experience in applying molecular biology approaches to the problems within the area specified above. Start-up funds and newly reno-vated space are available. Faculty members holding PhD and/or MD degrees will have aca-demic appointments in the School of Medicine and in the Graduate School of Vanderbilt University. Send applications with curriculum vitae, present and future research plans, and at least three names of references to:

Jack J. Hawiger, Professor and Chairman Department of
Microbiology and Immunology
Vanderbilt University School of Medicine
A-5321 Medical Center North

Women and minorities are encouraged to apply. Vanderbilt University is an Equal Opportunity/ Affirmative Action University. Review of applica-tions will begin immediately and continue until positions are filled.

Nashville, TN 37232-2363.



A position is available immediately to study regulation of the mammalian nervous system. The research will focus on isolation of factors which regulate alternative splicing of neuronal-specific genes. Candidates should have a Ph.D. with experience in molecular and cellular biology; some knowledge of protein purification techniques is desirable.

The Shriver Center is an affiliate of Massachusetts General Hospital and Harvard Medical School. The Department of Biomedical Sciences provides extensive core facilities and many opportunities for scientific interactions.

Please send C.V. and the names/phone numbers of three references to:

Athena Andreadis, Ph.D., E. K. Shriver Center, Biomedical Sciences, Room 205, 200 Trapelo Road, Waltham, MA 02254, Fax: (617) 893-4824.

email: aandreadis@shriver.org

EUNICE KENNEDY SHRIVER CENTER

An Equal Opportunity Employer

#### SENIOR RESEARCH **IMMUNOLOGIST**

Merck Research Laboratories in West Point. Pennsylvania, a world leader in biological and pharmaceutical research, has an immediate opening for a Senior Research Immunologist in the department of Virus and Cell Biology.

The successful candidate must have experience in the immunology of multiple virus systems with knowledge of medical or biochemical virology or immunology. The focus of this position will be to develop methods to assess the immune response to viral vaccines and apply novel assays to characterize vaccine viruses and measure immunity to viruses. Experience in molecular, biochemical or biophysical characterization of viruses is also desired.

A Ph.D. in Immunology, Virology or related field, or equivalent with postdoctoral experience in the growth and characterization of viruses is required.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter to: Personnel Manager, Ad#B-42, MRL Human Resources, WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. EEO/AA/V/Employer.



#### **POSITIONS OPEN**

#### PHYSICAL OCEANOGRAPHER

The University of Southern Mississippi (USM) invites applications for a nine-month, tenure-track faculty position in physical oceanography in the Center for Marine Sciences. The appointment will be made at the ASSIST-ANT or ASSOCIATE PROFESSOR level depending upon the applicant's previous teaching and research experience. The successful applicant must hold a Ph.D. in physical oceanography or a closely related field and have a strong research interest in coastal oceanographic processes. Applicants with interests in interdisciplinary research problems are particularly encouraged to apply. The appointee is expected to maintain a strong externally funded research program, to supervise graduate students, and to develop and teach courses at the graduate level. The Center for Marine Sciences is a multidisciplinary academic unit with research and teaching programs in biological, chemical, geological, and physical oceanography, including numerical ocean modeling. The USM Center for Marine Sciences is located at NASA's John C. Stennis Space Center on the Mississippi-Louisiana border. Besides NASA research activities, the Stennis Space Center is also the home of the U.S. Naval Oceanographic Office, NO-AA's National Data Buoy Center, the Naval Research Laboratory-SSC, and the Maury Oceanographic Library. Ample opportunities are available for research collaboration with oceanographers at these federal agencies. More information about our program is available at http:// www.coam.usm.edu/cms/ on the Internet. The starting date is August 14, 1996. Qualified applicants should mail a complete curriculum vitae, a statement of teaching and research interests, and names of four references to: Dr. Denis A. Wiesenburg, The University of Southern Mississippi, Center for Marine Sciences, Building 1103, Room 102, Stennis Space Center, MS 39529. Application deadline is January 12, 1996. Affirmative Action/Equal Employment Opportunity/ADA Institution.

#### CONSERVATION BIOLOGY AND WILDLIFE ECOLOGY

The Yale University School of Forestry and Environmental Studies seeks to make a **TENURED** appointment in the field of Conservation Biology and Wildlife Ecology. Responsibilities of the position will include development of a research program, presentation of graduate courses/seminars, and advising Master's and doctoral students. Individuals with research interests in population biology and related areas and in the policy implications of conservation biology would be especially attractive. The ability to thrive in an interdisciplinary, professional program is essential.

The deadline for receipt of application materials is January 8, 1996. Please send a statement of research and teaching interests, a curriculum vitae, and the names and addresses of three references to: Jared L. Cohon, Dean, Yale University, School of Forestry and Environmental Studies, 205 Prospect Street, New Haven, CT

Yale University is an Equal Opportunity/Affirmative Action Employer. Women and minority group members are encouraged to apply.

#### QUANTITATIVE POPULATION ECOLOGIST University of California, Berkeley

Applications are invited for a tenure-track position in quantitative population ecology at the ASSISTANT PROFESSOR level in the Department of Integrative Biology. Area of organismal interest is open, but preference will be given to a person with special skills in experimental design, quantitative analysis and/or modelling. The successful applicant will participate in teaching our upper-division course in population and community ecology and will be expected to develop an advanced undergraduate and graduate-level course in quantitative and experimental methods in ecology. He or she will also offer seminars in the area of specialty.

Applications must be posted by January 19, 1996; the appointment will begin on July 1, 1996. Submit a curriculum vitac, three letters of recommendation, a statement of research and teaching goals, and reprints of your three most significant publications to: Chair, Population Ecology Search Committee, Department of Integrative Biology, 3060 Valley Life Sciences Building, University of California, Berkeley, CA 94720-3140. The University of California is an Assimator Action/Equal Opportunity Employer.

#### **POSITIONS OPEN**



THE CLEVELAND CLINIC FOUNDATION

#### OPTHALMIC RESEARCH PROGRAM IN MACULAR DEGENERATION AND

INHERITED RETINAL DISEASES

Division of Ophthalmology The Cleveland Clinic Foundation (CCF)

Two positions, at the level of Assistant, Associate or Full Professor, are immediately available in Opthalmic Research in the newly expanding Eye Institute. Three additional positions will be filled in the fall of 1997. Basic investigators with training in molecular biology, cell biology, biochemistry, human genetics, or epidemiology, with research interests that impact the clinical areas of macular degeneration and inherited retinal diseases, will be seriously considered. Applicants should send curriculum vitae; names of three references; and a statement of past research activities, current interests, and career goals to: Joe G. Hollyfield, Ph.D., Director of Ophthalmic Research, Research Institute FFb, The Cleveland Clinic Foundation, Cleveland, OH 44195-5245. FAX: 216-445-3670. Email: <a href="https://dimensive.cr.org">https://dimensive.cr.org</a>>. CCF is an Equal Opportunity/Affirmative Action Employer.

#### PROFESSOR AND CHAIR OF PHARMACOLOGY AND CELL BIOPHYSICS

The University of Cincinnati College of Medicine invites applications and nominations for CHAIR of this department, which has a history of academic and research excellence. Current faculty support includes two training grants and two NIH Merit awards. The College receives approximately \$60 million in sponsored program awards and has significant interdisciplinary programs of distinction in cardiology, neuroscience, and oncology. Faculty have been internationally recognized for expertise in the generation/evaluation of transgenic mice. The college is developing an interdisciplinary Structural Biology program with 750, 600, and 500 MHz NMRs.

We seek qualified candidates with distinguished records in research, teaching, and service, and demonstrated excellence in leadership and administration. Individuals with nationally and internationally recognized and funded research programs in molecular approaches to pharmacology or related disciplines are particularly encouraged to apply. The Chair is responsible for medical and graduate instruction in pharmacology as well as for maintaining and developing outstanding, externally supported research programs within the department. Review of candidates will begin in late 1995. Send nominations and applications (include letter of interest, curriculum vitae, and three references) to: Jerry B. Lingrel, Ph.D., Pharmacology Search Committee Chair, University of Cincinnati College of Medicine, 231 Bethesda Avenue, Cincinnati, OH 45267-0524. University of Cincinnative Action/Equal Opportunity Employer. Women, Minorifies, Disabled, Veteraus encouraged to apply.

# HUMBOLDT STATE UNIVERSITY Department of Biological Sciences Two Positions: Animal Development and Phycology

TENURE-TRACK FACULTY POSITIONS starting August 21, 1996. Animal Development: requires Ph.D. in zoology or biology, with emphasis in animal development. Primary responsibilities will be to teach courses in animal development and general zoology; candidate should possess sufficient breadth in vertebrate zoology to teach a course in herpetology or vertebrate nat-ural history. Phycology: requires Ph.D. in the biological sciences with an emphasis in freshwater and marine phycology. Primary responsibilities will be to teach courses in marine phycology, freshwater algae, and general botany. Both: other duties will include advising undergraduates and Master's students and serving on faculty committees. Research is expected. Send résumé, three letters of recommendation, and academic transcripts to: Animal Development Search Committee or Phycology Search Committee, Department of Biological Sciences, Humboldt State University, Arcata, CA 95521. Telephone: 707-826-3245; FAX: 707-826-3201. Completed application materials must be postmarked by February 15, 1996. Equal Opportunity/Affirmative Action Employer. Women, persons with disabilities, and minorities are encouraged to apply.

#### **POSITIONS OPEN**

#### BIOLOGIST

The University of Minnesota, Morris seeks an individual who combines broad intellectual interests with a strong commitment to undergraduate teaching and research involving undergraduates, to fill a TENURE-TRACK position in microbiology and biochemistry be ginning September 16, 1996. The selected candidate will teach a broad range of undergraduate biology courses including lower-level courses for both majors and nonmajors and upper-level courses in microbiology, biochemistry, and another area such as immunology, virology, mycology, or plant or animal pathology. The selected candidate will also participate periodically in the teaching of a one-quarter interdisciplinary course required of all freshmen. The selected candidate will share in the governance and development of the biology program as well as the campus at large. Candidates must expect a Ph.D. in microbiology or a related field by September 16, 1996. Preference will be given to candidates with a broad liberal arts background. Two years of teaching experience at the undergraduate level is required. (Graduate TA experience is acceptable.) The University of Minnesota, Morris is a small, selective, residential, undergraduate liberal arts colof the University of Minnesota. Salary range: \$32,000 to \$40,000 depending on qualifications. Applications must include a letter of application, résumé, graduate transcript(s), three reference letters, and two statements: (1) a teaching statement in which approaches to teaching are described and past teaching experiences are evaluated, and (2) a research proposal in which the applicant proposes a research program that is viable and accessible to advanced students at a small liberal arts institution. Send applications to: Biology Search Chair, Division of Science and Mathematics, University of Minnesota, Morris, MN 56267-2128. Applications must be received by January 31, 1996. The University of Minnesota is an Equal Opportunity Educator and Employer.

#### NEUROBIOLOGIST

The Department of Cell Biology, Developmental Biology and Neurobiology at Rutgers University, New Brunswick invites applications for one or possibly two TEN-URE-TRACK POSITIONS from individuals with postdoctoral experience and a record of significant research achievement in cellular and molecular analysis of synaptic function and plasticity. Successful candidates will be expected to develop an active research program, participate in the ongoing expansion of neurobiological research at Rutgers, and contribute to graduate and undergraduate education. The appointment will begin in September 1996 in the newly organized Department of Cell Biology, Developmental Biology and Neurobiology. Applicants should send a curriculum vitae, a statement of research interest, and three letters of recommendation to: Dr. Richard E. Triemer, Chair, Department of Biological Sciences, Nelson Biological Laboratories, Rutgers University, Piscataway, NJ 08855-1059 by February 15, 1996. Rutgers University is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITIONS IN MEMBRANE/CELL PHYSIOLOGY

The Department of Physiology of the Medical College of Pennsylvania and Hahnemann University invites applications for full-time, tenure-track faculty positions at the rank of ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR or PROFESSOR. Applicants must have a record of independent research in an area of membrane or cell physiology. Future areas targeted for expansion include epithelial and cardiovascular membrane structure/ function. Appointees will join a Department that was initiated in 1992 and is built around the theme of membrane and cell physiology. Such a cohesive Departmental theme ensures excellent opportunities for interactions and collaboration. The Department occupies space in a recently renovated building located in a very pleasant residential area of Philadelphia. Salaries and start-up packages are competitive. In addition to establishing and maintaining a competitive research program, successful candidates will be expected to participate in teaching in a medical physiology course. Applications will be accepted until March 1, 1996. Send a curriculum vitae, a brief description of research interests and plans, and the names, addresses, and telephone numbers of at least three references to: Dr. John M. Russell, Department of Physiology, Medical College of Pennsylvania and Hahnemann University, 2900 Queen Lane, Philadelphia, PA 19129. Email: russell@medcolpa.edu.

# Challenging infectious and cardiovascular diseases, allergies, cancer and central nervous system disorders...

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From molecules to medicines. At Schering-Plough, scientists are discovering and developing the novel therapeutics that challenge mankind's most debilitating diseases. To continue this important work, we seek talented scientists with knowledge and dedication.

#### SCIENTIST Immunology

We seek an independent self-starter to play an important role on a professional research team. To qualify, you will need a BS in Biology or related field and 7-10 years of experience or an MS and 5-8 years of experience. Background must include training and experience conducting in vivo experiments as well as knowledge of in vitro cell culture and molecular biology techniques. Expertise in lymphocyte isolation and fractionation, DNA sequencing and gene expression evaluation is desirable. Experience in FACS analysis is helpful. To be considered for this position, please respond to Dept. DD95-48.

#### SCIENTIST Allergy

We seek a talented scientist to assume major responsibilities for conducting ongoing studies of T cell activation and cytokine production at the molecular level. To qualify, you will need a BS in Cell or Molecular Biology or Immunology and 7-10 years of experience or an MS and 5-8 years of experience. Background must include experience in lymphocyte isolation and cell culture. Experience in a variety of recombinant DNA techniques is highly desirable. A high degree of organization and independence is a must. To be considered for this position, please respond to Dept. DD95-43.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume indicating the Dept. Code for your position of interest and salary requirements to: Human Resources-BG, Schering-Plough Research Institute, MS #1255, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Using Science For Human Advantage

# DIRECTOR, AHERF CARDIOVASCULAR INSTITUTE

Allegheny Health, Education and Research Foundation (AHERF), parent corporation of Allegheny General Hospital and Allegheny-Singer Research Institute in Pittsburgh, PA, The Medical College of Pennsylvania and Hahnemann University Hospitals and St. Christopher's Hospital for Children in Philadelphia invite applications for a newly created position.

Successful candidate will have an M.D., Ph.D. or equivalent doctoral degree, experience working in a cardiovascular/pulmonary surgical or medical environment, appropriate experience directing and administering research programs in cardiovascular specialties, including clinical and basic research and a demonstrated record of excellence in research. Demonstrated leadership capabilities to collaborate among clinical and basic science faculty in a variety of cardiovascular and other disciplines, plus the ability to function in an interdisciplinary setting needed.

Attractive recruitment package includes research laboratory space, the ability to recruit new faculty, and a research endowment. Interested individuals please submit curriculum vitae and references to: James H. McMaster, M.D., President and CEO, Allegheny-Singer Research Institute, 320 E. North Avenue, Pittsburgh, PA 15212. EOE. M/F/H/V.



# PROCESS/ANALYTICAL BIOCHEMIST

Merck Research Laboratories is considered by many to be the premier research organization in the pharmaceutical industry based on its unparalleled success at creating important new pharmaceuticals and vaccines, which have been used to improve human health worldwide.

The Bioprocess R&D group is responsible for the development of processes and analytical techniques to be used for manufacture and release of all biologically-made new vaccine and drug candidates. We are looking for talented Ph.D. Biochemists, Molecular Biologists and Molecular Immunologists at various levels of experience to join our group. The successful candidate would have the objective of gaining a more fundamental understanding of our processes, our analytical methods and our products, and of applying that knowledge to improve productivity and reproducibility.

The work is varied with the opportunity to work in a team which moves product candidates from Basic Research through process scale-up and Clinical evaluation to start-up in manufacturing. Current product candidates require the development of purification processes and analytical methods for polysaccharides, proteins, purified viruses, conjugates and plasmid DNA.

Merck offers excellent salary and benefits programs for this position located in our research facilities 25 miles northwest of Philadelphia. Please send curriculum vitae with cover letter and the names of three references to: Personnel Manager, Ad#B-43, MRL Human Resources, WP42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. EEO/AA/V/Employer.



#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR Department of Microbiology and Cell Science University of Florida at Gainesville

The Department of Microbiology and Cell Science, University of Florida, is expanding and invites applica-tions for a new TENURE-TRACK POSITION, available August 1, 1996. This position is equally divided between teaching and research and includes start-up funds. The successful candidate will be expected to devel op an externally funded research program in the area of microbial genetics/physiology, microbial ecology, or host/bacterial interactions (human, animal, or plant). Teaching responsibilities will include participation in undergraduate and graduate courses, training of graduate students, and other University-related activities. Candidates should have a Ph.D. in microbiology, biochemistry, or related science and at least two years of postdoctoral experience. The closing date for this position is January 1, 1996. Applicants should submit a curriculum vitae, summary of research interests, and three letters of reference to: Lonnie O. Ingram, Department of Microbiology and Cell Science, Museum Road, P.O. Box 110700, University of Florida, Gainesville, FL 32611-0700. The University of Florida is an Affirmative Action/Equal Employment Opportunity Employer.

#### ASSISTANT/ASSOCIATE/FULL PROFESSOR Microbiology and Immunology/Cancer Research

The Department of Microbiology and Immunology and the Center of Excellence in Cancer Treatment, Research, and Education at Louisiana State University Medical Center invite applications for a tenure-track FACULTY position. Applicants should have a doctoral degree, postdoctoral research experience, and a commitment to excellence in teaching and cancer research. Special consideration will be given to established investigators with national funding in an area of research that directly concerns clinical cancer. Responsibilities include teaching medical students and the training of the 30 departmental doctoral students. Excellent facilities, start-up funds, and competitive salary are offered. Curriculum vitae, future research plans, status of funding, and three letters of reference should be sent to: Dr. Dennis J. O'Callaghan, Professor and Head, Department of Microbiology and Immunology, LSUMC, 1501 Kings Highway, Shreveport, LA 71130-3932. An Equal Opportunity Employer.

#### BIOLOGY FACULTY POSITION

The Department of Biology of Saint Joseph's University invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level. We are seeking a broadly trained eukaryotic cell biologist. Successful applicants will be expected to participate in non-major courses, teach a freshman cell biology course, and develop an upper-division/graduate-level course in advanced cell biology. Development of an active independent research program involving undergraduate/M.S. students is expected. Ph.D. required; postdoctoral and teaching experience are assets. Please send curriculum vitae, copies of all transcripts, an outline of teaching and research goals (including a list of needed equipment), and names and telephone numbers of three references to: Dr. John J. Tudor, Chair, Department of Biology, Saint Joseph's University, 5600 City Avenue, Philadelphia, PA 19131. Review of applicants will begin in mid-January 1996. St. Joseph's University is a four-year liberal arts university in the Jesuit tradition. Equal Opportunity/Affirmative Action Employer.

#### MEDICAL SCIENTIST

A TENURE-TRACK position is available at Indiana University for a medical scientist to take part in the School of Optometry's scientific and clinical contribution to the teaching, treatment, and research on the eye. We seek a candidate enthusiastic to join our professional and graduate-level didactic and research programs, particularly to teach medical school-level biochemistry and in other appropriate areas, and to take advantage of opportunities for collaborative research. Minimum requirements include an earned doctorate and additional postdoctoral experience. Send curriculum vitae, three letters of reference, and statement of teaching and research interests to: Dr. David Goss, Chair, Search and Screen Committee, School of Optometry, Indiana University, 800 East Atwater, Bloomington, IN 47405. Deadline for applications is January 15, 1996. An Affirmative Action/Equal Opportunity Employer.

#### **POSITIONS OPEN**

#### STROKE NEUROSCIENTIST DEPARTMENTS OF CELLULAR BIOLOGY, NEUROLOGY AND NEUROSURGERY Schumpert Chair in Neurobiology

Full-time tenure-track, joint faculty position available January 1, 1996. Applicants should have a Ph.D. or M.D., postdoctoral experience, and a record of excellent research accomplishments in cell/molecular biology of stroke or related diseases. Candidates should have an established record of extramurally funded research support and be willing to participate in the Neuroscience graduate program. Faculty rank will be commensurate with level of experience. A very attractive package including Schumpert Chair, research facilities and start-up funds is available. Send curriculum vitae and description of current and future research plans to:

Leonard L. Seelig, Ph.D.
Department of Cellular Biology and Anatomy
P.O. Box 33932
Shreveport, LA 71130

Louisiana State University Medical College is an Affirmative Action Employer.

#### ECOLOGIST DEPARTMENT OF BIOLOGY

The Department of Biology at Central Michigan University invites applications for a ten-month tenure-track FACULTY POSITION in aquatic or terrestrial ecology at the ASSISTANT PROFESSOR level to begin August 1996. A Ph.D. is required. Postdoctoral research experience and ability to teach biological statistics is preferred. The successful candidate will be expected to teach undergraduate and graduate (M.S.) courses, establish an active research program, and seek extramural funding. Preference will be given to applications received prior to January 26, 1996. Send curriculum vitae, statement of teaching interests, research objectives, graduate and undergraduate transcripts, and three letters of reference to: Ecology Search Committee, Department of Biology, Central Michigan University, Mt. Pleasant, MI 48859. FAX: 517-774-3462.

Central Michigan University (Affirmative Action/Equal Opportunity Institution) encourages diversity and resolves to provide equal opportunity regardless of race, sex, disability, sexual orientation or other irrelevant criteria.

#### FACULTY POSITIONS Developmental and Cell Biologists

The Department of Molecular Genetics and Cell Biology invites applications for new faculty positions in the field of mammalian developmental genetics at the AS-SISTANT PROFESSOR level, although exceptional candidates at any level will be considered. The quality of the research program and its relationship to existing strengths in the Department will be the most important considerations. Complete applications with three letters of recommendation should be sent by January 15, 1996 to: Dr. Elaine Fuchs, Chair, Search Committee, Department of Molecular Genetics and Cell Biology, The University of Chicago, 920 East 58th Street, Chicago, IL 60637. An Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

#### PHYTOPLANKTON CURATOR

The Provasoli-Guillard National Center for Culture of Marine Phytoplankton (CCMP) at Bigelow Laboratory is seeking a CURATOR. Experience in culturing phytoplankton, algal taxonomy, and light microscopy required. Experience in electron microscopy, molecular biology, or computer science is desirable but not necessary. M.S. or equivalent is minimal requirement. The position requires some heavy lifting (ca 15 kg) and good cyesight for microscopy. The CCMP provides marine phytoplankton cultures to the scientific and aquaculture communities (see our Home Page-http://ccmp.bigelow.org). Please send curriculum vitae and three letters of reference by January 15, 1996 to: Dr. Robert A. Andersen, Bigelow Laboratory for Ocean Sciences, West Boothbay Harbor, ME 04575 USA. Equal Employment Opportunity.

#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR CHEMICAL ENGINEERING Massachusetts Institute of Technology

Applicants are invited for a junior-level, TENURETRACK FACULTY POSITION in the Department of Chemical Engineering at the Massachusetts Institute of Technology. Applicants should have a Ph.D. in chemical engineering or a closely related field, should have demonstrated excellence in academic research, and should have a strong interest in teaching graduate and undergraduate chemical engineering. Send résumé including the names of at least three references, graduate transcripts, and a description of research interests to: Dr. Robert A. Brown, Head, Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, MA 02139. Material should be received by January 1, 1996. MIT is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION BIOLOGICAL CHEMISTRY

The Department of Chemistry at the University of North Carolina at Chapel Hill invites applications for a tenure-track position in biological chemistry. The successful applicant must have a Ph.D., postdoctoral experience, a strong record of research, and the ability to teach biological chemistry effectively at the undergraduate and graduate levels. Preference will be given to individuals who can establish a strong research program in biological chemistry and interact enthusiastically with other chemistry, and whose appointment would be at the rank of ASSISTANT PROFESSOR. Review of the applications will begin December 15, 1995. Send a curriculum vitae, a brief research plan, a statement of teaching interests, and four letters of recommendation to: Dr. Nancy L. Thompson, Department of Chemistry, CB 3290 University of North Carolina, Chapel Hill, NC 27599-3290. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.

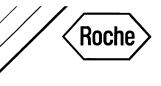
Tulane University is seeking to fill a vacant faculty position at the TENURE-TRACK ASSISTANT PRO-FESSOR level. It is possible that a candidate with exceptional qualifications may be considered for a position at a higher level. We are seeking a person with a Ph.D. at the time of appointment that can demonstrate high standards of both teaching and research, and who emphasizes applications of geology to environmental problems. Such a person may have a research field in any specialty, however, strong consideration will be given to those candidates that specialize in fields such as sedimentary geology, geohydrology, geomorphology, remote sensing, geochemistry, or geophysics, and can interact with researchers and stu-dents in a developing interdisciplinary environmental science program at Tulane. Applicants should send a letter of application, statement of research and teaching interests, current curriculum vitae, and the names, addresses, and telephone numbers of three references to: Stephen A. Nelson, Department of Geology, Tulane University, New Orleans, LA 70118. Email: snelson@mailhost. tcs.tulane.edu. The search will remain open until a qualified applicant is found. Tulane University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

#### DEVELOPMENTAL BIOLOGIST/GENETICIST ASSISTANT PROFESSOR

TENURE-TRACK POSITION opens fall 1996. Requires teaching genetics, developmental biology, team teaching introductory biology, and advising seniors in thesis research. Ph.D., familiarity with mammalian development and embryology, and previous teaching experience required. Send letter of application, three letters of reference, curriculum vitae and list of references by February 1, 1996 to: Dr. Donald Toczek, Director, Biology Department, Hillsdale College, Hillsdale, MI 49242. Equal Opportunity Employer.

#### UNIVERSIDAD DE CHILE ASTRONOMY

Open position for ASSISTANT/ASSOCIATE PROFESSOR, tenure-track. Candidate must be a Ph.D., with interest in theoretical astrophysics. Teaching duties include graduate courses in astronomy and undergraduate courses in physics. Please send curriculum vitae and two reference letters before December 31, 1995, to: Departamento de Astronomia, Casilla 36-D, Santiago, Chile. FAX: 562-229-4101; Email: oficina@das.uchile.cl.



Our Preclinical Research Department in Basel is looking for a new member for its

# Computational Chemistry

team, to work in the development of new methods in the area of molecular modeling and biostructurebased de-novo design tools.

Çandidates are expected to have a strong background in chemical and biostructural research and experience in the algorithmic implementation of methods and tools in this field.

We expect you to have a PhD in chemistry, biochemistry or biophysics, combined with extensive informatics experience, or, alternatively, solid informatics qualifications plus several years' professional experience in the chemistry/biostructure area.

We have strong preferences for platform-independent, modular and eventually object-oriented implementations. Currently our in-house systems are developed in C and run on SGI hardware.

Located in Switzerland we offer a dynamic multidisciplinary international research environment and encourage collaboration with academic groups.

Please apply in writing to our personnel department, Mrs. M. Waespe, quoting reference Science 13/95/Wa.

F. Hoffmann-La Roche Ltd. P.O. Box, CH-4002 Basel

# Greenland Ph.D.-Fellowships



Greenland's Home Rul

With the purpose af strengthening the research infrastructure of Greenland, the Greenland Home Rule, The Danish Research Academy, and the Danish Ministry of Research with its associated Research Councils announce 2-3 Ph.D.- fellowships.

Applications may cover research training in any discipline within Humanities, Social Sciences, Health Sciences, Natural Sciences and Technology.

Successful candidates are expected to enroll at a Danish University, alternatively another University of relevance to the chosen object.

Fellowships are open to individuals permanently associated with the Greenland society, preferentially people with greenlandic educational background.

Candidates not fully qualifying for a Ph.D.enrolment at the time of application may be supported for a maximum of 1 year prior to ordinary enrolment.

The application should include a project proposal and indicate at which institute/faculty/university the candidate would prefer to enrol. It is therefore recommended that applicants seek contact to relevant academic advisors prior to developing the application.



Fellowships are granted according to Danish University guidelines, which include a maximum of 149 payments of D.kr. 3.551 during the study period of 3 years. Additional 4.580 D.kr. per month may be obtained from teaching activities or other study-related work.

The application should be submitted in 4 copies to the Danish Research Academy which will ensure a peer review prior to selection of the candidates.

Additional information can be obtained from the Research Academy, att: Rector Ole Fejerskov, phone + 45 8614 4899, fax: + 45 8614 4871, e-mail: academy@inet,unic.dk.; Director Torben Cordtz, the Greenland Home Rule, phone: 00299 230 00; or Director Ove Poulsen, Ministry of Research and Technology, phone + 45 3392 9880, e-mail: OPO@fsk.dk.

Application forms can be obtained from the Danish Research Academy. Deadline for application: **January 15, 1996.** 

Greenland covers 2.175.600 sq. km of which 85 pct. is icecovered. The Greenlandic population is 56.000 with 13.000 living in the capital of Nuuk in Westgreenland.

Research in Greenland by Greenlandic research institutes are carried out by Greenland University, the Greenland Nature Institute and the National Museum of Greenland.

Danish research institutes and universities have facilities in Godhavn at the Disco Island, in Kangerlussuaq Airport and at Zackenberg in the North East of Greenland. More than 200 research projects are carried out of Greenland every year partly with logistic support from Danish Polar Center.

# The Danish Research Academy

#### **POSITIONS OPEN**

#### ASSISTANT PROFESSOR

The Department of Biological Sciences, University of Iowa, invites applications from highly qualified candidates for a TENURE-TRACK POSITION in developmental biology or developmental neurobiology, especially from candidates whose research makes use of cellular imaging or molecular genetic techniques. Postdoctoral experience and evidence of strong potential as an independent scholar are required. Teaching duties in both undergraduate and graduate courses will be negotiated based on the candidate's interests and experience. Applicants should ask three referees to send letters of recommendation and should themselves send a curriculum vitae, selected reprints, statement of future research plans, and description of teaching interests by January 15, 1996 to: Neuro/Development Search Committee, Department of Biological Sciences, Univesity of Iowa, Iowa City, IA 52246. Women and minority candidates are encouraged to apply. The University of Iowa is an Affirmative Action/Equal Opportunity Employer.

#### BIOLOGIST

Saint Vincent College invites applications for a tenure-track, ASSISTANT PROFESSOR level position in cell and molecular biology, beginning in the fall of 1996. Requirements include a Ph.D. and some teaching or post-doctoral experience. Teaching responsibilities will include courses and labs in molecular genetics and advanced cell biology. Supervision of senior research projects (required of all biology majors) and participation in team-taught general biology are also expected.

Saint Vincent College is a Catholic, Benedictine, liberal arts institution that serves 1200 undergraduates. The Biology Department consists of five faculty members and 120 students and emphasizes preparation for graduate and professional school studies.

Please submit a curriculum vitae, three letters of recommendation, transcripts, and a statement of teaching and research interests by December 22, 1995 to: Director of Personnel, Saint Vincent College, 300 Fraser Purchase Road, Latrobe, PA 15650-2690. We are an Equal Opportunity/Affirmative Action Employer.

# DEPARTMENT OF BIOCHEMISTRY EAST TENNESSEE STATE UNIVERSITY James H. Quillen College of Medicine

We are seeking an individual at the level of ASSIST-ANT or ASSOCIATE PROFESSOR (tenure-track) to develop a research program in the area of cholesterol metabolism as it relates to cardiovascular disease. A secondary interest in the role of lipid metabolism in the regulation of cell growth would also be desirable. The primary appointment will be in the Department of Biochemistry with a joint appointment in the Department of Internal Medicine. Competitive start-up and salary support will be provided.

Interested candidates should send a curriculum vitae and the names, addresses, and telephone numbers of three references by January 31, 1996 to: Dr. Michael Sinensky, Chairman, Department of Biochemistry, East Tennessee State University, James H. Quillen College of Medicine, Box 70581, Johnson City, TN 37614-0581. Affirmative Action/Equal Opportunity Employer.

#### TENURE-TRACK POSITION STROKE AND AGING

The University of Kansas Medical Center (KUMC) is seeking applications for a new FACULTY POSITION in the Center on Aging and an appropriate basic science department. The successful candidate will be a cellular, molecular, or integrative neuroscientist with a Ph.D., M.D., or equivalent degree and an established research program relating to ischemic neuronal injury and/or functional recovery from stroke. This individual will hold a position of scientific leadership and facilitate the integration of pre-existing Center on Aging clinical research programs in rehabilitation with a strong neuroscience group whose interests include neuronal death, plasticity, pathogenesis, motor control and development. Send curriculum vitae, a statement of research interest, and names and addresses of three references to: Stephanie Studenski, M.D., M.P.H., Director, Center on Aging, University of Kansas Medical Center, 3901 Rainbow Boulevard, Kansas City, KS 66160-7117. KUMC is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and minorities.

#### **POSITIONS OPEN**

#### TENURE-TRACK FACULTY POSITION VETERINARY SCIENCE

The Department of Veterinary Science, University of Arizona, seeks an outstanding individual with an active research program in the field of vector-borne infectious diseases for a TENURE-TRACK FACULTY POSI-TION. Of particular interest are broadly trained scientists focusing on veterinary molecular virology and/or the biology of vector-borne infectious diseases of veterinary or zoonotic importance. The successful applicant will participate in the research and teaching missions of the university by developing an extramurally funded research program of sufficient scope and caliber to support high quality training opportunities for graduate students, and by teaching in discipline-related courses in the department's undergraduate and graduate programs. Excellent opportunities also exist for interdisciplinary research collaboration with faculty such as those comprising the Vector Biology Program, Center for Insect Science at The University of Arizona. The Vector Biology Program will soon be recruiting an additional tenure-track faculty member who is working at the vector-parasite interface to add to its growing emphasis in public health and medical entomology. Applicants for the position in Veterinary Science must hold the Ph.D. degree; applications from those also holding the D.V.M. or M.D. degree are encouraged. Rank and salary will be commensurate with the successful applicant's qualifications. The starting date is July 1, 1996. Applicants should send a letter of intent describing long-term career goals, and qualifications, interests and accomplishments in research and teaching, curriculum vitae, and the names and addresses of four references to: Dr. Michael W. Riggs, Chair-Search Committee, Department of Veterinary Science, Veterinary Science/ Microbiology Building, University of Arizona, Tuc-son, AZ 85721. Review of applications will begin Feb-ruary 15, 1996; applications will be accepted until a suit-able candidate is identified. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.

#### THEORETICAL ECOLOGIST Arizona State University

We invite applications for a reopened and broadened search for a tenure-track position at the ASSISTANT PROFESSOR level beginning in fall 1996. Candidates must have a primary research interest and record of accomplishment in the development and testing of broad ecological theory. We welcome applicants from all of the many disciplines relevant to ecology. The successful candidate will be expected to establish an active research program, to participate in undergraduate and graduate-level teaching, and to develop a course in ecological modelling.

Candidates must have demonstrated a strong commitment to teaching and research and must have a Ph.D. in an appropriate area by August 1996. Applicants should forward a curriculum vitae, selected reprints, statements of teaching and research goals, and arrange for three letters of reference to be sent directly to: Ecologist Search Committee, Department of Zoology, Arizona State University, Box 871501, Tempe, AZ 85287-1501. Review of applications will begin February 1, 1996 and the 1st of each month until position is filled. Applications from two individuals for a single shared appointment will be considered. Arizona State University is an Affinnative Action/Equal Opportunity Employer.

The Department of Biology, Tennessee Technological University, invites applications for a tenure-track appointment at the ASSISTANT PROFESSOR level in field botany/vascular plant systematics, beginning August 1996. Applicants must have a Ph.D. in botany and be broadly trained in biology. Teaching responsibilities include regional vascular plant systematics, environmental botany, and introductory biology. The successful applicant will be expected to develop an active research program, direct graduate student research, and serve as curator of the herbarium. Send letter of application, curriculum vitae, and names, addresses, and telephone numbers of three references to:

#### Chair, Search Committee Department of Biology Tennessee Technological University Cookeville, TN 38505

Closing Date: January 15, 1996 or until filled.

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Employer:

#### **POSITIONS OPEN**

#### MOLECULAR BIOLOGIST

Tenure-track ASSISTANT PROFESSOR position starting July 1996. Ph.D. required. Teaching and post-doctoral research experience desirable. The successful candidate will participate in undergraduate courses in Developmental Biology, Cellular Biology, Recombinant DNA Techniques, and in University-wide programs. The appointee will join a biology faculty deeply involved in creating a strong research-oriented program for undergraduate students, and will contribute to this effort. Applications are especially encouraged from candidates whose research focuses on developmental biology using molecular techniques. Please forward a letter of application with curriculum vitae, transcripts, statement of teaching and research interests, and representative publications by January 3, 1996, and arrange to have three letters of recommendation sent as quickly as possible to: Dr. Randall Fuller, Chair, Department of Biology, Colgate University, Hamilton, NY 13346-1398. Women and minorities are especially encouraged to apply. Colgate University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT/ASSOCIATE PROFESSOR of Audiology and Hearing Sciences (Psychoacoustics), Department of Communication Sciences and Disorders, Northwestern University. Full-time (academic year), tenuretrack position. Ph.D. required. Conduct research, direct graduate seminars, and teach upper-division courses in psychoacoustics. Start fall 1996; application deadline February 15, 1996. Send letter and curriculum vitae to: Chair, Audiology and Hearing Sciences Program, Northwestern University, 2299 North Campus Drive, Evanston, IL 60208-3550. Telephone: 708-491-3164; FAX: 708-491-2523; Email: dcg679@nwu.edu. Northwestern University is an Affirmative Action/Equal Opportunity Employer. Hiring contingent upon eligibility to work in the United States of America.

#### COGNITIVE NEUROSCIENTIST

The Department of Psychology at the University of Missouri-Columbia (UMC) invites applications for a tenure-track appointment at the ASSISTANT or ASSOCIATE PROFESSOR level, with research specialization in the neural basis of human information processing (e.g., ERPs, lesion analysis). Please submit curriculum vitac, reprints, a cover letter stating research and teaching interests, and three letters of reference to: Dr. Steven Hackley, Department of Psychology, 210 McAlester Hall, UMC, Columbia, MO 65211. (Email: shackley@MIZZOU1.missouri.edu; Telephone: 314-882-3277.) We anticipate interviewing in February 1996; start date August 1996. Affirmative Action Employer.

POSTDOCTORAL POSITION immediately available in Dr. Susan E. Kane's lab, to study mechanisms of multidrug resistance in human cancers and the application of drug resistance to gene therapy. Requires a Ph.D. in biology or related field, experience in molecular biology, virology, or hematopicsis strongly preferred. Send curriculum vitae and three reference letters to: City of Hope National Medical Center, Human Resources, Attn: SK, 1500 East Duarte Road, Duarte, CA 91010. FAX: 818-301-8448; Email: jyasminch@smtplink.coh.org. Other research opportunities are also available. Call our Jobline at 818-301-8200. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available immediately to develop new DNA fluorescence labeling and analysis methods and apply them to the Human Genome Project. Experience with organic synthesis and nucleic acid enzymology preferred for the bioorganic position. Experience with microfabrication, capillary electrophoresis, DNA sequencing, and biophysical spectroscopy preferred for the biophysical position. Send résumé to: Dr. Richard A. Mathies, Chemistry Department, University of California, Berkeley, CA 94720. The University of California is an Equal Opportunity/Affinnative Action Employer.

POSTDOCTORAL POSITION to study mechanisms involved in interactions between testicular macrophages and Leydig cells. Experience in several of the following areas desired: lipid chemistry, cell adhesion molecules, HPLC, mass spectroscopy, cell culture, molecular biology, and electron microscopy. Applicant must possess enthusiasm for science. Send curriculum vitae to: James C. Hutson, Department of Cell Biology and Biochemistry, Texas Tech University HSC, Lubbock, TX 79430. Equal Opportunity Employer.

#### MACROMOLECULAR SCIENCES

#### Investigator/Sr. Investigator

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an opportunity for an Investigator to join the Department of Macromolecular Sciences.

The selected candidate will provide leadership in the following areas: the discovery of new enzyme targets; the design and implementation of novel enzyme screening assays and identification of optimal substrates, including the design and testing of novel substrates from phage display or combinatorial libraries; and the characterization and activation of enzymes. This individual will also participate with crystallography, biophysical and protein biochemistry groups in characterization of proteins.

Qualifications include a Ph.D. in Biochemistry, Chemistry or a related field with at least 2 years of postdoctoral experience, plus demonstrated creativity and productivity as evidenced in a strong publication record. Thorough knowledge of protein structure/ function relationships and enzymology, and experience in the application of biophysical techniques are required. Excellent oral and written communication skills and the ability to interact in a multidisciplinary environment are key.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers an excellent compensation/benefits/relocation package. Interested candidates should send C.V. with salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code H5-0488, P.O. Box 2645, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



Challenging the natural limits.

#### **DISCOVER SUGEN:**

A LEADER IN SIGNAL TRANSDUCTION RESEARCH

SUGEN, Inc., a dynamic biopharmaceutical company in the San Francisco Bay Area, is focused on the discovery and development of drugs for the treatment of cancer, immunological disorders and diabetes. Our research teams identify novel kinases and phosphatases, and elucidate signaling pathways in disease relevant models. We currently have the following opportunities.

**Immunology** 

GROUP LEADER: This group will focus on immunosuppression and inflammation. The position requires a Ph.D. and several years of experience in immunological research. Experience in signal transduction pathways essential.

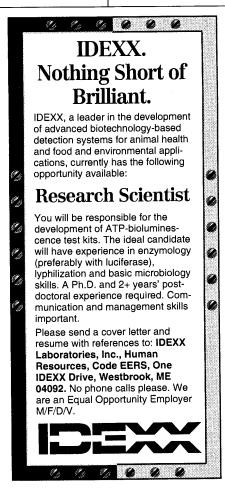
Gene Expression
SCIENTIST: This Ph.D.-level position requires an individual experienced in vector construction and eukaryotic and prokaryotic expression systems.

Please send c.v., along with the names, addresses and telephone/fax numbers of three references, to: SUGEN, Inc., Human Resources Dept. SC, 515 Galveston Drive, Redwood City, CA 94063. A competitive salary and benefits, including stock options, support these positions. Equal Opportunity Employer.

SUGEN, Inc.

#### Chair, Department of Chemistry Ohio University

Applications are invited for the position of Chair of the Department of Chemistry in the College of Arts and Sciences at Ohio University. Ohio University, located in the city of Athens (population 30,000 is a state university with Carnegie Research II status and has undergraduate and graduate student enrollments of 16,000 and 2,500 respectively. The Department of Chemistry has 22 full-time tenuretrack faculty with approximately 300 undergraduate majors in traditional chemistry, forensic chemistry, biochemistry, and pre-professional programs, and 50 Ph.D. and M.S. students. The research strengths of the Department are in analytical chemistry and the chemistry of biological systems, and candidates for the Chair should have their research interests in one of these areas. The successful applicant will be expected to lead a reorganization of the Department which will include focusing the Ph.D. program in the areas of current strength. Candidates should have an international reputation in their research area, an established record of external funding and publication in quality journals, current substantial external funding and quali-fications which merit tenure and rank of Professor. Candidates should also have administrative skills and/or experience which will enable them to maintain an active research program in addition to assuming the administrative responsibilities as Chair of the Department. Salary and research support for the position are competitive. This position is contingent on final budgetary approval by Ohio University. Letters of application containing a curriculum vitae, a description of research inter-ests and current areas of activity, names of three references, and a statement describing administrareterences, and a statement describing administrative experience and philosophies should be addressed to: Dr. P. Johnson, Search Committee Chair, Department of Chemistry, Clippinger Laboratories, Ohio University, Athens, Ohio 45701. Completed applications will be reviewed beginning January 15, 1996, with July 1, 1996 as the provided to the provided of the provided the negotiable staring date for the position. Ohio University is an Equal Opportunity/Affirmative Action Employer.



CALIFORNIA CAREER OPPORTUNITIES

PATHOLOGY: The University of California, Davis, School of Medicine seeks a full-time academic Chairperson of Pathology. Candidates must possess an M.D. degree and be Board Certified in Anatomic/Clinical Pathology, be eligible for licensure in California and be academically qualified for appointment at the professorial level. Demonstrated evidence of excellence in academic and clinical service administration, teaching, and research is required. Please forward the following: (1) letter describing administrative, teaching, and research background; (2) curriculum vitae; (3) names and addresses of five references to Chair, Search Committee for Chair of Pathology, c/o Karen Eilers, Office of the Dean, School of Medicine, East Health Sciences Drive, University of California, Davis, California 95616. This position will be "Open Until Filled"; for full consideration, applications should be received by March 31, 1996. The University of California is an Affirmative Action/ Equal Opportunity Employer.

#### **POSITIONS OPEN**

POSTDOCTORAL POSITIONS Roswell Park Cancer Institute Department of Human Genetics with Thomas B. Shows, Ph.D. and Pieter J. de Jong, Ph.D.

Positions available for Ph.D./M.D. in human genome research including projects involving: efficient construction of sequence ready clone sets; analysis of conserved repetitive DNA; application of recombination-based cleavage methods for chromosome analysis and genome manipulation; transcript mapping; positional cloning of disease loci; sequencing the genome; and improvements in large-insert cloning technology.

Experience in molecular genetic and genome technology is required. Please send curriculum vitae, a description of your research experience and future interests, and names and telephone numbers of three references to: Chair, Department of Human Genetics, Roswell Park Cancer Institute, Buffalo, NY 14263. Roswell Park is a Minority/Female/Disabled/Veteran Affirmative Action Employer.

#### SCIENTIST/POSTDOCTORAL POSITIONS Molecular Characterization of Ion Transport Proteins

SCIENTIST (RESEARCH ASSISTANT PROFESSOR) and POSTDOCTORAL POSITIONS are available immediately at the University of Rochester to investigate the molecular physiology of secretion in exocrine gland cells. Structure/function studies will include the cloning and in vitro expression of ion transport proteins. Ph.D. with a background in molecular and cellular biology required. Send curriculum vitae and the names of three references to: Dr. James E. Melvin, School of Medicine and Dentistry, Box 611, University of Rochester, 601 Elmwood Avenue, Rochester, NY 14642. FAX: 716-473-2679; Email: melvin@medinfo.rochester.edu. Equal Opportunity/Affimative Action Employer.

POSTDOCTORAL POSITION available immediately to study molecular cardiovascular physiology. Candidates must have an M.D., D.V.M. or Ph.D. with training in physiology, pharmacology, or related area, and a firm commitment to research. Background in molecular biology desired but not necessary. Projects include: (1) studies involving in vivo hemodynamic (macro- and microcirculatory) analysis of transgenic animals, and/or (2) gene therapy involving the arterial wall and/or heart. Send curriculum vitae, summary of research interests, and names of three references to: Dr. R. Wayne Barbee, Division of Research, Alton Ochsner Medical Foundation, 1520 Jefferson Highway, New Orleans, LA 70121. Ochsner is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately to study the regulation of activation of matrix metalloproteinases in cancer. Applicants should have a strong background and experience in enzymology, protein chemistry, and molecular biology. Research involves structure-function studies of enzyme domains, enzymenhibitor interactions, kinetic analysis, site directed mutagenesis, and recombinant protein expression. Send curriculum vitae and names of three references to: Dr. Rafael Fridman, Department of Pathology, Wayne State University, 540 East Canfield Avenue, Detroit, MI 48201.

#### POSTDOCTORAL ASSOCIATE

A POSTDOCTORAL ASSOCIATE is sought for ongoing studies on the posttranscriptional control of development in *Xenopus* and mouse. These involve the analysis of RNA-protein interactions and translational control, oocyte microinjection, and the generation of transgenic mice. Please submit a curriculum vitae and the names and addresses of three persons who may act as references to: Dr. Joel Richter, c/o Human Resources, Worcester Foundation for Biomedical Research, 222 Maple Avenue, Shrewsbury, MA 01545. Affinnative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study transcriptional regulation in the bacterial flagellar regulon. Applicants should have background in molecular biology. Please send curriculum vitae and a list of references to: Dr. Philip Matsumura, University of Illinois at Chicago, Department of Microbiology and Immunology, M/C 790, 835 South Wolcott Avenue, Chicago, IL 60612-7344. UIC is an Affirmative Action/Equal Opportunity Employer.

#### **POSITIONS OPEN**

#### POSTDOCTORAL POSITIONS

Two grant-funded POSTDOCTORAL RESEARCH ASSOCIATE positions are available immediately to participate in an epidemiological study of body composition and cardiovascular disease risk factors. The primary focus of the work is to assist in analyzing data collected in the ongoing Fels Longitudinal Study and to collaborate in writing manuscripts describing specific findings from these data. Opportunities exist for participating in the expansion of the scope of the research into new related areas. A doctoral degree in one of the following areas is required; epidemiology, sports medicine, biostatistics, exercise physiology, human biology, nutrition, genetic epidemiology or a related field. Ability to work independently and cooperatively within a team of established investigators is essential. Current research interests within this team center on the role of changes in body composition over the life span in the development of cardiovascular and other age-related diseases, biostatistical methods for serial analyses, genetic epidemiology, and aging. Applicants with statistical and analytical background and compatible research interests are preferred. Positions are open until filled. Send curriculum vitae, a short statement of research interests, and names of three references to: Chair, Postdoctoral Search Committee, Division of Human Biology, Department of Community Health, Wright State University School of Medicine, 1005 Xenia Avenue, Yellow Springs, OH 45387-1695. FAX: 513-767-6922. Equal Opportunity Employer/Affinnative Action.

#### POSTDOCTORAL POSITION Joslin Diabetes Center/Harvard Medical School

Applications are invited for a POSTDOCTORAL POSITION available immediately for NIH-funded studies of polyendocrine autoimmune diseases (diabetes, thyroiditis, and adrenalitis) and diabetic kidney complications in mice. Candidates should have a Ph.D. or M.D./Ph.D. with zero to two years of postdoctoral experience in molecular biology or immunogenetics and possess expertise in breeding studies, gene mapping, cloning, sequencing, and expression. Please send curriculum vitae and the names, addresses, and telephone numbers of three references to: Dr. Masakazu Hattori, Section on Immunology and Immunogenetics, Joslin Diabetes Center, One Joslin Place, Boston, MA 02215. Email: hattorim@joslab.harvard.edu; FAX: 617-732-2589.

#### POSTDOCTORAL RESEARCH ASSOCIATE NEUROCHEMISTRY/MOLECULAR BIOLOGY

NIH RO1-funded position, salary commensurate with qualifications. Individual will perform HPLC analysis on ovel neurotransmitters, and molecular cloning of receptors and ion channels in the auditory/vestibular periphery. Send curriculum vitae, previous publications, and names of three references to: Dr. Dennis Drescher, Laboratory of Bio-otology, Wayne State University School of Medicine, 540 East Canfield Avenue, 259 Lande Medical Research Building, Detroit, MI 48201. Wayne State University is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL POSITION Biological Mass Spectrometry

Position available early 1996, projects involve structural studies of protein toxins and microcapillary HPLC methods development. Submit curriculum vitae and names of three references to: Dr. Murray Hackett, Department of Medicinal Chemistry, University of Washington, Box 357610, Seattle, WA 98195-7610. Address inquiries for further information to mhackett@u.washington.edu. The University of Washington is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL OPPORTUNITY available now in the Markey Center for Cell Signaling for biochemist with background and interest in protein kinases, phosphatases or G-proteins in cellular signaling. Candidates must have published first-author peer-reviewed papers in good journals. Preference may be given to individuals who are available by February 1, 1996, but all interested persons are urged to provide a letter of inquiry, curriculum vitae, and three references to: Dr. Thomas W. Sturgill, University of Virginia Health Sciences Center, Markey Center for Cell Signaling, Box 577, Charlottesville, VA 22908. FAX: 804-924-9659. An Equal Opportunity/Affinative Action Employer.

#### **POSITIONS OPEN**

RESEARCH ASSOCIATE MOLECULAR VIROLOGY University of Southern California

POSTDOCTORAL POSITIONS are available to study the molecular biology of gene expression and RNA synthesis of several viruses, including mouse hepatitis virus, human hepatitis delta virus, and hepatitis C virus. Background in molecular biology, virology, or biochemistry is desirable. Please send curriculum vitae to: Dr. Michael Lai, Department of Molecular Microbiology and Immunology, University of Southern California, 2011 Zonal Avenue, HMR-401, Los Angeles, CA 90033. FAX: 213-342-9555. University of Southern California is an Equal Opportunity Employer.

#### POSTDOCTORAL POSITION Cellular Neurobiology

POSTDOCTORAL POSITION available immediately to investigate the function of transmembrane heparan sulfate proteoglycans in the developing nervous system. A broad range of cell biological, molecular, and biochemical techniques will be utilized. Experience with cell culture and molecular biology techniques (cloning, mammalian expression, site directed mutagenesis) and protein purification and characterization are desirable. Interested candidates should send a curriculum vitae, names of three references, and a brief summary of research experience to: Geisinger Human Resources (DJC), 100 North Academy Avenue, Danville, PA 17822-1529. Equal Opportunity Employer, Minority/Fenale/Disabled/Veteran.

#### POSTDOCTORAL/RESEARCH ASSOCIATE

Available for the study of human molecular genetics of inherited ophthalmic diseases. Current research includes: Linkage mapping, mutation analysis, SSCP, DGGE, Cosmid Contig maps, selective hybridization cloning, library screening, apoptosis research, gene transfer studies. Send curriculum vitae and names, telephone and Email addresses of three references to: Kent W. Small, M.D., Associate Professor, Doris Stein Eye Research Center, 200 Stein Plaza—UCLA, Los Angeles, CA 90024-7007. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP: excellent opportunity to participate in research program to utilize protein chemistry and molecular biological techniques in reproductive endocrinology among a diverse group of scientists. Send letter of application to:

Dr. Robert E. Canfield Columbia University College of Physicians & Surgeons 630 West 168th Street (PH10-305) New York, NY 10032

Columbia University is an Equal Opportunity/Affirmative Action Employer.

#### POSTDOCTORAL RESEARCH Transcriptional Regulation and Virology

Shelley L. Berger, Ph.D.: Analysis of human and yeast adaptors in transcriptional activation and in HSV-1 reactivation from latency. Paul M. Lieberman, Ph.D.: Function of TF11A and TF11D recruitment by activators that disrupt viral latency. The Wistar Institute, 3601 Spruce Street, Philadelphia, PA 19104. Equal Opportunity Employer.

#### RESEARCH ASSOCIATE

RESEARCH ASSOCIATE position available immediately to clone transcription factors regulating expression of the chemoattractant cytokine RANTES. Requirements: Ph.D. in relevant biology with at least three years of post-degree laboratory experience. Experience in cloning transcription factors desired. Send curriculum vitae with three references to: Dr. Alan Krensky, Department of Pediatrics, Stanford University, Stanford, CA 94305-5119.

#### ENDOCRINOLOGY FELLOWSHIP

Unexpectedly available, starting July 1996 in multidisciplinary clinical/research division. Will accept transfer from other program. Contact: Maria Grant, Chief, Division of Endocrinology, Department of Medicine, University of Florida, Gainesville, FL. Telephone: 904-392-2726; FAX: 904-846-2231. Must be able to commit by December 31, 1995.

a subsidiary of DNX Corporation, is a leading transgenic animal development company providing custom transgenic animal model development capabilities and Biodigm® transgenic animals to the biomedical research community.



## PRINCIPAL SCIENTIST TRANSGENIC ANIMAL SCIENCE

An opportunity exists for a Ph.D. Scientist to direct commercial transgenic animal projects, develop new transgenic animal technologies and evaluate the utility of transgenic animal models for drug discovery.

Qualified candidates will have a Ph.D. in molecular biology or related field and 2-5 years postdoctoral experience developing transgenic animal models. Experience developing animal models by homologous recombination is highly desirable. Animal science experience and 2-3 years of industry experience in a supervisory role are also preferred. Excellent oral and written communication skills and the ability to work in a team environment are essential.

DNX Transgenics offers an excellent compensation package including competitive salary, stock option program and comprehensive benefits. For the opportunity to be an integral part of this expanding organization, send curriculum vitae and references to:



Human Resources DNX Corporation 575 Route 28, Raritan, NJ 08869

**Equal Opportunity Employer** 

#### Florida State University Vice President for Research

The Florida State University, a member of the State University System of Florida, is seeking a vice president for research. The university is located in Tallahassee, the state capital.

The Florida State University, founded in 1857, is a comprehensive Research I university with extensive research facilities and a faculty of 1100. The university awards approximately 300 doctoral, 1400 master's, and 5,000 baccalaureate degrees annually. Its 30,000 students, of whom 5,600 are graduate students, are enrolled in sixteen schools and colleges. Expenditures in contracts and grants for 1995-96 will total \$100 million.

The vice president for research is the senior administrative officer in the university responsible for research policy and the administration of sponsored research. The vice president represents the university to local, state, and national public and private entities in all matters related to research. The vice president reports to the president of the university. The following units report to the vice president for research: National High Magnetic Field Laboratory, Supercomputer Computations Research Institute, Marine Laboratory, Laboratory Animal Resources, and the Institute for Science and Public Affairs. Technology transfer, the Research Foundation, and Innovation Park are responsibilities of this office.

The University is searching for a scholar of national prominence who has had university-based research experience. Candidates should have successfully achieved significant funding from federal or other sources. National experience involving university representation with federal agencies, or service with a national agency or professional advocacy organization is highly desirable. Candidates should have administrative experience within a complex academic or related organization and strong communication skills.

Nominations or applications for the position should be sent to the Chair of the Search Committee, Dean Alan Mabe, Office of Graduate Studies, 408 Westcott, Florida State University, Tallahassee, FL 32306-1047. Dean Mabe can be reached at (904) 644-3500 or vpsearch@westcott.wes.fsu.edu/Information about the university can be found at its web site, http://www.fsu.edu/

A completed candidate folder will include a curriculum vitae, a list of five references, and a statement of candidacy. The closing date for the receipt of nominations is January 12, 1996 and the closing date for the receipt of all materials is January 19, 1996.

The Florida State University is an Equal Opportunity/Affirmative Action employer that encourages applications from minorities and women and complies with the Americans with Disabilities Act. It is a public-record agency pursuant to Chapter 119, Florida Statutes.

## CANCER PREVENTION RESEARCHER

The H. Lee Moffitt Cancer & Research Institute and the College of Medicine at the University of South Florida are seeking applicants for a tenure-earning Associate or Full Professor faculty position for a laboratory based independent researcher with expertise in translational research. This position will be in the Cancer Prevention Program.

The successful candidate will be a doctoral level (MD or Ph.D.) investigator who will have responsibility for conducting laboratory research in the area of molecular and immunohistochemical markers for the early detection of preneoplastic conditions and early cancer. This research should lead to the design of interventions to target these markers with chemopreventive agents. The successful candidate will also have an established track record of obtaining external funding and five years academic or research experience at, or comparable to, the Assistant Professor level. The position will include heading up the Molecular Core Laboratory designed to support marker studies initiated by clinical researchers at the Cancer Center.

H. Lee Moffitt Cancer Center & Research Institute, adjacent to the Health Sciences Center on the University of South Florida's Tampa Campus includes a modern, 162-bed inpatient and ambulatory facility for children and adults, a 25-bed bone marrow transplantation program, a recently established high volume screening program including a fixed site and mobile unit and a new basic research facility.

Send inquiries and current curriculum vitae to Gail Shaw, M.D., Program Leader, Office of Faculty Recruitment, 12902 Magnolia Drive, Tampa, Florida 33612. Applicants must be postmarked by deadline date of January 31, 1996.





H. LEE MOFFITT CANCER CENTER & RESEARCH INSTITUTE

University of South Florida College of Medicine

Moffitt Cancer Center is an Equal Opportunity Employer.
The University of South Florida is an Equal Opportunity/Equal
Access/Affirmative Action Employer. For disability accommodations
please contact Jody Swanson at (813) 975-7894 a minimum of
five working days in advance.

#### Department of Earth and Atmospheric Sciences University of Alberta

#### Tenure Track Position in Resource/Environmental Management

The University of Alberta recently established the Department of Earth and Atmospheric Sciences through the merger of the Departments of Geology and Geography. Detailed information about the department can be found on the World Wide Web at: http://www.ualberta.ca/~eas/home.html. The new department wishes to further strengthen its teaching and research in the area of Resource/Environmental Management. We are particularly interested in an individual with expertise in the social dimensions of environmental earth science and geological activity.

The appointment will be at the Assistant Professor level (salary range of \$39,230-\$55,526). Applicants must hold a Ph.D. degree and have a proven research record. Previous teaching experience would be a significant asset.

#### Two Tenure Track Positions in Geoprocessing

The University of Alberta recently established the Department of Earth and Atmospheric Sciences through the merger of the Departments of Geology and Geography. Detailed information about the department can be found on the World Wide Web at: http://www.ualberta.ca/~eas/ home.html. The new department wishes to strengthen its research programs in geoprocessing through the appointment of two new faculty members. Appointees will have responsibility for teaching and research in the areas of Geographic Information Systems (GIS), Cartography, Remote Sensing, and Quantitative Methods (with emphasis on spatial applications). Experience with application of these methods to an area of research such as biogeography, human geography, terrain analysis, geological exploration, geological mapping, and/or atmospheric sciences would be an advantage.

One position will be at the Assistant Professor level and the second position may be at a higher level if the candidate has a proven track record in teaching and research.

Salary ranges are: Assistant Professor - \$39,230-\$55,526; Associate Professor-\$48,736-\$69,664; and Professor-starting at \$60,567. Applicants must hold a Ph.D. degree and have a proven research record. Previous teaching experience would be a significant asset. Applications, including a resume, a statement of research interests, and the names and addresses of three referees, should be addressed to Dr. Brian Jones, Chair, Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton, Alberta, Canada, T6G 2E3. (Fax: 403-492-2030; e-mail: bjones@gpu.srv.ualberta.ca). Deadline for receipt of applications is January 15, 1996. The appointments will commence on July 1, 1996 providing suitable candidates can be found.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities.

#### POST DOCTORAL RESEARCH POSITION

# UNIVERSITY OF ARIZONA DEPARTMENT OF ASTRONOMY STEWARD OBSERVATORY CENTER FOR ASTRONOMICAL ADAPTIVE OPTICS

Applications are invited for a research associate position with the Center for Astronomical Adaptive Optics. The Center is building a powerful adaptive optics system for operation with the new 6.5 m telescope which will replace the MMT in 1997. The system will routinely achieve the diffraction limit of the 6.5 m aperture at 1.6 and 2.2 microns. Very low thermal background is projected since correction will be done with an adaptive secondary. The sodium laser guide star system to be used with the 6.5 m is already installed at the present MMT, allowing 0.3 arcsec images over the whole sky by rapid correction of image motion.

Applicants must have a recent PhD in astronomy, and will be expected to concentrate on scientific observations with adaptive optics at wavelengths from 1 to 2.5 microns. Preference will be given to the candidate who brings expertise in areas of extragalactic astronomy, complementing current research on the solar system, stellar companions and the Galactic center. Previous experience with adaptive optics and an interest in the physics and technology underlying adaptive correction will be taken into consideration.

The position is funded for two years at a salary beginning at \$38,000, with the possibility of extension. Interested applicants should send curriculum vitae and names and addresses of three referees to Dr. Roger Angel at Steward Observatory, University of Arizona, Tucson, Arizona 85721, (520) 621-4409, fax (520) 621-9843. Application review will begin January 2, 1996. The University of Arizona specifically encourages applications from women and minorities. AA/EEO/ADA.

#### The University of **Montana**

#### VICE PRESIDENT FOR RESEARCH AND DEVELOPMENT

The University of Montana-Missoula invites applications and nominations for the position of Vice President for Research & Development. The Vice President will provide leadership and direction for all research programs at the University in Missoula and will coordinate research and creative activities at the University's three other campuses. The Vice President reports directly to the President of the University, acts on the President's behalf for research activities and is responsible for research planning, program development and developing new opportunities for research. The Vice President develops relationships with government agencies and the private sector, strengthens research infrastructure and nurtures ideas and research initiatives.

The University of Montana includes campuses in Missoula, Butte, Dillon and Helena. The University of Montana-Missoula is a comprehensive, doctoral-granting institution committed to excellence in teaching, research and service. The University maintains nine doctoral and 43 masters' programs, having a combined graduate enrollment of over 1,700 students, and has rapidly growing research and creative activities.

Candidates must have an earned doctorate and a strong record of research and other achievements, a clear understanding of the role of research and creative activities and their relationship to graduate education, demonstrated experience in research administration, the developed ability to communicate effectively, and the capacity to provide leadership essential to the continued development of research and creative activity at the University.

Salary will be commensurate with experience and qualifications. The position is available 1 July 1996. Nominations must be received no later than 16 January 1996 and applications, including vitae and the names of five references, by 16 February 1996.

Address all inquires, applications and nominations to:

Mr. Robert Frazier, Executive Assistant to the President Chair, Vice Presidential Search Committee The University of Montana Missoula, MT 59812-1291 Telephone: (406) 243-2311; FAX: (406) 243-2797 e-mail: frazier@lewis.umt.edu

The University of Montana is an equal opportunity employer.

#### **VASCULAR BIOLOGIST/ PHARMACOLOGIST**

The Pharmacology Department of Merck Research Laboratories, a world leader in the discovery and development of pharmaceutical and biological products, has a career opportunity for a Vascular Biologist/Pharmacologist. The successful candidate will be responsible for the development of new, quantitative animal models of vascular growth and repair such as re-endothelialization, angiogenesis, vascular reactivity, proliferation and restenosis. Candidate will also participate in ongoing antithrombotic/anticoagulant projects by conducting and/or supervising in vivo experiments.

The position requires an M.D., Ph.D. or equivalent in physiology, pharmacology or related field with a minimum of 2 years postdoctoral experience.

Excellent salary and benefit programs accompany this position at our modern research facilities located 25 miles northwest of Philadelphia.

Please send curriculum vitae with cover letter to: Personnel Manager, Ad#B-41, MRL Human Resources, WP 42-2, Merck Research Laboratories, P.O. Box 4, West Point, PA 19486. EEO/AA/V/Employer.



# SIUE

MOLECULAR PLANT SYS-TEMATIST. The Department of

Biological Sciences, Southern Illinois University at Edwardsville, invites applications for a tenure-track position in molecular plant system-

atics at the Assistant Professor level. We seek applicants with extensive training in botany and expertise in evolutionary biology. We are particularly interested in candidates who take a broad view of plant systematics, but who apply molecular techniques to problems in evolution, conservation biology or other related fields. The successful candidate will teach a course in modern plant systematics and share responsibility for teaching general botany for biology majors and a general education course in biology for nonmajors. Candidates should exhibit potential for independent and innovative research involving undergraduate and graduate students and a willingness to support the Ecology, Evolution and Environment specialization in Biology and the Environmental Studies Program. Qualifications: Ph.D., preferably in botany, with teaching experience; post-doctoral experience strongly pre-ferred. To apply, send a letter of application with a statement of your teaching and research interests, curriculum vitae, university transcripts, names and addresses of three persons who will serve as references, and reprints of no more than three publications to: Chair, Molecular Plant Systematist Search Committee, Southern Illinois University at Edwardsville, Department of Biological Sciences, Box 1651, Edwardsville, IL 62026-1651. Review of applications will be gin on Feb. 15, 1996 and continue until position is filled. SIUE is a comprehensive regional university located in the St. Louis Metropolitan Region, and is dedicated to excellence in undergraduate education. SIUE is an affirmative action/equal opportunity employer.

#### **TOXICOLOGIST**

Rohm and Haas Company, a leading chemical company serving global markets, has an immediate opening for a Toxicologist with expertise in in vitro methodology. This position is at our Corporate Research Center in Spring House, PA, near Philadelphia.

We are looking for a scientist to assume the leadership of a laboratory conducting assays in genetic toxicology, as well as research in toxicology using in vitro methods. The assays and research are primarily directed toward the expeditious development of new products for regulatory acceptance.

The successful candidate will have a Ph.D. degree in a relevant discipline, with demonstrated technical expertise in in vitro toxicology methods: e.g., genetic toxicology, cytotoxicity, receptor-mediated toxicity. This scientist will also have a substantive publication record in the peer-reviewed literature.

Our position requires a broad perspective of toxicology, as well as outstanding oral and written communication skills to interact effectively with regulatory scientists and our company's scientific staff. Candidates must be skilled in project management and have the drive, aptitude and motivation to work effectively in multidisciplinary teams.

Rohm and Haas offers a highly competitive salary and benefits program, including relocation assistance. We invest heavily in research and in resources to develop our Research staff. Candidates must be legally qualified to hold regular employment in the U.S. For consideration, please forward your resume or C.V., including publication list and references, to: Corporate Staffing #295, Rohm and Haas Research Laboratory B-70, 727 Norristown Road, Spring House, PA 19477-0904.



An Equal Opportunity Employer M/F/H.



#### WEST VIRGINIA UNIVERSITY **Two Tenure-Track Faculty Positions**

The Departments of Physiology and Otolaryngology at West Virginia University Health Sciences Center invite applications for two state-funded tenure-track faculty positions available Spring 1996. We seek scholars to establish vigorous and independent research programs and to participate in departmental teaching and service missions. Qualified applicants with established records of research productivity are invited to apply for either position or for both, as appropriate. Applicants should send a letter of application, a curriculum vitae, reprints of publications, a statement of research interests and professional goals, and arrange to have three letters of recommendation sent by January 15: Applications received by the deadline will be given first consideration.

The PHYSIOLOGY DEPARTMENT seeks a scientist to apply molecular and cellular approaches to fundamental mechanisms of development, plasticity or remodeling. The department is building an integrative group to investigate physiological mechanisms at the molecular and cellular level. Address application to: Dr. David L. Kreulen, E.J. van Liere Professor and Chair, Department of Physiology, Box 9229, West Virginia University, Morgantown, WV 26506.

The OTOLARYNGOLOGY DEPARTMENT seeks an individual to join a growing group of scientists and to apply molecular approaches to fundamental questions in the auditory or vestibular systems. Candidates with interests in development, regeneration, signal transduction, cell biology and/ or molecular genetics are encouraged to apply. A joint appointment in the appropriate basic science department is available. Address application to: Dr. Stephen J. Wetmore, Chair, Department of Otolaryngology, Box 9200, West Virginia University, Morgantown, WV 26506.

West Virginia University is an Affirmative Action/

Equal Opportunity Employer.

# CARING **l'ogether**

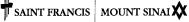
#### **POST-DOCTORAL FELLOW**

Bone/Cell/Molecular Biology

Saint Francis Hospital & Medical Center is seeking candidates who have completed a doctoral degree to join our NIH-supported Bone Biology Laboratory.

Interested candidates should send a resume and references to:

Dr. Ernesto Canalis, Director, Department of Research, Saint Francis Hospital & Medical Center, 114 Woodland Street, Hartford, CT 06105-1299.



EEO/AA - M/F/D/V Pre-Employment Drug Testing



#### REOUEST FOR PROPOSALS **MOLECULAR GENETIC STUDIES** INHERITED RETINAL DEGENERATIONS

Proposals are invited for molecular genetic analysis of inherited retinal degenerations such as retinitis pigmentosa and allied disorders, Usher syndrome, and inherited macular degenerations. Proposals must focus on the genetic etiology of retinal degeneration, definition of the mechanisms related to known genetic etiologies, and/or therapeutic approaches based on known etiology and mechanisms. Innovative approaches to causes of the understudied genetic types, especially recessive RP, are encour-

New and renewal applications will be reviewed together by a special panel of consultants to The Foundation's Scientific Advisory Board, solely on the basis of scientific merit and program relevance. Awards will average \$100,000 annually for three

Interested individuals should submit a letter of intent which briefly summarizes the proposed research, provides background of the laboratory, includes curricula vitae of the principal investigators and gives an approximate budget. Following a preliminary review, complete applications will be invited from a limited number of applicants. Deadline for letter of intent is January 22, 1996, for application is May 3, 1996, and funding is expected to begin September 1, 1996.

Address letters of intent to: Department of Science, The Foundation Fighting Blindness, Executive Plaza One, Suite 800, 11350 McCormick Road, Hunt Valley, MD 21031-1014. Telephone: 410-785-1414, FAX: 410-771-9470. (Formerly: RP Foundation Fighting Blindness, Baltimore, MD)

#### GLOBAL CAREER OPPORTUNITIES

#### The Chinese University of Hong Kong **Faculty of Medicine**

The University (founded 1963) offers comprehensive programmes up to PhD level. Student enrollment in 1995-96 is around 11,500 full-time equivalent. The Faculty of Medicine offers undergraduate and postgraduate programmes in Medicine, Nursing and Pharmacy. The MBChB programme admits 160 students annually and is fully recognized by the General Medical Council of the United Kingdom. Clinical courses are taught at the Medical Faculty's 1,450bed teaching hospital, the Prince of Wales Hospital, which is one of the regional hospitals in Hong Kong and at the Lek Yuen Health Centre. English is used in teaching and administration in the Faculty of Medicine.

Applications are invited for the following post:

Department of Physiology (Ref. 95/129(665)/2)

Lecturer (carrying the title of Assistant Professor or Associate Professor, as

Applicants should have a Ph.D. degree or a medical qualification and some teaching and research experience in the field of Physiology. The Department offers courses to medical, nursing and pharmacy students of the Faculty and students majoring in Human Biology. The Department specialises in research in the areas of ion channels and epithelial transport, sensory and central nervous system physiology, vascular physiology, muscle physiology, molecular endocrinology and reproductive physiology. The appointee is expected to assume duty in August 1996 or as soon as possible thereafter.

#### Annual Salary and Fringe Benefits

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#### Application Procedure

Send full resume in duplicate and names and addresses of three referees, with copies of academic credentials (in duplicate) and recent publications, to the Personnel Office, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong (Fax: (852)2603 6852) before December 31, 1995. Please quote the ref. no and mark "Recruitment" on cover. [Note: The University reserves the right not to fill the post or to fill the post by invitation.]

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#### GLOBAL CAREER OPPORTUNITIES

#### AUSTRALIAN NATIONAL CENTRE IN HIV VIROLOGY **VACANCY FOR SENIOR SCIENTIST**

The Australian National Centre in HIV Virology Research laboratories at the Macfarlane Burnet Centre for Medical Research, in Melbourne, is seeking a highly-qualified, independent HIV virologist.

The National Centre laboratories at Macfarlane Burnet Centre have a staff of approximately 30 scientists, and are conducting work in a variety of areas of HIV virology, including control of transcription, function of HIV accessory proteins, mechanisms of drug resistance, characterization of virus strains from long-term non-progressors, ascertaining the role of macrophages and dendritic cells in HIV pathogenesis, and development of novel therapeutics (including gene therapy) and vaccines for HIV infection. The Centre is part of the Macfarlane Burnet Centre, Australia's premier virology research institute which has a staff of 120, with major research programs in epidemiology, international health, hepatitis viruses and respiratory viruses, in addition to the HIV research being conducted by the National Centre units. The academic environment, space, and technical facilities are excellent. Melbourne is one of the most livable cities in the world, and is also he centre of Australia's first-rate biomedical research community.

The Centre is seeking an independent scientist with a clearly defined research program on HIV, or in a closely related area, to join one of the three National Centre laboratories at Macfarlane Burnet Centre. The areas of research that the applicant pursues is flexible; the main criterion is that it complement the existing research programs of the Centre. Applicants should have substantial research experience, a strong publication record in high-quality, peer-reviewed journals, and should show evidence of scientific creativity and independence

Further information from: Professor John Mills-Director Phone: 61 3 9280 2823 Fax: 61 3 9280 2926

Salary is negotiable and will be in accordance with current NH&MRC levels in the range of Senior Research Fellow (From Aust. \$56,440) to Principal Research Fellow (Aust. \$68,571)

Applications with complete resume and three work related referees should be addressed to:

Mr Derrick Harvie, Administrator, NCHVR C/o Macfarlane Burnet Centre, P.O. Box 254, Fairfield Victoria 3078 Australia



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#### **POSITIONS OPEN**

#### MOLECULAR BIOLOGIST (INSECTS)

USDA, Agricultural Research Service (ARS) announces a position for a Research Molecular Biologist (Insects), GS-14/15 for the Red River Valley Agricultural Research Center at Fargo, North Dakota. The successful applicant will lead a research unit in the development of biological and biochemical approaches for suppressing pest insect populations. Incumbent will utilize molecular biology techniques for genome characterization, DNA sequence ing, hybrid gene construction, and the development of gene transfer technology. Applicants must meet minimum education requirement, plus have at least one year of research experience at the postdoctoral level equivalent to the next lower grade. Salary (\$57,760 to \$88,326 per annum plus 3.74% locality pay) is commensurate v qualifications. For vacancy announcement ARS-D-6-W-022 and application forms, call Ms. Melanie Nyquist, Telephone: 701-239-1203 and for information on research, contact Dr. Don Zimmerman, Telephone: 701-239-1370. U.S. citizenship is required. Application must be postmarked on or before December 26, 1995. ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

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Date and location: April 14-17, 1996, The Center for Executive Education at Babson College, Boston,

Deadline for completed application: January 15, 1996. For information, write: Dr. Margaret Pericak-Vance, Box 2900, Duke University Medical Center, Durham, NC 27710; or contact: Ms. Nadine Powers, Course Administrator. Telephone: 919-684-6274; FAX: 919-684-6514; Email: genclass@genemap.mc.duke.edu. WWW: http://www.mc.duke.edu/depts/genetics/ courses/index.html.

#### Computational Science Graduate Fellowship Program

The U.S. Department of Energy is offering a Graduate Fellowship in Computational Science. The award benefits of the program are: 1) Stipends (\$1,500 per month for the first year). 2) Full payment of tuition and fees. 3) Open to students entering first year graduate school with uninterrupted study toward a Ph.D. degree. 4) Renewable up to 48 months. 5) Practicum at DOE laboratories.

For an application booklet contact: Computational Science Graduate Fellowship Program, Ames Laboratory, 126 Wilhelm Hall, Ames, IA 50011. Telephone: 515-294-7900; Email: petersen@ameslab.gov. Application deadline: January 24, 1996. Must be a U.S. citizen or permanent resident, GRE required.

The Fellowship is administered by the Ames Laboratory. This is an Equal Opportunity program and is open to all qualified persons without regard to race, sex, creed, color, age, physical disability or national origin.

#### NASA PLANETARY BIOLOGY INTERNSHIPS

The Marine Biological Laboratory, Woods Hole, Massachusetts, invites applications from graduate students and seniors accepted to graduate programs. Interns will receive awards of \$2,200 plus travel to participate in research at NASA centers and collaborating institutions for approximately eight weeks. Typical intern programs include: global ecology, remote sensing, microbial ecology, biominer-alization, origin and early evolution of life. Application deadline: March 1, 1996. For information/applications contact: Michael Dolan, Planetary Biology Internship, Department of Biology, Box 3-5810, University of Massachusetts, Amherst, MA 01003-5810. Email: pbi@bio.umass.edu; Telephone: 413-545-3223. An ual Opportunity/Affirmative Action Institu

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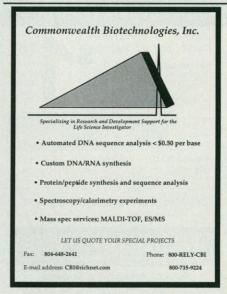
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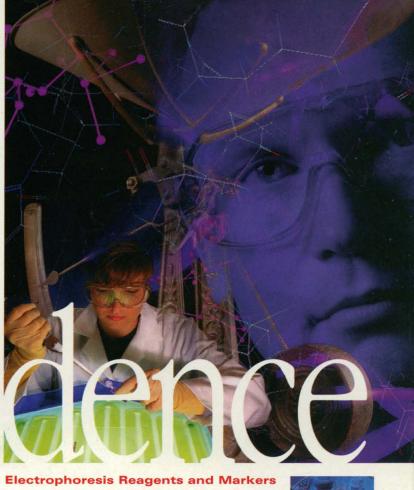


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