

PRODUCTS & MATERIALS

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Random Primer Labeling Kit

The Prime-It random primer labeling kit produces high-specific-activity DNA hybridization probes in only 2 min. These probes are ideal for Southern (DNA) and Northern (RNA) analyses and for screening gene libraries. The kit can produce probes from fragments purified by a variety of techniques, including isolation from low-melting-temperature agarose. Stratagene. Circle 137.

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The Mini Prep Cell is a continuous elution preparative electrophoresis cell for the resolution of proteins and nucleic acids in quantities from 550 ng to 1 mg. It is suitable for purifying proteins for sequence analysis, x-ray crystallography, and antibody production. Any protein that can be resolved by a conventional slab gel can be purified in the Mini Prep Cell. Samples are loaded onto the

upper surface of a gel column and are electrophoresed through the cylindrical matrix, separating off into ring-shaped bands. Individual bands migrate off the bottom of the gel where they pass directly into the elution chamber. The cell can isolate molecules that differ in molecular weight by as little as 2%. Bio-Rad Laboratories. Circle 138.

Bio-Spectrophotometer

The DU 640B UV/VIS Bio-Spectrophotometer System is an affordable unit for researchers performing routine biological applications. The 640B includes comprehensive software for requirements from simple pro-



tein contamination checks to optimizing polymerase chain reaction parameters. Focused-beam technology ensures accurate measurements of samples as small as 5 μ l. Applications include Fixed Wavelength, Wavelength Scanning, Kinetics/Time, Quantitative Protein Analysis, Nucleic Acid Analysis, and DNA/RNA/Oligo Quantitation with theoretical T_m determination. Beckman Instruments. Circle 139.

Slide Wells

The SonicSeal Slide Wells provide the convenience of in situ tissue culture on a standard microscope slide. All components are

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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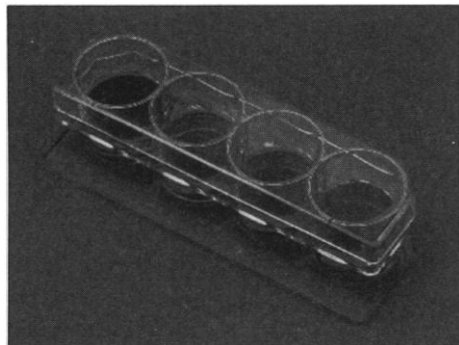
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made from Permanox plastic, which exhibits good chemical resistance to fixatives and staining solvents and is compatible with most fluorescent techniques. The media



chamber is sonically welded to the slide and can be removed by releasing the weld. The well dimension is comparable to that of a 24-well plate. Nunc. Circle 140.



Literature

1995-1996 *Particle Catalog* features a variety of monodisperse polystyrene microspheres available in research and bulk quantities. The particles can be used for immunoassay, flow cytometry, instrument calibration, and magnetic separation. Polysciences. Circle 141.

U-2001 UV/Visible Spectrophotometer describes a new instrument with maximum energy throughput, reduced stray light, excellent signal-to-noise ratios, a compact footprint, and a sample compartment large enough to accommodate a wide variety of accessories. Hitachi Instruments. Circle 142.

Ultra-Micro Cells is a brochure on a series of cells for the spectrophotometric analysis of minute volumes. These cells can be filled and emptied with even the smallest volumes through the filling/emptying ports using a pipette and suitable tips. Hellma Cells. Circle 143.

BTI Research Products Catalog 1995/96 is a 36-page catalog featuring cell growth and attachment factors; radioimmunoassays, enzyme immunoassays, and components; monoclonal and polyclonal antibodies; fluorescent markers; purified proteins; and radioiodine-labeled products. Biomedical Technologies. Circle 144.

SpectraPHORESIS Capillary Electrophoresis Systems details the advantages of this family of capillary electrophoresis systems, application kits, and accessories. Thermo Separation Products. Circle 145.

Enter the Micra Sphere: A Breakthrough in Fast HPLC is a 12-page brochure on using

nonporous silica in high-performance liquid chromatography columns to drastically reduce analysis time and solvent consumption and improve sensitivity. Micra Scientific. Circle 146.

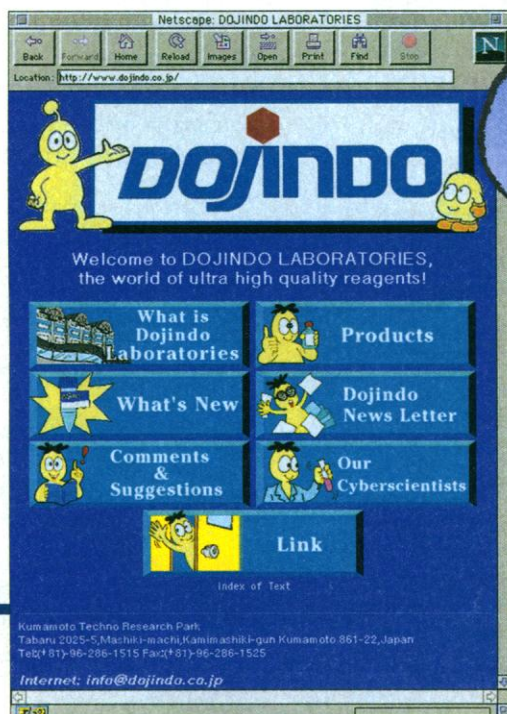
Turbo CE Plus System describes a separations strategy that allows users to work with any combination of up to eight capillary electrophoresis, liquid chromatography, and gas chromatography systems. Perkin-Elmer. Circle 147.

Creative Solutions for Laboratory Bioseparation discusses applications in DNA concentration, desalting and buffer exchange, DNA recovery from agarose gel, protein recovery from dilute solutions, enzyme removal from DNA, and purification of polymerase chain reaction products. Amicon. Circle 148.

L-Arginine-Nitric Oxide Pathway is a brochure with more than 50 new products for research in this rapidly growing field. Alexis Biochemicals. Circle 149.

Sigma Peptides and Amino Acids contains an extensive collection of these products, ranging from protein analysis and peptide synthesis reagents to high purity bioactive peptides, protease substrates, protease inhibitors, amino acids, and polyamino acids. Sigma Chemical. Circle 150.

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Science reserves the right, at its discretion, to edit or decline to publish advertisements submitted to it.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Forest Resources and Ecology Center at Utah State University (USU) are seeking to fill a **TENURE-TRACK POSITION** in forest hydrology and watershed science emphasizing the interaction of forest ecosystem hydrological, biological, and atmospheric processes at the watershed to landscape scale. The candidate will be expected to collaborate with terrestrial and aquatic scientists and to participate in the interdisciplinary Watershed Science Program in the College of Natural Resources. The candidate will teach both an undergraduate and graduate-level forest hydrology/watershed science course, and one graduate-level course in the candidate's area of expertise. The candidate must have: 1) Ph.D. at time of appointment in hydrology, forestry, or related field; 2) evidence of research productivity; 3) ability to develop a research program in forest hydrology based largely on extramural funding; 4) commitment to interdisciplinary research; and 5) commitment to quality undergraduate and graduate teaching. Send letter of interest, curriculum vitae, transcripts and supporting material, and arrange to have three letters of recommendation sent to: **Dr. David W. Roberts, Chair, Forest Hydrology Search Committee, Department of Forest Resources, Utah State University, Logan, UT 84322-5215.** Review of applicants will begin on December 15, 1995, and continue until the position is filled.

USU is an Affirmative Action/Equal Opportunity Employer. Qualified women and minorities are encouraged to apply.

ANATOMIST

Carroll College invites applications for the position of **ASSISTANT/ASSOCIATE PROFESSOR** of Anatomy, a nine-month tenure-track joint appointment in the Department of Physical Therapy and the Department of Biology. Carroll, a liberal arts college with a tradition of excellence in the sciences, is located in Waukesha, Wisconsin, 15 miles west of Milwaukee. Responsibilities include teaching and research in the developing entry-level Graduate Program in Physical Therapy and the Department of Biology's undergraduate curriculum. Candidates must have strong communication and organizational skills, a desire to develop innovative learning experiences, including the integration of anatomy dissection software into the teaching of anatomy and histology, and content expertise for scholarly activity. Requirements include a doctorate in anatomy. The Anatomist reports to the Director of the developing Graduate Program in Physical Therapy and the Chair of the Department of Biology. Salary is commensurate with credentials and experience. Screening of applications will begin on November 27, 1995, and will continue until the position is filled. Send letter of application, curriculum vitae, and the names, addresses, and telephone numbers of three references to: **Robert G. Black, Vice President for Academic Affairs and Dean of the Faculty, Carroll College, 100 North East Avenue, Waukesha, WI 53186.**

Carroll College is an Equal Opportunity/Affirmative Action Employer.

TENURE-TRACK ASSISTANT PROFESSOR

The University of Illinois at Chicago (UIC) College of Medicine is accepting applications for a tenure-track position in the Department of Pharmacology, preferably at the **ASSISTANT PROFESSOR** level. Applicants should have a Ph.D. or M.D. degree and postdoctoral experience. Applicants should also have a solid publication record and a demonstrated ability to apply molecular biological approaches to studies in the areas of vascular biology, receptors, or signal transduction. The successful candidate will be expected to have a funded independent research program and to participate in the medical teaching curriculum. This position is accompanied by significant start-up funds and laboratory space. The Department of Pharmacology at UIC has maintained a strong record of graduate education/scholarly activity and is seeking applicant qualifications commensurate with this tradition. Please forward a letter, complete curriculum vitae, a brief statement of research interests, and the names of three references to:

Faculty Search Committee
Department of Pharmacology (m/c 868)
University of Illinois at Chicago
835 South Wolcott
Chicago, IL 60612

The University of Illinois at Chicago is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR MOLECULAR, CELLULAR AND DEVELOPMENTAL BIOLOGY

The Division of Biology of Kansas State University (KSU) invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek an individual who will establish a strong, extramurally funded research program as well as participate in our undergraduate and graduate teaching program. A Ph.D. or equivalent and postdoctoral training are required. The position includes a competitive salary and start-up package. A research focus on developmental genetics utilizing an animal model system is preferred, but individuals working in related areas within the larger context of molecular, cellular, and developmental biology will be considered. The Division of Biology is a large, diverse unit with a strong record of research productivity and funding, and established investigators in areas relevant to the search. For more information go to <http://www.ksu.edu:80/biology/>. Applicants should submit a curriculum vitae, selected reprints, and summary of research interests, and have three letters of reference sent to: **Robin Denell, MCDB Faculty Search Committee, Division of Biology, Ackert Hall, Kansas State University, Manhattan, KS 66506-4901.** Applications should be received by January 16, 1996. *KSU is an Equal Opportunity/Affirmative Action Employer, and encourages diversity among its employees.*

INSECT POPULATION GENETICIST

Tenure-track, **ASSISTANT PROFESSOR** research (60%) and teaching (40%) position, to begin July 1, 1996. Research area is open, but should contribute ultimately to strategies for insect pest management, diversity conservation, or both; examples include genetic aspects of host plant resistance, pesticide resistance, plant/herbivore or herbivore/natural enemy interactions, or conservation biology. The successful candidate will participate in both graduate and undergraduate teaching, and interact with existing programs in integrated pest management, insect/plant and insect/vertebrate interactions, and evolutionary biology. Applications should include curriculum vitae, statements of research plans and of teaching experience and interests, transcript copies or list of relevant courses taken, and names and addresses of five referees. Apply by December 11, 1995 to guarantee fullest consideration. Direct applications or questions to: **Charles Mitter, Population Genetics Search, Department of Entomology, University of Maryland, College Park, MD 20742 [Internet: cm42@umail.umd.edu].** *An Equal Opportunity Employer, applications from minorities and women are encouraged.*

MOLECULAR/CELLULAR BIOLOGY UNIVERSITY OF VIRGINIA

The Department of Biology at the University of Virginia invites applications for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. We are seeking a researcher of exceptional promise who uses molecular, genetic, and/or biophysical approaches to investigate fundamental questions in biology. Candidates who would contribute to existing departmental strengths in cellular, molecular and developmental biology, neurobiology/behavior, evolution or plant biology are desired. Applicants should submit curriculum vitae, a summary of past accomplishments, a description of future research plans and teaching interests, and should arrange for three letters of reference to be sent to: **Molecular/Cellular Biology Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, VA 22903-2477.** Screening of applications will begin immediately. *The University of Virginia is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply and to identify themselves.*

UNIVERSITY OF WASHINGTON Chemical Senses Neuroscientist

Tenure-track **ASSISTANT PROFESSOR** position in the Department of Otolaryngology-Head and Neck Surgery at the University of Washington. Candidate should be a Ph.D. or M.D. with postdoctoral training. Preferred research interests are cellular, molecular, or developmental problems in the olfactory system. Please send a curriculum vitae, a brief statement of research interests, and the names and addresses of three references to: **Marc D. Coltrera, M.D., Oto-HNS, University of Washington, Box 356515, Seattle, WA 98195-6515.** *The University of Washington is an Affirmative Action/Equal Opportunity Employer.*

By all accounts, 1995 was a turning point for European biopharmaceuticals. Industry, academia, government, and entrepreneurs are now creating new opportunities for science careers. The very notion of a scientific career is changing in ways that no serious job-seeker can afford to ignore.

Growing Up

European biopharma has at last left its infancy. Jeremy Curnock-Cook, director at Rothschild's with responsibility for investment in biotech, says that "what was missing in Europe for a long time was the role model that made everybody feel this wasn't just a US phenomenon." Now Europe has role models such as British Biotech, born in 1986 and a comparative veteran with significant industrial collaborations. At the center, it seems, is London. The European Medicines Evaluation Agency (formerly the Committee for Proprietary Medicinal Products) has moved to London. Upjohn and Pharmacia are headquartering their merged companies there, as are IVAX and Häfslund Nycomed. Venture capital is flowing there too, as biotechnology stocks prosper on the London Stock Exchange.

In Europe, too, the financial environment is becoming much more open. David Collingham, chairman of Ruston Poole International, a scientific executive search firm, says, "People are finding more creative ways to finance start-ups and refinance existing companies." As a result, both France and Germany have become key pockets of biopharma. Biogen recently affirmed French biotech by establishing its international headquarters in Paris. French companies such as Genset are attracting private investors. Local governments in Germany have eased regulatory restrictions and in many cases added financial support. Companies such as MorphoSys, Rhine Biotech, and Biopharm have helped erase Germany's image as a science graveyard.

All these developments call for a scientist who is both a master of a particular discipline and flexible enough to work across disciplinary boundaries. Excellent basic science, computer and verbal communications skills, and business acumen are all necessities. The Euroscientist of 1996 must be ready to assume different tasks and be open to new career directions—including those below.

Integrated Research

These are the days of the seamless company, where all departments and disciplines work together to make drug development speedier and more efficient. Discovery science blends with process development with manufacturing. A good example of an integrated approach is that of the Cruciform Project, which has parlayed more than \$50 million of government and private support into a research effort aimed at cardiovascular disease, neurodegenerative disease, and cancer. Salvador Moncada, director of the Project, says that the borders between traditional disciplines have all but disappeared: "I strongly believe in integrated research."

So does the British government, whose Foresight Initiative calls for an "integrative biology" bringing together molecular biology and genetics with cell and tissue biology and whole organism studies. The Initiative singled out neuroscience and the cognitive sciences, progressive degenerative disease, and non-specific age-related decline as promising targets for future research.

Genomics, Gene Therapy, and Informatics

Many major pharmaceutical companies, including Rhône-Poulenc Rorer, Glaxo Wellcome, and SmithKline Beecham, are intensely



investigating genomics, gene therapy, and cell therapy. So are many of Europe's most exciting smaller companies, such as IDM and Transgène of France, Therexsys and Xenova of the UK, MediGene of Germany, and IntroGene of the Netherlands. Genomics, of course, places a heavy emphasis on informatics—requiring a new generation of information scientists.

Combinatorial Chemistry and Organic Synthetic Chemistry

Combinatorial chemists, who can create libraries and make them converse, are much prized in a world where speed to market is of the essence. Organic synthetic chemists, who can make compounds and design production processes for them, are crucial players in the newly integrated drug development process in Europe.

Oxford Asymmetry (UK) recently announced a \$7 million collaboration with Pfizer, creating Oxford Diversity, the first European company devoted solely to combinatorial chemistry. The idea is to find novel chemical approaches that will accelerate drug development. Eventually, Oxford Asymmetry will offer libraries of chemical analogues and intermediates for use in drug discovery screening. Thus is born a new kind of drug company: the outsource that specializes in development—what Edwin Moses and Roger Brimblecombe of Oxford Asymmetry call a "one-stop shop."

Flex-mindedness: The New Science Careerer

As European science changes, so will the shape of a science career. Alan Garmonsway, manager of human resources for the UK biotech Xenova Group Plc., points out that the very language people use to describe a career is changing. Susan Harris-Charles, managing director of De Facto Consultants Limited, a consultancy dedicated to science-based industries, says, "It's no longer the case that a scientist will stay in the same department with the same company for an entire career. It will be more like other job trajectories, with the scientist switching departments or companies or jobs 4 to 5 times."

This dynamic job market brings with it a new range of choices, and at least one certainty. "There will always be a need for good science PhDs," says Larry Botheras, consultant for Macmillan Davies, "but those PhDs need to target their skills to the needs of the future." That means what Collingham calls "flex-mindedness": understanding that the PhD need not be confined to discovery research. "Look at process development, scale-up, clinical trials, supplies, manufacturing," says Botheras. "If you're a synthetic organic chemist, why not go into synthesis or process development?" Garmonsway says that the new employment scene calls for scientists who "have specific skills but also an aptitude to make their scientific approach productive through intelligent application, evaluation, and flexibility."

As 1996 approaches, science careers are taking on undreamed-of trajectories. "Without a doubt," says Harris-Charles, "it's an exciting time."

John Timpane, PhD, writes frequently about the biotechnology and pharmaceutical industries.

Director of the Sandoz Research Institute, Vienna

The Sandoz Research Institute in Vienna, which was established in 1969, is one of Sandoz Pharma's four major centres of excellence devoted to the search for new therapies. It employs approximately 200 research scientists in a wide variety of biological and chemical disciplines focused on the discovery of improved therapies for inflammatory and hyperproliferative skin diseases, such as atopic dermatitis and psoriasis.

Ideal Profile

Candidates should have a degree in biology, pharmacology or medicine and a PhD in physiology/pathophysiology or a related field.

A broad understanding of modern biology and pathophysiology, as well as expertise in the fields of immunology, inflammation, cell signalling and cell regulation are required. As research at Sandoz Pharma is performed in large interdisciplinary teams, candidates should have a track record of successful leadership of such teams, as well as proven personal excellence in research. Experience in the pharmaceutical industry and in the field of dermatology would be advantageous.

Candidates must have leadership qualities, drive and scientific vision, coupled with organisational skills and objectivity as part of a decisive personality. Entrepreneurial perception and a full command of English are mandatory. Fluency in German is desirable.

The main responsibilities will be to ensure a constant flow of innovative therapies, to maintain the Institute's position as a leader in dermatological research. In addition, as an ex-officio member of the Sandoz Pharma Research Board, the new Director of the Institute will participate in determining global corporate research strategy, and in reviewing the projects and development programmes of other Sandoz Pharma research centres.

Applications, including a detailed curriculum vitae and list of publications, should be addressed to:

Dr. P. Herrling
Head Corporate Research
Sandoz Pharma Ltd.
P.O. Box
CH-4002 Basel, Switzerland

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UNIVERSITY OF CAMBRIDGE Department of Chemistry *Professorship of Chemistry (1968) (Theoretical Chemistry)*

The Board of Electors invite applications for this post which will become vacant on 1 October 1997 upon the retirement of Professor A D Buckingham FRS. Applications are encouraged from outstanding research scientists across the entire range of Theoretical Chemistry. Professor Buckingham's immediate predecessors were Sir J E Lennard-Jones and H C Longuet-Higgins.

The appointment will be subject to the Statutes and Ordinances of the University. The pensionable stipend for a Professor is £38,993 per annum. The University follows an equal opportunities policy.

Informal enquiries may be made to Professor Nicholas Handy FRS, Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW (e-mail nch1@cus.cam.ac.uk). Detailed information about the Department is available from the World Wide Web (<http://www.ch.cam.ac.uk>).

Candidates should send ten copies of their applications, marked 'confidential', together with the names of two referees, to the Secretary General of the Faculties, from whom further information regarding the Professorship is available, at the General Board Office, The Old Schools, Cambridge CB2 1TT, so as to reach him not later than 29 February 1996.

The University aims to achieve the highest quality in teaching and research.



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Frankfurt am Main

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Bewerbungen sind innerhalb von 6 Wochen nach Erscheinen dieser Anzeige mit den üblichen Unterlagen an den Dekan des Fachbereichs Humanmedizin der Johann Wolfgang Goethe-Universität, Theodor-Stern-Kai 7, 60590 Frankfurt, zu richten.

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- Managing and organising an expanding group of professional scientists and technologists.

Candidates must be qualified at PhD level in a relevant life science, with at least 10 years post-doctoral experience of receptor based, mechanism driven research in inflammation, within the pharmaceutical industry. They must have an excellent track record of introducing new targets with therapeutic end-points. Ideally, these will have resulted in new chemical entities which have entered development. Experience of man management is also required.

This is a challenging role and requires a high calibre scientist who can turn innovative ideas into practical applications. It is important for applicants to challenge arguments and progress programmes with vigour, maintaining a critical, evaluative insight. At the same time, good relationships need to be maintained at all levels, with colleagues in the full range of disciplines.

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This is an exciting opportunity to get in at the start of a new venture in pharmaceutical research with Astra. If you are ready for a major challenge at the leading edge of drug research, then contact me today for a discussion. Otherwise, send or fax your CV, quoting Ref. S/1118/IC, to Dr Ian Collins, Managing Director, *Executive & Scientific Appointments Limited*, 15-17 The Broadway, Old Hatfield, Hertfordshire AL9 5HZ. Tel: 01707 264311 or Fax: 01707 275402.

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APPOINTMENTS



Am Universitätsklinikum Charité, Medizinische Fakultät der Humboldt-Universität zu Berlin, ist im Institut für Pharmakologie und Toxikologie ab sofort eine

C 3-Professur für Molekulare Pharmakologie

(Kennziffer: Prof. 144/95)

zunächst auf 18 Monate befristet im Rahmen eines DFG-Innovationskollegs zu besetzen. Eine Fortführung nach DFG-Zwischenbegutachtung für weitere 36 Monate und eine Aufhebung der Befristung sind möglich.

Die/der zukünftige Stelieninhaber/in soll in einem Projektbereich des Innovationskollegs "Kompensations- und Regenerationsmechanismen nach definierten Veränderungen an "Transmissionssystemen und ihre Bedeutung für Hirnfunktionen" eine Arbeitsgruppe "Transgene und gendefekte Tiere" aufbauen und leiten.

Vorausgesetzt werden die Habilitation oder eine gleichwertige wissenschaftliche Leistung, eine hervorragende wissenschaftliche Qualifikation und herausragende methodische Kenntnisse auf den Gebieten der Molekularen Pharmakologie, Molekularbiologie und Gentechnik.

Die/der Bewerber/in soll auf dem Gebiet der Herstellung von transgenen und gendefekten Tieren gearbeitet haben.

Eine Beteiligung an der Lehre im Fach Pharmakologie und Toxikologie wird erwartet, die entsprechende Lehrbefähigung vorausgesetzt.

Berlin strebt eine Erhöhung des Anteils von Frauen in Forschung und Lehre an und fordert deshalb qualifizierte Wissenschaftlerinnen nachdrücklich auf, sich zu bewerben.

Schwerbeschädigte werden bei gleicher Eignung bevorzugt.

Schriftliche Bewerbung mit Lebenslauf, Darstellung des wissenschaftlichen Werdegangs, urkundlichen Nachweisen, Schriftverzeichnis und ausgewählten 5 Publikationen sind bis 29.12.95 nach Erscheinen dieser Anzeige zu richten an: **Herm. Prof. Dr. W. Sterry, Humboldt-Universität zu Berlin, Schumannstr. 20/21; 10117 Berlin.**

FACULTY RECRUITMENT

The Institute of Biomedical Engineering of the University of Toronto seeks applicants for two tenure-track faculty positions at the Assistant Professor level. One of the positions will be filled by an individual jointly appointed to the Department of Electrical and Computer Engineering who will be expected to teach within that Department; for the second position, applicants may have a life sciences/medicine or an engineering/physical sciences background.

The Institute of Biomedical Engineering is part of the Faculty of Medicine and the Faculty of Applied Science and Engineering. It is responsible for undergraduate and graduate programs in Biomedical Engineering and a graduate Clinical Engineering Program. The Institute has three research themes: Diagnostic and Therapeutic Engineering, Technology for Health, and Cellular and Molecular Bioengineering.

A successful applicant will have a Ph.D., excellent teaching skills, a strong background in his or her discipline, and demonstrated success at collaborative research at the interface between engineering and medicine. The individual will be expected to teach undergraduate courses (in biomedical engineering and in a cognate department) and graduate courses and initiate and maintain a collaborative research program, of international calibre, addressing fundamental problems within the three existing theme areas. Areas of special interest include, but are not limited to: vestibular-ocular, auditory or cardiovascular physiology, signal processing or electrical and computer engineering within a biomedical engineering context, rehabilitation engineering, and assistive technology, biomechanics, clinical engineering, cost-effective health technology, tissue engineering, drug and gene delivery systems.

Applications should be sent to **Professor H. Kunov, Director, Institute of Biomedical Engineering, Rosebrugh Building, University of Toronto, Toronto, Ontario M5S 1A4.** Include a C.V., a summary of research and teaching interests, and the names of at least three referees. The closing date for applications is 1 February 1996. The effective date of the appointments will be 1 July 1996, subject to the availability of resources.

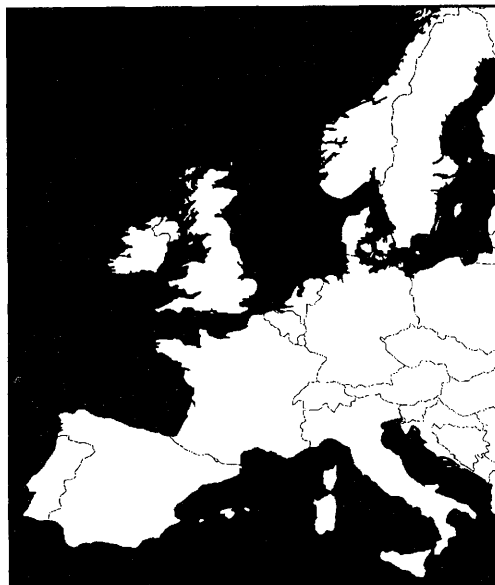
In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents of Canada. *The University of Toronto encourages applications from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities.*

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Position 2. MS in biochemistry or related fields and 2 years of lab experience in chromatography/protein expression & purification are required. A background in immunology is a plus. (Reference APMQXP-1195)

Clinical Sales Development Specialist. Experience selling emerging molecular biology technology in clinical and clinical research markets is required. Ability to adapt to an exciting nationwide travel schedule including possible conferences in Europe, ease with a team selling environment, and sales coaching abilities are prerequisites for success. Understanding of amplification technology and various DNA/RNA products is a plus. MS/BS degree in life sciences is required. (Reference SDCQA-1195)

Technical Sales Representative. BS degree and at least 1 year of lab experience in molecular biology or related fields is required. Prior sales experience is a plus. Territories are available nationwide. (Ref. TSR-1195)

Instrument Sales Specialist. MS/BS degree and at least 1 year of lab experience in molecular biology or related fields is required. At least 2 years of laboratory equipment sales experience is a must. Territories are available nationwide. (Reference ISP-1195)

Technical Support Specialist. Responsibilities include providing technical support for QIAGEN's complete product line. Additional duties include providing technical training for internal and external customers, and writing and editing technical literature. MS/BS degree and at least 2 years of lab experience in molecular biology or related fields. Broad molecular biology experience and outstanding verbal and written communication skills required. Experience in recombinant protein expression and purification is desirable. (Reference TSS-1195).

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TENURE -TRACK ASSISTANT PROFESSOR

The Department of Molecular and Medical Pharmacology and the Crump Institute for Biological Imaging at the UCLA Center for the Health Sciences have initiated an exciting new program whose goal is to fuse modern molecular and cell biology with imaging technologies. The objective of the program is to develop new approaches to investigate the molecular basis of integrated organ function in experimental animals and in human biology. The program requires the co-operative efforts of cell and molecular biologists, physicists, biomathematicians, enzymologists, chemists, pharmacologists, microscopists, and clinical specialists.

We seek a creative investigator who, in this environment, will initiate an independent program in real-time analysis of molecular processes at the cellular level, developing and/or modifying analytical procedures that facilitate the repeated monitoring of dynamic inter- and intracellular processes such as ligand-initiated signal transduction, cell cycle traverse, hormonal responsiveness, neuronal stimulation, or similar topics. The ideal individual will be concerned with continuous monitoring and intervention of molecular processes at the cellular level and will plan to extend his/her studies to the organismal level, both with respect to normal development and homeostasis, and with respect to biological models of disease processes. Interested applicants with appropriate experience and intent should send a curriculum vitae and a research proposal describing a relevant project to:

Judith Amos
Dept. of Molecular & Medical Pharmacology
UCLA School of Medicine
10833 Le Conte Avenue
Los Angeles, CA 90095-1735

Applicants should also arrange to have three letters of recommendation sent to the same address. All applications and letters of recommendation should be received by January 20, 1996.

AN EQUAL OPPORTUNITY EMPLOYER

FACULTY POSITIONS IN STRUCTURAL BIOLOGY CELLULAR BIOCHEMISTRY & BIOPHYSICS PROGRAM SLOAN-KETTERING INSTITUTE

We seek outstanding candidates for tenure track faculty positions at the Assistant and Associate member level in the Cellular Biochemistry & Biophysics Program. Applications are invited from candidates with expertise in the application of x-ray crystallography, NMR spectroscopy or computational methods to problems in biology. The Program faculty includes cell biologists, biochemists and structural biologists with interests in diverse areas of biology such as intracellular protein transport, cell adhesion, signaling pathways in cell growth and differentiation, protein folding and nucleic acid structure and function. Successful candidates will join Dinshaw Patel (NMR), Nikola Pavletich (x-ray crystallography) and Michael Rosen (NMR) on the structural biology floor of the new Rockefeller Research Laboratories building.

Applicants should submit a curriculum vitae, a summary of research interests and names and addresses of three references to:

Ms. Fran Berman, Program Coordinator, Cellular Biochemistry & Biophysics Program,
Box 135, Memorial Sloan Kettering Cancer Center, 1275 York Ave., NY, NY 10021. EOE/AA.



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INSTITUTO DE
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ACADEMIC POSITIONS

The Institute for Cellular Physiology of the National Autonomous University of Mexico invites scientists to apply for **two tenure-track positions as independent researchers**. Candidates in the areas of Molecular and Cell Biology as well as Immunogenetics and Developmental Biology must apply before March 15, 1996. Ph.D. and Post-doctoral experience required. Good knowledge of spoken and written Spanish preferred. Send *Curriculum vitae*, current and projected research interests, selected reprints and names and addresses of three references to: **Dr. Georges Dreyfus, Director, Instituto de Fisiología Celular, UNAM, Ap. Postal 70-600, 04510 México City D.F. MÉXICO. Telephone: (52-5) 622-5603/04, Fax: (52-5) 616-2282, Internet: <http://ifcsun2.ifisiol.unam.mx> or gdreyfus@ifcsun1.ifisiol.unam.mx**

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POSTDOCTORAL FELLOW Allergy Research

We seek a scientist to conduct scientific research to determine the role of cyclic nucleotide phosphodiesterase IV in the function of inflammatory cells. As an integral member of this fellowship project, you will have a unique opportunity to generate novel, publishable data and conclusions. To qualify, you will need a PhD in biochemistry with proven experience in enzyme kinetics, protein biochemistry,

and molecular cloning and expression. Direct experience with PDE enzymes is preferred. Excellent written and verbal communication skills are a must.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources-BG, Dept. TM-PDF, 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.*



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**NATIONAL CANCER INSTITUTE
DIVISION OF CANCER EPIDEMIOLOGY AND GENETICS
BETHESDA, MARYLAND**

Opening Date: November 15, 1995
Closing Date: December 15, 1995

Announcement Number: CA-95-0180

DIRECTOR, HUMAN GENETICS PROGRAM

The Division of Cancer Epidemiology and Genetics (DCEG), National Cancer Institute (NCI), is seeking candidates to fill the position of Director, Human Genetics Program (HGP). Candidates should be internationally recognized for their expertise, leadership, and collaborative capabilities in the area of human cancer genetics.

The HGP is a newly established diversified intramural program conducting research into the genetic determinants of human cancer. Emphasis is placed on population-based studies that integrate clinical, epidemiologic and laboratory approaches to investigate heritable factors that predispose to cancer. The HGP is currently composed of the Genetic Epidemiology Branch, Clinical Genetics Branch, and the Laboratory of Human Genetics.

The Director plans, manages and directs the activities of the HGP, utilizing intramural resources, contracts, inter-agency agreements, and extramural collaborations. He/she oversees a research program of studies of individuals, families and populations at high risk of cancer to detect heritable factors at the molecular level that predispose to cancer and to explore gene-environment interactions. The Director also ensures that appropriate databases and biospecimen repositories are developed and maintained for cancer-prone families and syndromes. In addition, he/she develops and directs a research training program, incorporating clinical, epidemiologic, and laboratory-based approaches into investigations of the genetic determinants of cancer. The Director is responsible for establishing Program priorities, allocating resources, integrating the activities of the Program's branches and laboratory, evaluating Program effectiveness, and representing the Program in management and scientific decision-making meetings within the Division and Institute. The Director advises the Division Director and supports the activities of the Board of Scientific Counselors, the National Cancer Advisory Board, and other national and international advisory and scientific groups.

Candidates must hold a medical or other doctoral-level degree in a biomedical or related field. In addition, candidates must have extensive interdisciplinary research experience using epidemiologic, clinical and laboratory approaches to study human cancer genetics. In particular, research experience essential to this position includes: (1) conduct of epidemiologic studies to estimate the prevalence of cancer susceptibility genes in the general population, identify the risk of cancer among gene carriers, and clarify the modifying effects of lifestyle and other environmental risk factors; (2) identification and characterization of cancer-prone individuals and families to define genetic mechanisms and gene-environment interactions in cancer risk; (3) segregation and linkage analyses for mapping genes predisposing to cancer; and (4) use of molecular biotechnology to identify and clone cancer susceptibility genes from malignant and normal cells and tissues, characterize their encoded products, and elucidate their functions and mechanisms of action. Experience is also desirable in evaluating the effectiveness of appropriate counseling and interventions among groups at high risk of cancer.

Candidates must have satisfactory experience in the administration and management of a research program in cancer genetics which includes epidemiologic, clinical, and laboratory components. Experience includes the planning and directing of such a program and evaluating its effectiveness. Experience in establishing priorities and allocating resources is also essential.

Candidates must be either a U.S. citizen, a citizen of a treaty allied country, or a nonresident alien with a valid work visa.

Annual salary will be commensurate with education and experience, and may be up to \$148,400. Qualified physicians who are employed as Medical Officers may be eligible for an additional Physician's Comparability Allowance of up to \$20,000 per year.

Applicants should send a cover letter of interest in the position. In addition, applicants should submit a statement of research interest, curriculum vitae, bibliography and the names and addresses of five individuals who can be contacted as references. Letters of reference should not be submitted by the applicant. This material should be sent to:

**NATIONAL CANCER INSTITUTE
PERSONNEL MANAGEMENT BRANCH
9000 ROCKVILLE PIKE
BUILDING 31, ROOM 3A16
BETHESDA, MD 20892**



Applications may also be faxed to (301) 496-5547.

If you need additional information, please call Ms. Sue Hickman, NCI Personnel Office, on (301) 496-8182.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

NCI is an Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION MOLECULAR BIOLOGY

Applications are invited for a tenure-track position beginning July 1, 1996, at the level of **ASSISTANT PROFESSOR**. Applicants must have a Ph.D., at least two years of postdoctoral experience, and a strong publication record. The successful applicant will be expected to establish a vigorous, independent research program and to participate in graduate and undergraduate teaching. We seek applications from individuals whose research addresses basic questions at a molecular level and can interface with the interests of existing faculty. Specific areas include but are not restricted to developmental biology, neurobiology, and environmental toxicology. Opportunities also exist for research collaborations and participation in the Molecular and Cellular Biology Interdisciplinary Graduate Program, the Neurosciences Interdisciplinary Graduate Program, and the Center for Bioenvironmental Research. The deadline for applications is February 15, 1996. Applicants for the position should send curriculum vitae, a brief statement of research plans, and three letters of recommendation to:

Dr. Ken Muneoka, Chair
Department of Cell and Molecular Biology
Tulane University
New Orleans, LA 70118

Tulane University is an Equal Opportunity/Affirmative Action Employer and encourages minority and female applicants to apply.

NATURAL RESOURCE MANAGEMENT ENVIRONMENTAL POLICY

ASSISTANT PROFESSOR, tenure-track. Qualifications: Ph.D., strong interest in undergraduate liberal arts education, science background with proven interest/experience in two or more of the following: resource management, environmental policy, risk analysis, waste management, sustainability, environmental planning, or EIS. Areas of primary research related to the southern Appalachians such as forest, water, air resources, or waste management are of interest to the department. Responsibilities: teach in program's core curriculum, teach advanced courses in specialty, and develop a research program that can interface with student research/internship opportunities. Submit: résumé, official transcripts, reprints, a statement of undergraduate teaching/research interest, and three letters of reference (from authors) to: **Dr. Gary Miller, Environmental Studies Program, University of North Carolina-Asheville, Asheville, NC 28804. Telephone: 704-251-6441.** Initial screening will begin on February 1, 1996. Position open until filled.

Equal Opportunity Employer.

BIOLOGY: GENETICS

Carthage College seeks an **ASSISTANT PROFESSOR** for a tenure-track position in genetics. Ph.D.; strong background in experimental biology; commitment to teaching at the undergraduate level; willingness to involve students in research projects; and ability to pursue external funding required. Located on the shore of Lake Michigan midway between Chicago and Milwaukee, the College offers quick urban access from the relaxed environment of a small city. Recent renovations to science facilities make Carthage well equipped for state-of-the-art teaching and research activities. Nominations and applications, including a current curriculum vitae and three letters of reference, should be sent by January 1, 1996, to: **Charlotte Chell, Chair, Division of Natural Sciences, Carthage College, 2001 Alford Park Drive, Kenosha, WI 53140.**

Genetics/Plant Cell Biology—Brigham Young University (BYU) anticipates filling a tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Position is available September 1, 1996. Position qualifications include Ph.D. in plant genetics (either crop or ecological) and the applicant should have research experience in plant molecular biology, genetics of native plant populations, or evolutionary genetics. Responsibilities include teaching undergraduate courses in genetics and plant cell biology, teaching graduate courses, and developing an active research program. Send curriculum vitae, statements of research interests and teaching experience to: **Dr. W. M. Hess, Chair, Department of Botany and Range Science, Brigham Young University, Provo, UT 84602.** *BYU is an Equal Opportunity/Affirmative Action Employer. Preference is given to members of the sponsoring church.*

POSITIONS OPEN

ENVIRONMENTAL SCIENTIST/ENGINEER

The Department of Environmental Studies at Baylor University seeks candidates for an advanced **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** level faculty appointment. The preferred candidate will have a biological and/or chemical process orientation with interest and experience in a combination of research, teaching, and applied environmental problem-solving. There is a preference for concentration on air quality issues, but candidates with other interests, including renewable energy and environmental biotechnology, are encouraged to apply.

Initial applications should include a detailed letter of interest, a curriculum vitae, and names of at least three references. Direct inquiries and applications to: **Dr. Dudley J. Burton, Chair, Department of Environmental Studies, Baylor University, P.O. Box 97266, Waco, TX 76798-7266. Telephone: 817-755-3405; FAX: 817-755-3409; Email: dudley_burton@baylor.edu.** Application closing date is January 1, 1996.

Baylor is a Baptist university affiliated with the Baptist General Convention of Texas. As an Affirmative Action/Equal Employment Opportunity Employer, Baylor encourages minorities, women, veterans, and persons with disabilities to apply.

ASSISTANT PROFESSOR

The Medical Sciences Program of the Indiana University School of Medicine in Bloomington invites applications from candidates with at least two years of postdoctoral experience for a 12-month, tenure-track **ASSISTANT PROFESSOR** position in anatomy, physiology or biochemistry starting July 1996. The successful applicant is expected to participate in the teaching of basic biomedical sciences to medical, graduate, and undergraduate students, and to establish an excellent extramurally funded research program that uses modern molecular and cellular techniques. Preference will be given to those candidates who can document both teaching and research expertise and whose research interests complement those of current faculty. Information: <http://www.indiana.edu/~medsci/> Applicants should send a curriculum vitae, a statement of teaching commitment and philosophy, a summary of current and anticipated research activity, and the names and telephone numbers of at least three references by January 15, 1996, to: **Search Committee, Medical Sciences Program, Indiana University School of Medicine, Myers Hall, Room 203, Bloomington, IN 47405-4201.** *Indiana University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

ASSISTANT PROFESSOR—BIOLOGY

The Biology Department at Saginaw Valley State University is accepting applications for a tenure-track **ASSISTANT PROFESSORSHIP**. The successful candidate must be a molecular biologist with expertise in one or more of the following areas: environmental toxicology, systematics, or vertebrate physiology. A Ph.D. is required; the position will begin in the fall 1996 semester. Teaching will include lower-division courses for majors and non-majors as well as upper-division major courses. Candidates must possess a strong commitment to and demonstrated experience in undergraduate teaching and interest in undergraduate research. A letter of application, curriculum vitae, transcripts, and three letters of recommendation must be received by January 31, 1996 for full consideration. Application materials should be sent to: **Mr. Larry Fitzpatrick, Director of Personnel, Saginaw Valley State University, University Center, MI 48710.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR Department of Animal Sciences

The Department of Animal Sciences at Cook College, Rutgers—The State University of New Jersey invites applications for a **TENURE-TRACK** position. Candidates should have a doctoral degree, postdoctoral experience, and commitment to excellence in teaching. We seek individuals using molecular approaches in livestock research with the potential to attract external research funding. Description of research plans, curriculum vitae, and names of three references should be sent by December 29, 1995 to: **Dr. C. A. Bagnell, Search Committee Chair, Department of Animal Sciences, Cook College, Rutgers—The State University of New Jersey, New Brunswick, NJ 08903.** *Rutgers is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR(S) IN BIOLOGY MARYMOUNT UNIVERSITY

Marymount University, a small liberal arts institution with a diverse student population, invites applications for two positions at the **ASSISTANT PROFESSOR** level in biology beginning fall 1996. Commitment to undergraduate teaching and undergraduate research with university teaching experience and postdoctoral training preferred. Position one requires ability to teach introductory biology and two or more of the following areas: environmental science, microbial ecology, toxicology, hydrology/geology, or marine science. Position two requires ability to teach introductory biology and genetics, and two or more of the following areas: anatomy and physiology, endocrinology, parasitology, or biochemistry. Specify teaching and research interests. An official application must accompany curriculum vitae, and other supplemental material. Applications will be considered until positions are closed or filled. Contact Personnel Services Office for an official faculty application by **Telephone: 703-284-1680; or by mail: 2807 North Glebe Road, Arlington, VA 22207-4299. TDD 1516.** *Current authorization to work in the U.S. required.*

24-Hour Employment Opportunities Job Line: 703-284-1518. *Affirmative Action/Equal Employment Opportunity.*

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 postdoctoral 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.*

VERTEBRATE BIOLOGIST

Hiram College Biology Department invites applications for a tenure-track position as **ASSISTANT PROFESSOR**. The successful candidate will teach vertebrate biology and introductory zoology as well as courses from among (but not limited to) the following: developmental biology, evolution, human anatomy and physiology (Exercise and Sport Science Program), immunology, histology. Course contribution to the general curriculum is encouraged as is development of a research program involving undergraduates. Ph.D. required. Letter of application, curriculum vitae, statements of teaching philosophy and research interests, graduate and undergraduate transcripts, and names of three references should be sent to: **Dr. P. J. Hall, Biology Department, Hiram College, Hiram, OH 44234.** Review of applications will begin on January 2, 1996. *Hiram College is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

BOTANY

ASSISTANT PROFESSOR. The Department of Biology at The University of West Florida is seeking applications for a tenure-track faculty position, available August 1996. Candidates with expertise in higher plants will be given preference. The successful candidate is expected to teach undergraduate and graduate courses in botany or other areas of expertise (e.g., cell/molecular biology, genetics, wetlands biology, or biochemistry), and develop an active research program involving undergraduate and Master's students. Qualifications include Ph.D. in botany or related field of plant science or biology and relevant research or teaching experience. Applicants should submit a statement of teaching and research interests, curriculum vitae, transcripts, and three letters of reference by February 1, 1996 to: **Dr. John P. Riehm, Chair, Department of Biology, The University of West Florida, Pensacola, FL 32514.** *An Affirmative Action/Equal Opportunity Employer.*

Tenure-Track And Postdoctoral Opportunities.

The following research training opportunities are currently available at the National Institutes of Health.

Tenure-Track Position Assistant Professor Equivalent

Developmental Neurobiology

A position is available in the Laboratory of Molecular and Cellular Neurobiology (Chief, Forrest F. Weight, MD) to develop an independent research program investigating the molecular basis of alcohol effects on neural development. Expertise in the investigation of the molecular mechanisms involved in the regulation of nerve cell development is required. Applications must be received within six weeks of the publication of this advertisement. Please submit a *curriculum vitae*, a detailed statement of research interests, and names of three references to Theodore Colburn, PhD, Division of Intramural Clinical and Biological Research (OE-105), NIAAA, Building 31, Room 1B58, 31 CENTER DR MSC 2088, BETHESDA MD 20892-2088.

Postdoctoral Positions

Brain Imaging and Neuropharmacology Stanley I. Rapoport, MD and Mark B. Schapiro, MD

Positron emission tomography (PET) and functional magnetic resonance imaging are used to examine mechanisms and sites of action of drugs that modulate cognitive function and synaptic transmission in Alzheimer disease patients. Studies are done during cognitive and pharmacological activation and in relation to therapeutic efficacy. The laboratory offers a two- to five-year training program to clinician-researchers. Laboratory of Neurosciences (OE-105), NIA, Building 10, Room 6C103, 10 CENTER DR MSC 1582, BETHESDA MD 20892-1582.

Hypertension and Brain Disease Stanley I. Rapoport, MD and Mark B. Schapiro, MD

A two- to five-year training program is offered to clinician-researchers interested in clinical studies examining brain disease related to hypertension and other cardiovascular dysfunction. Positron emission tomography and magnetic resonance imaging are used to study brain structure and function, including blood flow autoregulation. Laboratory of Neurosciences (OE-105), NIA, Building 10, Room 6C103, 10 CENTER DR MSC 1582, BETHESDA MD 20892-1582.

Retroviral Entry Mechanisms Maribeth V. Eiden, PhD

The receptors for the amphotropic murine leukemia viruses (A-MuLVs) and gibbon ape leukemia viruses (GaLVs) have been recently shown to function as cellular phosphate symporters. A position is available to investigate the process of retroviral entry by characterizing the regions of these viruses involved in the process of infection and the regions of their receptors that are critical for receptor/transporter function. Applicants must have less than five years of postdoctoral experience. Laboratory of Cell Biology (OE-105), NIMH, Building 36, Room 2D10, 36 CONVENT DR MSC 4068, BETHESDA MD 20892-4068.

Retrovirology and Nephrology Jeffrey Kopp, MD

The Kidney Disease Section is investigating the molecular and cellular mechanisms of HIV-associated nephropathy, using clinical studies, transgenic models, and *in vitro* infections. Applicants should have training in retrovirology and/or molecular biology, an interest in retroviral pathogenesis, and less than five years of postdoctoral experience. With some projects, the possibility exists for educational loan repayment. Kidney Disease Section (OE-105), NIDDK, Building 10, Room 3N116, 10 CENTER DR MSC 1268, BETHESDA MD 20892-1268.

Tumor Suppressor Genes in Kidney Cancer Berton Zbar, MD

The von Hippel-Lindau protein (pVHL) controls the rate of transcription elongation mediated by RNA polymerase II by binding to elongins B and C. Current work concerns the regulation of binding between pVHL and elongins B and C, and identification of other VHL binding proteins. A strong background in biochemistry and cell biology is preferred. Candidates should have less than five years of postdoctoral experience and preferably be US citizens or permanent residents. Laboratory of Immunobiology (OE-105), NCI-FCRDC, P.O. Box B, Building 560, Room 12-71, Frederick, MD 21702-1201.

Additional Opportunities

The NIHEDNET Bulletin Board **POSTDOC** (fellowship positions) and **TENURE** (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (wylbur.cu.nih.gov) or the World Wide Web (URL: telnet://wylbur.cu.nih.gov). When connected to NIH, key in **.vt100** for terminal emulation, **F5E** for initials, and **AJL1** for account number. To view tenure track positions, **quit** the **POSTDOC** conference and **join** the **TENURE** conference.

An electronic version of the *Postdoctoral Research Fellowship Opportunities* catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: <http://www.nih.gov>). When connected with Gopher, select **Grants and Research Information** and then **NIH Office of Education**. When connected with WWW, select **Grants and Contracts** and then **NIH Office of Education**. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, *curriculum vitae*, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.



National Institutes Of Health

Office Of Education

The NIH is an Equal Opportunity Employer

POSITIONS OPEN

TWO ASSISTANT COOPERATIVE EXTENSION SPECIALIST/ASSISTANT ENTOMOLOGIST POSITIONS

Available July 1, 1996, in the Department of Entomology, University of California, Riverside, California. Positions are career-track, 11-month appointments (60% cooperative extension, 40% research). Qualifications: Ph.D. in entomology or related field. Responsibilities: Assemble/extend research results and educational materials through extension advisors, horticulture and urban agriculture industries, state/local agencies, commercial biological control industries, pest control advisors, and residential or institutional landscape clientele. Training of graduate students will be encouraged. Applicants should send curriculum vitae, transcripts, a detailed statement of research interests, Ph.D. dissertation summary, reprints, and names, addresses, and telephone numbers of five references to: **B. A. Mullens** (for Biological Control Entomologist) or **R. A. Redak** (for Ornamentals Entomologist), Department of Entomology, University of California, Riverside, CA 92521. Application deadline for both positions is January 31, 1996. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

Biological Control Entomologist: Develop research/extension program emphasizing natural enemies in IPM in agriculture and horticulture in and near urban areas.

Ornamentals Entomologist: Develop research/extension program on IPM in commercial nurseries, glasshouse and floricultural crops, landscapes and turf.

DIRECTOR OF ANIMAL RESOURCES CENTER

University of Texas Southwestern Medical Center

The position of **DIRECTOR** of Animal Resources Center at the University of Texas (U.T.) Southwestern Medical Center at Dallas is available immediately. The Director reports to the Dean through the Associate Dean for Research and is responsible for managing the AAA-LAC-accredited Animal Resources Center (65 staff and five veterinarians) of a large, rapidly growing biomedical research facility that relies heavily on rodents and currently houses 35,000 mice. The Director is responsible for the administrative aspects of the program, including budgets, personnel allocation, physical facilities (120,000 square foot vivarium, including barrier and biohazard suites and surgical facilities) and services that facilitate the humane care and use of animals in research at U.T. Southwestern Medical Center. The successful applicant will be responsible for maintaining a cost-effective vivarium consistent with institutional compliance of federal regulatory requirements for animal research. The Director will need to plan for and respond to the expanding animal needs of researchers in a cost-effective manner. Strong emphasis is placed on individuals with extensive fiscal and personnel management skills. Applicants must have D.V.M. or Ph.D. with a minimum of five years of experience in laboratory animal management. Submit letter of application, curriculum vitae, and three letters of reference by December 11, 1995 to: **Dr. Jerry Y. Niederkorn, ARC Search Committee, Department of Ophthalmology, U.T. Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9057.** *The University of Texas Southwestern Medical Center is an Equal Opportunity Employer.*

MICROBIOLOGIST

Northern Illinois University anticipates a tenure-track **ASSISTANT PROFESSOR** position for fall 1996. A Ph.D. and postdoctoral research experience are required. The successful candidate will be expected to develop a vigorous externally funded research program, direct graduate (M.S. and Ph.D.) students, and teach introductory courses for majors and non-majors.

The candidate's expertise should complement programs in microbiology with preference given to one of the following areas: microbial ecology, bioremediation, fermentation, or energy transduction. Teaching obligations will include an introductory course in microbiology and an advanced course in the candidate's area of expertise.

Send a letter of interest, curriculum vitae, brief statement of research goals and teaching goals, representative reprints, and three letters of reference by January 15, 1996 to: **Dr. Patricia Vary, Chair, Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115-2861.** Telephone: 815-753-1753; FAX: 815-753-0461; Email: micro@niu.edu. *Northern Illinois University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CHAIR DEPARTMENT OF MICROBIOLOGY

The University of Washington invites applications for Professor and Chair of the Department of Microbiology. Candidates should be recognized scientific leaders who are committed to undergraduate and graduate education, and who want to stimulate future advances in microbiology research. Applications (which should include a curriculum vitae and the names of three references) should be sent by January 31, 1996 to: **Dr. Roger M. Perlmutter, Chair, Microbiology Search Committee, Department of Immunology, Box 357650, University of Washington, Seattle, WA 98195-7650.**

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

INTEGRATIVE ORGANISMAL PHYSIOLOGY/TOXICOLOGY

We seek a scholar/teacher with an extramurally fundable research program to fill an anticipated tenure-track, **ASSISTANT PROFESSOR** position. Teaching will include introductory physiology, freshman biology, and other graduate and/or undergraduate courses in the individual's area of expertise. By 15 January 1996, please submit 1) a letter describing teaching and research interests, 2) a curriculum vitae, 3) transcripts, 4) three representative publications, and 5) three letters of reference, to:

**Chair, Physiology/Toxicology Search Committee
Department of Zoology, LSW 430
Oklahoma State University
Stillwater, OK 74078-3052**

For additional information, please write or call (Telephone: 405-744-5555; FAX: 405-744-7824) the Search Committee Chair. *OSU is an Equal Opportunity/Affirmative Action Employer, and women and minorities are strongly encouraged to apply.*

FACULTY POSITION

Applications are invited for a **FACULTY POSITION** in Physician Assistant Studies. Must hold an M.D. or Ph.D. and have the training and experience to teach in at least two of the following disciplines: anatomy, physiology, and pharmacology. Applicants with broad medical sciences training and background to teach clinical applications of basic medical sciences preferred. Must have record of high quality and productivity in research. Forward letter of interest, current curriculum vitae, three references, and official transcripts from all higher education institutions attended to: **Dr. Kenneth Harbert, Department of Physician Assistant Studies, University of South Alabama, 1504 Springhill Avenue, USA-Springhill, Mobile, AL 36604-3273.** Telephone: 334-434-3641. Application deadline is January 15, 1996 or until filled. *The University of South Alabama is an Equal Opportunity/Affirmative Action Employer. Minority/Female/Disabled.*

ANIMAL PHYSIOLOGIST

Southern Oregon State College invites animal physiologists to apply for a tenure-track **ASSISTANT PROFESSOR** of Biology position. Duties include teaching animal physiology and participating in a human anatomy-physiology sequence and in introductory biology courses starting September 1996. Ph.D. required. The college focuses on undergraduate education and strongly encourages research involving undergraduates. Send letter of application, curriculum vitae, statement of teaching experience, approach to teaching animal physiology, research plans, list of pertinent courses taken, and names, addresses, and telephone numbers of three professional references to: **Dr. Carol Ferguson, Department of Biology, Southern Oregon State College, Ashland, OR 97520.** Preference will be given to applications received before December 15, 1995. Email: ferguson@wpo.sosoc.sshc.edu; FAX: 503-552-6415. *An Affirmative Action/Equal Opportunity Employer committed to development of an inclusive, multicultural community.*

POSITIONS OPEN

CLAUDE BERNARD CHAIR Nutrition/Molecular Biology/Cancer Research

The Pennington Biomedical Research Center (PBRC) and the Stanley S. Scott Cancer Center, both of Louisiana State University (LSU), are seeking a candidate at a senior level as holder of the Claude Bernard Endowed Chair and **ASSOCIATE DIRECTOR** of the Cancer Center. Any relevant area of biochemical and molecular research that can be applied to cancer prevention, including the broadly defined area of nutrition, is acceptable. The applicant is expected to bring along a currently active research program in his or her area of expertise. The Pennington Center has 223,000 square feet and \$14.2 million research funding in nutrition and preventive medicine. The Stanley S. Scott Cancer Center, which has recently been awarded an NCI Planning Grant, provides an outstanding growth opportunity and the Associate Director will lead and develop the Pennington Center's component of the Cancer Center. The successful candidate may have a teaching appointment, if desired. Space, transition funds, salary, and fringe benefits present an extremely attractive package. Applicants should send a curriculum vitae, bibliography, a brief description of future research plans, and the names of three (3) references to:

**George A. Bray, M.D.
Ref. CB/GB
Pennington Biomedical Research Center
6400 Perkins Road
Baton Rouge, LA 70808-4124**

LSU/PBRC is an Equal Opportunity, Affirmative Action Employer.

FIELD STATION DIRECTOR

ASSOCIATE RESEARCH SCIENTIST to direct a biological field station on the Mississippi River near St. Louis and an on-going, grant-funded, program authorized to continue to the year 2002. Supervise the collection and analysis of research and monitoring data by a staff of 10 and translate results into management recommendations and scientific findings. Opportunity for independent research. Cooperate with the University of Illinois and units of the Illinois Scientific Surveys; other universities, colleges, and museums; and river management agencies. Ph.D. in ecology or related field plus experience that includes research and publication as well as administration of research or monitoring programs. Strong interpersonal and communication skills; ability to lead, mentor, and motivate staff. \$35,000 to \$40,000 to start plus benefits. To apply, send application letter, statement of research interest, curriculum vitae, copies of most significant publications, and names, addresses, and telephone numbers of four references to: **Jacqueline Sanders, Field Station Search, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820.** Telephone: 217-244-7790. Technical questions to: **Dr. Richard Sparks, Telephone: 309-543-3950.** Applications due 12 January 1996 to receive full consideration. *The Illinois Natural History Survey is an Equal Opportunity/ADA Employer.*

University of California at Berkeley: **ASSISTANT PROFESSOR** of Forest Resource Management, nine-months, starting July 1, 1996. Ph.D. with expertise in application of optimization and simulation modeling to the study of forest ecosystems is required for appointment. Candidates are expected to have advanced training and expertise in systems analysis/operations research, ecosystem modeling, and economics. For further information, including a full position description, contact: **Chair, Forest Resource Management Search Committee, Department of Environmental Science, Policy, and Management, 145 Mulford Hall, University of California, Berkeley, CA 94720-3114.** Telephone: 510-642-0376. Applications close January 31, 1996. *The University of California is an Equal Opportunity/Affirmative Action Employer.*

Two **TENURE-TRACK FACULTY POSITIONS** General Biology; plant/general biology/elementary chemistry. Requires Master's in biology/zoology or biology/botany and experience. Ph.D., D.A. or ABD preferred. Academic year salary \$28,200 to \$34,200. Deadline January 15, 1996. For required application packet, contact: **Human Resources Office, Central Oregon Community College, 2600 NW College Way, Bend, OR 97701.** Telephone: 503-383-7216. *Equal Employment Opportunity/Affirmative Action Employer.*

NATIONAL CANCER INSTITUTE (NCI)
NATIONAL INSTITUTES OF HEALTH (NIH)
DEPARTMENT OF HEALTH & HUMAN SERVICES
(DHHS)

DIRECTOR

DIVISION OF CLINICAL SCIENCES
MEDICAL OFFICER (General), GS-602-15

The NCI is accepting applications for the position of Director, Division of Clinical Sciences (DCS), located on the NIH campus in Bethesda, MD. The Director, DCS, provides scientific leadership for the NCI intramural clinical research program. He/She is responsible for the development and administration of innovative investigator-initiated clinical research in cancer, AIDS, and AIDS-related malignancies which translates fundamental research to the bedside in a bi-directional manner. Through the allocation of budgetary and FTE resources within the Division, the Director determines immediate and long-range research objectives and plans and directs the implementation of these objectives. The Director is responsible for managing and maintaining a clinical and laboratory environment conducive to development and conduct of clinical research and ensuring that research conducted throughout the NCI intramural program reflects both the highest standards of scientific excellence and the highest ethical standards for protection of the human subjects participating in intramural clinical research. We are seeking physicians who have expertise in the development of innovative programs for the treatment of cancer and AIDS and who have demonstrated the ability to manage large, multi-disciplinary clinical research programs. Experience and working knowledge with the issues related to human subjects experimentation are highly desirable.

SALARY: Ranges from \$77,001 to \$97,386 per annum. In addition, Physician Special Pay ranging from \$34,000 to \$64,500 may be available.

BENEFITS: Generous package includes health and life insurance options, retirement, paid holidays, vacation and sick leave.

Exceptional recruiting difficulty may result in payment of recruitment bonus. Payment of travel and transportation expenses will be considered on an individual basis.

FOR QUALIFICATION REQUIREMENTS, APPLICATION PROCEDURES, AND OTHER ADDITIONAL INFORMATION (INCLUDING SALARY), PLEASE CONTACT:

MS. LAURA FAILE
PERSONNEL MANAGEMENT
SPECIALIST, NCI
NCI PERSONNEL OFFICE
BLDG. 31, ROOM 3A21
9000 ROCKVILLE PIKE
BETHESDA, MD 20892

TEL: (301) 496-6503; FAX: (301) 496-6168

Applications must be postmarked no later than the announcement closing date of 12/18/95. To be considered, applicants must be U.S. citizens.

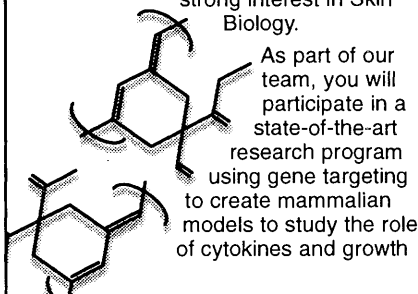
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Molecular Biology Postdoctorate

Research Without Boundaries

That's what you'll find at Unilever Research. As one of the world's largest consumer products companies, we offer hundreds of brands and thousands of products that are sold in more than 100 countries. And the driving force behind them all is scientific research.

Since we introduced our first product in 1902, Unilever scientists have developed a constant flow of highly innovative products and technologies. Our international commitment to scientific breakthroughs in skin research has resulted in the development of our world-class Skin Care Research Center in Edgewater, NJ, where a Postdoctoral position is now available for a highly-motivated and talented scientist with a strong interest in Skin Biology.



factors in the skin. We require a Ph.D. in molecular genetics or related science and experience in mammalian gene targeting (knock-out) technology. Training in Molecular Biology and mammalian cell culture including ES cells is also required.

In return for your expertise, we offer an excellent salary, a comprehensive flexible benefits package, retirement and savings plans, tuition reimbursement, and a progressive work environment that's conducive to challenge. For consideration, send your resume to: Ms. Jane Goodwin, Human Resources, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. Equal Opportunity Employer.



**Unilever
Research U.S.**

**LEADING INNOVATION THROUGH
WORLD CLASS RESEARCH**

(Revised and Extended)

H.H. Dow Professor of Chemistry

The search for a person to fill the Herbert H. Dow Endowed Chair at Saginaw Valley State University has been revised and extended. The Chair is established to recognize Herbert H. Dow, founder of The Dow Chemical Company. Both nominations and applications are invited.

The individual selected to fill the Chair will have an earned doctorate, or the equivalent, in chemistry or a closely related discipline, a record of research and related publications, and special skills and accomplishments in environmental chemistry. The successful candidate will be expected to:

- Teach up to 12 credits per academic year.
- Actively pursue external funding for the general development of the undergraduate chemistry program.
- Develop and carry out an undergraduate research program in chemistry, preferably related to environmental chemistry.
- Forge liaisons with industry and governmental agencies.

The salary for a 12 month appointment is competitive. Support for start-up of the research program is available. The appointment is at the administrative/professional level. The appointment may begin any time suitable to the successful candidate, but no later than September, 1996.

SVSU is a regional comprehensive state university with 7,000 students in east central Michigan. The modern 700-acre campus includes an ACS approved department of chemistry, offering a BS in chemistry. There are presently six full-time faculty members. The department has a full range of chemical instrumentation well suited for research and instruction. The campus lies in a suburban setting between the cities of Saginaw, Bay City and Midland. The tri-city area, with a population base of 500,000, is in the Saginaw Bay watershed, near one of the Great Lakes. It includes large manufacturing and agriculture sectors. This setting provides an ideal opportunity for an energetic individual to do research in environmental chemistry.

Nomination of individuals qualified to fill this position are encouraged. Applications for the H. H. Dow Chair should include a letter describing how the applicant meets the qualifications, a curriculum vitae or résumé and a list of at least three references with their addresses and telephone numbers. Nominations and applications should be addressed to **Dr. Thomas E. Kullgren, Dean of the College of Science, Engineering, and Technology, Saginaw Valley State University, University Center, MI 48710.** Evaluation of applications will begin on January 2, 1996. If more information is required, potential nominators and applicants may contact Dean Kullgren at (517) 790-4144 or kullgren@tardis.svsu.edu. SVSU is an EEO/AA employer.

POSITIONS OPEN

PLANT BIOCHEMIST MOLECULAR BIOLOGIST

The Institute of Biological Chemistry at Washington State University invites applications for a tenure-track position at the **ASSISTANT PROFESSOR/SCIENTIST** level. This full-time, nine-month academic year position is primarily a research position but some graduate-level teaching is required. Applicants must have a Ph.D. degree or equivalent, postdoctoral experience, and an excellent record of research using biochemical and molecular approaches to investigate problems relevant to basic plant biology and agriculture. The ability and commitment to build a strong, well-funded program of international stature is essential. The Institute provides an excellent research environment including more than 100 scientists, modern equipment, extensive growth facilities, and access to specialized methods and analytical services. Applicants should submit by mail a brief description of research accomplishments, a statement of teaching and research interests and goals, and a curriculum vitae. In addition, applicants should arrange for three letters of reference to be sent to: **Dr. Michael Kahn, Assistant Professor/Scientist Search, Institute of Biological Chemistry, Washington State University, Pullman, WA 99164-6340**. Applications will be accepted until January 31, 1996 or until the position is filled. *Equal Opportunity/Affirmative Action/ADA Employer.*

TUMOR IMMUNOLOGIST THE CLEVELAND CLINIC FOUNDATION

The Center for Surgery Research invites applicants for an appointment at the **ASSOCIATE STAFF** level. We are seeking individuals capable of applying molecular biology methods to basic biological issues of tumor immunology and/or gene therapy. Preference will be given to investigators with experience in manipulation of T cells, identification of MHC-binding, tumor-associated peptides, and clinical application of immunotherapy. Candidates must have a Ph.D. and/or M.D. with a minimum of five years of postgraduate training and must give evidence of potential distinction in scholarship through publications. Applicants should send curriculum vitae and a statement of research goals before December 15, 1995 to: **Jeff Steinbrunner, Center for Surgery Research—FF50, The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195**.

MOLECULAR SYSTEMATIST LOWER VERTEBRATES

The Department of Biology at the University of Texas at Arlington (UTA) invites applications for a tenure-track position in lower vertebrate molecular systematics at the **ASSISTANT PROFESSOR** level. Candidates should be familiar with higher level taxa systematics and a variety of phylogenetic methods. Applicants must have a Ph.D. The successful candidate is expected to participate in undergraduate and graduate teaching, and to develop a vigorous, externally funded research program. The University of Texas at Arlington Collection of Vertebrates, which contains over 100,000 amphibians and reptiles, is a resource for systematic studies.

The Department of Biology offers B.S., M.S., and Ph.D. Degrees. The University of Texas at Arlington, with about 23,000 students, is a comprehensive university located between Dallas and Fort Worth. Applicants should submit curriculum vitae, reprints, and a statement of research goals, and arrange for three letters of recommendation to be sent to: **Dr. J. A. Campbell, Chairperson, Search Committee, Department of Biology, UTA Box 19498, Arlington, TX 76019**. Application review will begin January 29, 1996.

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

BIOLOGIST

Northland College, offering a distinctive liberal arts/environmental education, invites applications for a biologist for the 1996-97 academic year. Courses include general biology, cell biology, microbiology, developmental biology, and spring course based upon individual interests. Invertebrate zoology and evolution desirable. Basic skills in molecular biology are expected. This is a one-year position with option for renewal. Ph.D. preferred. Send letter of application, résumé, and three letters of reference to: **Biology Search Committee, Office of the Dean, Northland College, Ashland, WI 54806**. *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

BIOCHEMISTRY

ASSISTANT PROFESSOR. Tenure-track position jointly held between the Biology and Chemistry Department. The successful candidate will hold the Ph.D. degree in biochemistry or a related discipline, and will be expected to teach two courses per semester and to develop a research program that involves undergraduates. The joint-appointment configuration will entail responsibility to the Chemistry Department to offer biochemistry courses with laboratory and responsibility to the Biology Department to assist in a portion of the core curriculum for biology majors. This biology core includes introductory freshman biology courses and sophomore and junior seminars in experimental design and research methods. Stetson University is a small, primarily undergraduate institution of about 1800 students, employing four full-time faculty in Chemistry and six in Biology. It is committed to excellence in teaching, and has a Phi Beta Kappa chapter and an ACS-approved chemistry program. Applicants should submit a curriculum vitae, statements of teaching philosophy and research interests, and copies of undergraduate and graduate transcripts, and arrange to have three letters of recommendation sent to: **Dr. Kenneth G. Everett, Biochemistry Search Chair, Campus Box 8337, Stetson University, DeLand, FL 32720**. Review of applications will begin in December and continue until the position is filled. *Stetson University is an Equal Opportunity Employer and is strongly committed to increasing the diversity of its faculty and administration.*

ORNITHOLOGIST/MOLECULAR ECOLOGIST

The Department of Biology at Coastal Carolina University is seeking an individual at the **ASSISTANT/ASSOCIATE PROFESSOR** level (tenure-track) to develop a program in ornithology with an emphasis in molecular ecology. The successful candidate will teach upper-level courses in ornithology, specialty courses related to expertise, and introductory biology. In addition, the person selected will be expected to establish an active research program with undergraduates and to participate in and support ornithological activities in the community. Preference will be given to candidates with an established record of effective skills in teaching and research.

The activities expected from the successful candidate will be supported in part with resources available from the Spivey Palmetto Professorship endowment, which has been established to promote the study of ornithology.

Applicants should send a curriculum vitae, a statement of current and future teaching and research interests, transcripts, and names of three references to: **Dr. Colleen A. Lohr, Chair, Department of Biology, Coastal Carolina University, P.O. Box 1954, Conway, SC 29526**. Consideration of applicants will begin January 31, 1996 and continue until the position is filled. *Coastal Carolina University is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION DEPARTMENT OF PATHOLOGY University of Arkansas for Medical Sciences

Applications or nominations are invited for a faculty position in the Department of Pathology, Division of Pediatric Pathology, at the level of **ASSISTANT PROFESSOR**. Applicants should have an established track record of excellence in original research in tumor cell biology as evidenced by their training and publications. Ph.D. level and postgraduate training and experience in molecular genetics is required. Candidates should submit their curriculum vitae to: **David M. Parham, M.D., Chief of Pediatric Pathology, Slot 820, Arkansas Children's Hospital, 800 Marshall Street, Little Rock, AR 72202**. *An Affirmative Action/Equal Opportunity Employer.*

DEVELOPMENTAL BIOLOGIST

ASSISTANT PROFESSOR, tenure-track position starting August, 1996. Ph.D. required; teaching and/or postdoctoral experience preferred. Strong commitment to undergraduate teaching and research. Teaching responsibilities (two courses per semester) will include participation in general biology, courses in developmental biology, genetics and/or histology, and a non-majors and/or graduate course. Send statement of teaching and research interests, curriculum vitae, transcripts, and three letters of reference to: **Dr. Paul A. Richmond, Chair, Department of Biological Sciences, University of the Pacific, Stockton, CA 95211**. Telephone: 209-946-3021. Review will begin January 3, 1996. *Women and minority candidates encouraged to apply.*

POSITIONS OPEN

ASSOCIATE DIRECTOR

Applied Marine Research Laboratory (AMRL)

The AMRL, a self-supporting research program affiliated with Old Dominion University (ODU), has a position available immediately for applicants with strong experience and interest in providing a leadership role in marine and environmental research. Responsibilities include operational management, supervision of managers for several laboratories, proposal and report preparation and review, research administration, and representation of the program to funding agencies and the public. This position also serves as a principal investigator on multidisciplinary projects for government agencies and the private sector. A Ph.D. in marine or related environmental science, and at least five years of experience in designing and conducting research projects, is required. Preference will be given to an applicant with evidence of significant extramural support and experience in leading multidisciplinary teams of investigators. While the area of expertise is open, special consideration will be given to applicants with experience in environmental toxicology or pollution ecology. The successful applicant should also have good communication and personnel management skills, as well as a hands-on approach to working with technical staff and academic investigators. Adjunct faculty appointments are possible with various academic departments. Some travel is required. An application letter outlining professional experience and interests; a curriculum vitae; and names, addresses, and telephone numbers of at least four professional references must be sent to: **ODURE, P.O. Box 6369, Norfolk, VA 23508-0369**. Expected hire date is February 1, 1996. *Equal Employment Opportunity/Affirmative Action 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.*

Research. **ASSISTANT PROFESSOR** needed to direct urologic oncology research efforts. Would develop gene therapy program for treatment of prostate and bladder cancer; supervise all basic urologic oncology efforts; supervise activities of postdoctoral fellows, graduate students, and residents working in the urology oncology research laboratory. Qualifications: Ph.D. in human cancer biology required. Minimum of four years of postdoctoral or faculty experience in prostate cancer biology is required. Additional requirements include specific experience in 1) development and characterization of monoclonal antibodies; 2) the study of cell adhesion molecules in prostate cancer; 3) the study of autocrine growth factors; 4) development of prostate cancer gene therapy systems. Must have current NIH funding. Send curriculum vitae and references to: **Urology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-9110**. *Affirmative Action/Equal Opportunity Employer.*

TENURE-TRACK ASSISTANT PROFESSORSHIPS in Biochemistry or Organic Chemistry. Research interests in polymer or environmental chemistry a plus for the organic position. Candidates must hold Ph.D., be effective, enthusiastic teachers at undergraduate and graduate levels, and develop innovative teaching and research programs. By December 15, 1995 submit curriculum vitae, official college transcripts, description of teaching philosophy and research plans, and three reference letters to: **Professor Mary Lou Caspers, Chair, Chemistry Department, University of Detroit Mercy, P.O. Box 19900, Detroit, MI 48219-0900**. *Equal Opportunity/Affirmative Action Employer; actively seeks applications from women and minority candidates.*



THE 1996 KEYSTONE SYMPOSIA

ON MOLECULAR AND CELLULAR BIOLOGY PRESENTS...

Molecular Basis for Drug Resistance in Bacteria, Parasites and Fungi (D7)

Stuart Levy, et. al. - Park City, UT - March 11 - 17

Topics: Influx Barriers and Efflux Systems; Changes in Drug Targets; Degradation and Detoxification of Drugs; Regulation of Genes Affecting Drug Resistance; Genetics Underlying the Acquisition of Drug Resistance; Molecular Epidemiology of Drug Resistance

Speakers: H. Nikaïdo; A. Fairlamb; Y. Koltin; P. Courvalin; A. Toasz; W. Jacobs; K. Bush; J. Davies; S. Beverley; S. Cole; B. Spratt; R. Hall

Neural Peptides (C4)

Richard Mains, et. al. - Lake Tahoe, CA - February 8 - 14

Topics: Neural Peptides and Cotransmitters in the Mammalian Brain: A Survey and Search for Rules; Molecular Characterization, Function, and Expression of Neuropeptide Processing Enzymes; Synthetic Neural Peptide Analogs as Probes for Receptor and Enzyme Function; Neural Peptides as Growth Factors and as Regulators of Development; Neural Peptides in Pathophysiology and Human Disease

Speakers: Larry Swanson; Story Landis; Nabil Seidah; Gary Thomas; Roger Cone; Victor Hruby; Richard Houghten; Pamela Mellon; Philip Gold; Stan Watson

Cell Polarity (B5)

Sponsored by Corning Costar Corporation - Keith Mostov, et. al. - Lake Tahoe, CA - February 1 - 7

Topics: Development of Polarity; Neuronal Development; Cell Interactions; Epithelial Membrane Traffic; Neuron membrane Traffic

Speakers: Elisabeth Knust; Ruth Lehmann; Walter Birchmeier; Marc Tessier-Lavigne; Yuh Nung Jan; W. James Nelson; Ira Mellman; Keith Mostov; Pietro de Camilli; Thomas Sudhof; Richard Scheller; Regis B. Kelly; Marino Zerial; Kai Simons

Cell Migration (C3)

Michael Sheetz, et. al. - Santa Fe, NM - February 4 - 10

Topics: Actin Dynamics in Migration; Integrins and Cytoskeleton in Migration; Chemotaxis and Regulation of Migration; Cell Migratory Phenomena; Models and Mechanics of Migration

Speakers: Alan Hall; Tom Pollard; Kenneth Yamada; Frederick Maxfield; Erkki Ruoslahti; Tim Springer; Peter Devreotes; Marianne Bronner-Fraser; Thomas Roberts; George Oster; Elliot Elson

Ion Channels as Therapeutic Targets (C1)

Sponsored by Pfizer Inc. - Michael Cahalan, et. al. - Tamarron, CO - February 4 - 10

Topics: Central Nervous System: Ischemia and Stroke, Epilepsy, Voltage-Gated Ion Channels; Cystic Fibrosis and Fluid Balance; Pancreatic Beta Cells/Diabetes; Cardioprotection with ATP-Sensitive Potassium Channel; Targets for Immunosuppression

Speakers: Alan North; William Catterall; John Garthwaite; Seve Heinemann; Michael Welsh; Richard Boucher; Bernard Rossier; Frances Ashcroft; David Clapham; Richard Aldrich; Steven Siegelbaum; Kevin Campbell; Roger Tsien

Viral Genome Replication (D4)

Paul Ahlquist, et. al. - Tamarron, CO - March 15 - 21

Topics: Positive Strand RNA Viruses; dsRNA Viruses; Negative Strand RNA Viruses; Hepadnaviruses and Other Retroelements; dsDNA Viruses

Speakers: Steve Schultz; Paul Ahlquist; Leonard Mindich; Gail Wertz; Daniel Kolakofsky; Heinz Schaller; Thomas Steitz; Jerard Hurwitz; Nicholas Muzyczka

(**Topics and speakers listed are excerpts — call for complete program**)

CONTACT US FOR MORE INFORMATION ON ANY OF OUR 1996 CONFERENCES

J1 Integrins and Signaling Events in Cell Biology and Disease	C7 Cell Biology of Virus Entry, Replication and Pathogenesis
J2 Molecular and Developmental Biology of the Extracellular Matrix	J5 Molecular Regulation of Platelet Production
A1 Small GTP-binding Proteins and Growth Factor Signaling Matrix	J6 The Hematopoietic Microenvironment
A2 Oxidant Stress: From Molecules to Man	D1 Exploring and Exploiting Antibody and Ig Superfamily Combining Sites
A3 The Cell Cycle	D2 Molecular Helminthology: An Integrated Approach
A4 Blood Cell & Bone Marrow Transplants	D3 Molecular Approaches to the Function of Intercellular Junctions
B1 Molecular Biology of HIV	D4 Viral Genome Replication
B2 Hepatitis C and Beyond	D6 Posttranscriptional RNA Processing
J3 Tissue Engineering	D7 Molecular Basis for Drug Resistance in Bacteria, Parasites and Fungi
J4 Wound Repair in Context	D5 Extracellular Matrix of Plants: Molecular, Cellular and Developmental Biology
B3 The Molecular Biology of the Cardiovascular System	E2 Steroid/Thyroid/Retinoic Acid Gene Family
B4 Breast and Prostate Cancer: Basic Mechanisms	E3 Transcriptional Mechanisms
B5 Cell Polarity	E4 Lymphocyte Activation
C1 Ion Channels as Therapeutic Targets	E5 Proteolytic Enzymes and Inhibitors in Biology and Medicine
C2 Gene Therapy for Hematopoietic Stem Cells in Genetic Disease and Cancer	E6 Immunopathogenesis of HIV Infection
C3 Cell Migration	E7 Signal Transduction Tyrosine Kinases
C4 Neural Peptides	E8 Signaling in Neuronal Development, Differentiation
C5 Inductive Interactions during Vertebrate Embryogenesis	X1 The Conduct of Science: Keeping the Faith
C6 Molecular Mechanisms in DNA Replication and Recombination	

Blocked meetings are joint sessions. Conferees may go to meetings in both conferences.

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POSITIONS OPEN

BIOMEDICAL ENGINEERING FACULTY POSITION

The Department of Biomedical Engineering at the University of Alabama at Birmingham (UAB) has an opening for a **TENURE-TRACK FACULTY** member. Candidates are particularly invited in cross-disciplinary areas of neurosystems, biological neural networks, computational neurobiology, or other multidisciplinary areas that combine neurobiology and imaging. The person selected for this position will be expected to form active research collaborations with other units on the UAB campus. Candidates should have a Ph.D. degree and must be U.S. citizens or have permanent residency in the U.S. The search will be continued until the position is filled.

UAB is an autonomous campus within the University of Alabama system. UAB faculty currently are involved in over \$180 million of externally funded grants and contracts. A 4.1 Tesla clinical NMR facility, several other small-bore MR systems, and a team of research scientists and engineers working in various aspects of MR imaging and spectroscopy are housed only 200 meters from the Engineering Building. Brain imaging projects are expected to involve collaborations with members of the Neurobiology Research Center, as well as faculty members from the Departments of Physiological Optics, Neurology, Psychology, Psychiatry, and Radiology.

To apply send a letter of application, a current curriculum vitae, and three letters of reference to: **Dr. Ernest Stokely, Department of Biomedical Engineering, BEC 256, University of Alabama at Birmingham, Birmingham, AL 35294-4461. Email: stokely@alax.eng.uab.edu.** The University of Alabama at Birmingham is an Equal Opportunity/Affirmative Action Employer, and encourages applications from qualified women and minorities.

FACULTY POSITIONS

California State University Monterey Bay (CSUMB)

CSUMB is seeking applications for tenure-track **ASSISTANT PROFESSOR** positions from individuals having strong interdisciplinary training and experience in environmental chemistry, physics, and biological and ecological sciences. Candidates must have a Ph.D.; demonstrated achievement in teaching, research and community involvement; a record of recruiting and mentoring multicultural populations; technological expertise; and an ability to secure external funding. Candidates will be expected to teach introductory and advanced courses, develop innovative curricula and assessment procedures, and conduct research. To receive a complete position announcement refer to our World Wide Web Home Page (<http://www.monterey.edu>) or Telephone: 408-582-3364. Apply to: Faculty Recruitment Office, California State University Monterey Bay, 100 Campus Center, Seaside, CA 93955-8001. CRS (TDD users): 1-800-735-2929; Email: faculty_recruitment@monterey.edu. Position closing date: January 12, 1996. Open until filled. California State University is an Equal Opportunity, Affirmative Action, and ADA Employer committed to excellence through diversity.

DIRECTOR

The Institute for Environmental Sciences (TIES)

ASSOCIATE OR FULL PROFESSOR, 12-month position available May or later. TIES is an interdisciplinary, free-standing institute that reports to the Vice Provost for Research. Salary commensurate with qualifications. Appointment as Director is 50% during the academic 9-months and 100% in summer. Academic appointment will be in the College of Engineering or Arts and Sciences. He or she must have a distinguished record in environmental sciences and successful experience in developing proposals, obtaining grants, and managing budgets and contracts. The successful candidate will (1) provide leadership to the institute, (2) develop linkages with agencies, foundations, and industry, (3) assemble interdisciplinary research teams to seek research support, and (4) oversee proposal development and submission. Applicants should send letter outlining qualifications and administrative philosophy, curriculum vitae, and have four letters of recommendation sent by February 1, 1996, to: **Dr. David Knaff, Chair of the Search Committee, Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, TX 79409-1061. Telephone: 806-742-3067; FAX: 806-742-1289; Email: KNAFF@TTACS.TTU.EDU.** Texas Tech is an Affirmative Action, Equal Opportunity Employer.

POSITIONS OPEN

ASSISTANT/ASSOCIATE PROFESSOR Department of Pharmacology and Experimental Therapeutics Loyola University Chicago Stritch School of Medicine

Tenure-track faculty position, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago Stritch School of Medicine. The Department of Pharmacology and Experimental Therapeutics is seeking to fill a tenure-track **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR** position. The candidate should preferably be a molecular pharmacologist with a strong interest in neuropharmacology, but outstanding candidates in other areas of research are also welcome. The candidate should have a Ph.D. and/or M.D. degree, postdoctoral experience, and a strong commitment to excellence in research and teaching. Evidence of originality and scientific accomplishment, plus an excellent record of publication in high class peer-reviewed journals, are essential. A record of extramural grant support is preferable. Salary is competitive, and based on experience and qualifications. Start-up support will be provided for early development. Candidates should send their curriculum vitae, three letters of recommendation, representative reprints, and a synopsis of their current and future research interests to: **Dr. Israel Hanin, Chairman, Department of Pharmacology and Experimental Therapeutics, Loyola University Chicago, Stritch School of Medicine, 2160 South First Avenue, Maywood, IL 60153. Telephone: 708-216-3261; FAX: 708-216-6596.** Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR ENVIRONMENTAL SCIENTIST

Illinois Benedictine College is seeking a tenure-track environmental scientist at the **ASSISTANT PROFESSOR** level, to begin August 1996. Ph.D. required. Successful candidate will have terrestrial ecology background and experience. Responsibilities are to teach introductory biology courses and upper-level courses in speciality and to develop a research program involving undergraduates. Cover letter should address applicant's interest in undergraduate teaching in a liberal arts environment. Send curriculum vitae, statement of teaching philosophy and research experience, three letters of recommendation, and all transcripts to: **Dr. Alfred R. Martin, Search Committee, Department of Biology, Illinois Benedictine College, 5700 College Road, Lisle, IL 60532.** Deadline for completed application is December 15, 1995. Illinois Benedictine College is an Equal Opportunity Employer. Women and minority candidates are especially urged to apply.

University of California, San Francisco (UCSF) seeks an outstanding scientist to serve as **DIRECTOR** of the Cancer Research Institute (CRI) at UCSF. The CRI is an established Organized Research Unit of UCSF and is the scientific arm of the UCSF Cancer Center. The CRI consists of a consortium of basic science investigators interested in fundamental research on cancer biology. The individual selected will have an outstanding scientific background and interest in bridging basic and clinical cancer research programs for the development of new therapeutic approaches. Applicants must be qualified for appointment as a professor in a School of Medicine academic department.

Applicants should send a curriculum vitae to: **Dr. Elizabeth Blackburn, c/o Joyce McKinney, University of California, San Francisco, 513 Parnassus Avenue, Room S-224, San Francisco, CA 94143-0410.** Women and minorities are encouraged to apply.

The University of Kansas is seeking outstanding candidates for an **ASSISTANT PROFESSOR** tenure-track position in the Department of Microbiology beginning fall 1996 (contingent on final budgetary approval). Candidates with postdoctoral experience, whose research interests encompass molecular genetic analysis of cellular or developmental processes in eukaryotic microorganisms, will be considered. The selected candidate will be expected to develop and sustain a vigorous research program and to participate effectively in the teaching of undergraduate and graduate students in microbiology. Applicants should submit a curriculum vitae, a brief statement of research interests, and the names and addresses of three references to: **Dr. Marci Chan, Department of Microbiology, University of Kansas, Lawrence, KS 66045.** First consideration will be given to completed applications received by January 31, 1996, and review will continue until the position is filled. Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.

POSITIONS OPEN

CHIEF

Division of Infectious Diseases

The Department of Medicine of the Mount Sinai School of Medicine is recruiting a new **CHIEF** for the Division of Infectious Diseases. We seek an outstanding physician-scientist, Board Certified in Internal Medicine and Infectious Diseases, to lead this crucial Division and to conduct high quality research. The Division currently carries out a broad range of clinical, research, and training activities, including major programs in AIDS and in the transplant-related immunocompromised host. Interested candidates should contact: **Paul D. Berk, M.D., Chair, Search Committee for Infectious Diseases, Box 1039A Mount Sinai School of Medicine, 1 Gustave L. Levy Place, New York, NY 10029. Telephone: 212-241-6479; FAX: 212-348-3517.** Mount Sinai is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY

TENURE-TRACK beginning August 20, 1996. Plant Biology. Teaching includes upper-level plant biology as well as participation in an introductory core course for majors. Must participate actively in undergraduate and Master's level research. Ph.D. required and postdoctoral experience desired. Screening of applicants will begin December 18, 1995. Send letter of application, résumé, transcripts and three letters of recommendation to: **Dr. John DePinto, Department of Biology, Bradley University, Peoria, IL 61625.** Bradley University is committed to cultural diversity and is striving to maintain cultural, racial and ethnic communities. It is expected that the successful candidate shares in this commitment. Bradley is an Equal Opportunity and Affirmative Action Employer.

Central Washington University—position openings: (1) **DEAN** of Graduate Studies and Research, contact **Dr. David Dauwalder, Telephone: 509-963-1955; FAX: 509-963-3042;** (2) **ASSISTANT PROFESSOR** Biological Anthropology, Telephone: 509-963-3201; FAX: 509-963-3215; Email: ANDERSON@CWU.EDU; (3) **ASSISTANT PROFESSOR** Organismic Vertebrate Zoology with biostatistical skills, Telephone: 509-963-2731; FAX: 509-963-3215; Email: SMITHS@CWU.EDU; (4) **ASSISTANT PROFESSOR** Physical Organic Chemistry, Telephone: 509-963-2811 or FAX: 509-963-1050; Email: CHEMSEEK@CWU.EDU. Affirmative Action/Equal Opportunity/Title IX institution. TDD: 509-963-2203.

University of California at Berkeley: **ASSISTANT PROFESSOR** of Silviculture, nine-months, starting, July 1, 1996. Ph.D. with expertise in silviculture and forest ecology is required for appointment. Experience should include research in silviculture, forest dynamics, and restoration of forested landscapes and familiarity with current forest management issues. For further information, including a full position description, contact: **Chair, Silviculturist Search Committee, Department of Environmental Science, Policy, and Management, 145 Mulford Hall, University of California, Berkeley, CA 94720-3114. Telephone: 510-642-0376.** Applications close January 31, 1996. The University of California is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL AND GRADUATE OPPORTUNITIES IN ANIMAL BEHAVIOR INDIANA UNIVERSITY

The NSF-supported Center for the Integrative Study of Animal Behavior (CISAB) at Indiana University seeks outstanding candidates for training that combines approaches to the study of animal behavior from biology, neuroscience, and psychology. Research areas include mate choice and sexual behavior, ecology of learning, neural plasticity, communication, orientation and migration, and parental behavior and development. Predoctoral candidates should request applications from the Psychology or Biology Departments or the Program in Neural Science. Applications for fall 1996 are due by January 15, 1996. Postdoctoral candidates (who must be citizens or permanent residents of the U.S.) should apply by March 1, 1996. Inquiries to **CISAB, 402 North Park, Indiana University, Bloomington, IN 47405. Telephone: 812-855-9663; FAX 812-855-0411; Email: lissummer@indiana.edu.** Additional information via the Internet: <http://www.cisab.indiana.edu> or gopher.cisab.indiana.edu. Applications by minorities and women are encouraged. Affirmative Action/Equal Opportunity Employer.

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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

Enzymology/Protein Chemistry

Join a team of scientists responsible for the study of enzymes as targets for drug research. To qualify, you will need a BS or MS degree and at least 5-10 years of related experience. Background should include expertise in protein overexpression, purification and site-directed mutagenesis. Experience in various techniques employed in enzyme characterization such as amino acid composition, determination, micro sequence analysis and kinetic studies is also desired. To be considered for this position, you must reference Dept. DD95-39.

MACROMOLECULAR CRYSTALLOGRAPHER

Structure-Based Drug Design

An excellent opportunity is now available for a PhD Macromolecular Crystallographer with 2-6 years of related experience to be involved in

both the determination of new protein structures and the iterative structure-based drug design process. You will also participate in integrating the crystallography component of the Structural Chemistry Department into our drug discovery programs. This department already includes a computer-aided drug design group in addition to a team of biophysical chemists specializing in purification and characterization of target proteins. To be considered for this position, you must reference Dept. DD95-37.

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, Schering-Plough Research Institute, 2015 Galloping Hill Road, K-15-1, MS#1255, 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.*



**Schering-Plough
Research Institute**

U s i n g S c i e n c e F o r H u m a n A d v a n t a g e



Plant Ecologist

The Department of Biology of Swarthmore College invites applications for a tenure track appointment at the assistant professor level, to begin September 1996, pending final administrative approval. We seek a plant ecologist with field experience who is committed to combining teaching and research at a small liberal arts college. Teaching responsibilities include an intermediate-level course in general ecology, an advanced seminar in a major area within plant ecology, and participation in the Department's introductory biology sequence. The ability to teach other plant-related courses and/or to participate in the College's Environmental Studies program are especially desirable. The successful candidate will be expected to establish an active research program that will provide opportunities for undergraduate participation. A Ph.D. is required; postdoctoral research experience and teaching experience are desirable.

Applicants should submit a CV, along with statements of teaching and research interest, and arrange to have three letters of recommendation sent by 15 January 1995 to:

**Rachel Merz
Chair**

**Department of Biology
Swarthmore College
Swarthmore, PA 19081-1397**

Swarthmore College is an equal opportunity educator and employer, and specifically invites and encourages applications from women and minorities.

Faculty



*Koo Foundation
Sun Yat-Sen
Cancer Center
Taipei*

Positions

Koo Foundation Cancer Center seeks expatriate positions in all medicine. Established in 1990, KF-SYSCC is the only free-standing multi-disciplinary cancer center in Taipei. Its 250-bed state-of-the-art referral hospital will be ready for occupancy in December 1996.

Sun Yat-Sen (KF-SYSCC) professionals for disciplines of

CLINICIANS with specialty training in oncology or other medical specialties are welcome to apply. KF-SYSCC is particularly interested in having partners with a lifetime commitment to patient care, a belief in collaborative team work for treatment, research and education, and a desire to upgrade the standard of medical care in Taiwan.

Positions for **BASIC RESEARCHERS** with established programs in molecular biology, immunology, virology and genetics are available at the new hospital. Researchers should welcome working partnerships with hospital clinicians.

Please send C.V.s to: Andrew T. Huang, M.D. • Box 3942 • Duke University Medical Center • Durham • NC 27710

POSITIONS OPEN

OREGON HEALTH SCIENCES UNIVERSITY BIOCHEMISTRY AND MOLECULAR BIOLOGY

POSTDOCTORAL RESEARCHER appointments available in group studying structure-function relations in the Na,K-ATPase. Applicants should have received a Ph.D. during the last five years in biochemistry or related discipline and have expertise in molecular biological techniques applied to understanding protein function. The laboratory is involved in studying the mechanism of P-type ATPases or ion pumps using the techniques of protein chemistry and molecular biology. Send curriculum vitae and names of three references to:

Professor Jack H. Kaplan, Ph.D., F.R.S.
Department of Biochemistry and
Molecular Biology, L224
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Road
Portland, OR 97201-3098

HYDROLOGY

A **POSTDOCTORAL POSITION** in hillslope hydrology is available under the Networks of Centres of Excellence on Sustainable Forest Management to participate in a multidisciplinary study on the impact of logging and fire on lakewater quality on the Canadian Shield and in Northern Alberta. The successful candidates will be part of a team working on the relationships between lakewater quality and catchment hydrology. Candidates should have a strong background in digital elevation models, hydrological flowpath models, and GIS. Send a curriculum vitae and three references to: **Richard Carignan, Department of Biology, Université de Montréal, C.P. 6128, Succ. Centre-Ville, Montréal, Québec H3C 3J7 Canada.**

BEHAVIORAL NEUROSCIENTIST, The University of California, San Francisco. The Gallo Center is seeking an experienced behavioral neuroscientist to collaborate with Gallo scientists to study behavioral responses to alcohol in animal models and transgenic mice. Experience in neuropharmacology is desirable. Salary and appointment commensurate with experience. Send curriculum vitae and three letters of reference to: **Ivan Diamond, M.D., Ph.D., Director, Gallo Center, Building 1, Room 101, San Francisco General Hospital, San Francisco, CA 94110.** The Gallo Center is an Equal Opportunity/Affirmative Action Employer. Women, minority groups and disabled individuals are encouraged to apply.

ASSISTANT RESEARCH SCIENTIST

Team leader with publication record in biomedical image processing and analysis for evaluating heart-lung physiology. Ph.D. in electrical engineering/computer science, C/C++/X-Windows development experience, ability to execute independent research required. Desirable: knowledge of heart-lung imaging modalities, coursework in digital signal/image processing, experience developing computer networking software for tele-radiology, UNIX administration skills, and one year minimum of postdoctoral experience. Send résumé to: **Eric Hoffman, Ph.D., University of Iowa Hospital and Clinics, 200 Hawkins Drive, Iowa City, IA 52240-1009.** Telephone: 319-356-1381. The University of Iowa is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are strongly encouraged to apply.

RESEARCH ASSOCIATE

Study the molecular basis of oncogenic transformation. M.S. in molecular biology or a related field required. Experience with Northern, Western, and Southern blots, PCR, cDNA library screening and computer literacy desirable.

For consideration, forward résumé to: **Employment Specialist, Winthrop-University Hospital, 259 First Street, Mineola, NY 11501.** An Equal Opportunity Employer.

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.

POSITIONS OPEN

POSTDOCTORAL POSITIONS

University of Massachusetts, Amherst

POSTDOCTORAL POSITIONS available December 1, 1995: **Dr. Eric L. Bittman**, molecular endocrinology of seasonal reproduction and circadian rhythms. Use *in situ* hybridization, immunocytochemistry, and neuro-anatomical techniques to study the interaction of melatonin, opiates, and gonadal steroids. Experience with molecular biology techniques preferred.

Dr. Vivian Budnik, electrophysiological aspects of synapse development in fruit flies. Candidates should have a strong background in neurobiology and experience in basic electrophysiological techniques.

Dr. Susan Cumberledge, *wingless/Wnt-1* signal transduction in *Drosophila* using biochemical and molecular genetic techniques. Experience with protein biochemistry (receptor-ligand interactions) preferred.

Dr. Jennifer Pinkham, oxidative stress intracellular signal transduction and transcription regulation of *SOD2* gene in yeast using molecular genetics, protein biochemistry. Experience with molecular biology required.

Salaries commensurate with experience. Duration of funding variable, one to three years. Send curriculum vitae names and addresses of three references to: **Postdoctoral Positions, c/o Ms. Jan Fournier, Department of Biochemistry and Molecular Biology, University of Massachusetts, Box 34505, Amherst, MA 01003-4505.** The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.

Two **POSTDOCTORAL POSITIONS** available now to design, engineer, and purify self-assembling protein frameworks. Applicant should have experience in gene cloning, expression, purification, and characterization of recombinant structural proteins. Strong background in biochemistry or physics desirable; molecular modeling or EM experience helpful. Candidates should be independent and inventive, with great initiative and bench ability. Send curriculum vitae and letters of reference (with telephone number) to: **Dr. Edward B. Goldberg, Department of Molecular Biology and Microbiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111-1800.** Equal Opportunity/Affirmative Action Employer.

NUCLEOCYTOPLASMIC TRANSPORT POSTDOCTORAL POSITION

A **POSTDOCTORAL** position will be available within the coming year to study the molecular mechanisms of nuclear import and nuclear export. One specific area of study will be the role of the small Ras-like G-protein Ran in these processes. Send curriculum vitae, three names of references, and a letter indicating skills and interests to: **Mary Shannon Moore, Ph.D., Department of Cell Biology-150E, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.**

Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS for analysis of genes, enzymes, and metabolites of clostridia in interdisciplinary project. Experience in one or more of the following areas is essential: (i) DNA cloning, sequencing, and vector construction; (ii) enzyme purification and characterization; (iii) culture, genetics, and mutagenesis of anaerobic bacteria. Respond to: **G. N. Bennett, Department of Biochemistry and Cell Biology, Rice University, Houston, TX 77005-1892.** FAX: 713-285-5154; Email: gbennett@bioc.rice.edu.

COLLEGE OF PHYSICIANS AND SURGEONS COLUMBIA UNIVERSITY Molecular Basis of Cancer

POSTDOCTORAL/RESEARCH SCIENTIST positions available to join interactive research team studying novel genes involved in oncogenesis and cell differentiation (see *MCD*, 2: 221-239, 1994; *JNCI*, 86: 91-98, 1994; *PNAS*, 92: 6778-6782, 1995; *Oncogene*, 10: 1855-1864, 11: 1179-1189, 1995). Expertise in molecular biology and biochemistry required. Send curriculum vitae and three letters of reference to: **Dr. Paul B. Fisher, Departments of Pathology and Urology, Columbia University, College of Physicians and Surgeons, PH STEM-10, 630 West 168 Street, New York, NY 10032.** FAX: 212-305-8177. Equal Opportunity Employer.

POSITIONS OPEN

PH.D. MOLECULAR BIOLOGISTS

Two positions available in the Pulmonary Division, Brigham and Women's Hospital/Harvard Medical School. **POSTDOCTORAL FELLOW** position is available to study the molecular interactions between GPI-linked receptors and integrins as they pertain to cellular differentiation and migration. Experience in molecular biology and molecular genetics or cell signalling required (Reference: 95/PF). **RESEARCH ASSOCIATE** position is available to study polymorphisms in various human genes related to asthma. Ph.D. in biology/molecular biology and three years of postdoctoral experience required. This is a non-tenured, non-faculty position (Reference: 95/RA). Send curriculum vitae to: **DC, Pulmonary Division, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** FAX: 617-732-7421. Please identify the position for which you wish to be considered by including reference number. No telephone calls please. An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSISTANT/ASSOCIATE. Available immediately to participate in research on cellular immune responses in HIV-infected individuals. Projects include the evaluation of HIV envelope specific ADCC and CTL responses. Experience in immunology and excellent technical skills required; salary commensurate with experience. Send curriculum vitae to the principal investigator: **Gail Showron, M.D., Division of Infectious Diseases, Roger Williams Hospital/Brown University, 825 Chalkstone Avenue, Providence, RI 02908.** Telephone: 401-456-2437; FAX: 401-456-6839.

POSTDOCTORAL POSITION available immediately to study molecular mechanisms by which tumor necrosis factor alpha affects pulmonary epithelium and surfactant composition/function. Required: experience in clinical pulmonology, analysis of surfactant function/composition and molecular techniques to apply to the study of inflammatory lung disease. **Dr. Gloria S. Pryhuber, Department of Pediatrics, University of Rochester, 601 Elmwood Avenue, Box 651, Rochester, NY 14642** by December 25, 1995. The University of Rochester is an Equal Opportunity Employer.

POSTDOCTORAL POSITION in molecular genetics of clinical prostate cancer. Candidate should have strong background in molecular genetics and broad, in-depth experience in gene cloning and characterization. Send a curriculum vitae, a statement of research experience and career goals, and arrange to have three letters of references sent to: **Jacob Kagan, Ph.D., Division of Laboratory Medicine, Box 72, The University of Texas, M.D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** Equal Opportunity Employer.

POSTDOCTORAL POSITION

Signal Transduction and Membrane Trafficking

Our research focuses on cloning and characterizing novel proteins that function in signalling pathways from the insulin receptor and in the trafficking of the glucose transporter and other proteins to the cell surface in response to insulin. Position open in summer 1996. Send résumé and names and telephone numbers of three references to: **Dr. Gustav E. Lienhard, Department of Biochemistry, Dartmouth Medical School, Hanover, NH 03755-3844.**

POSTDOCTORAL POSITION, Neuroscience. A full-time postdoctoral position is available immediately to study single-unit neuronal activity in rodents during the sleep-wake cycle. Applicants should have a recent Ph.D. in neurobiology, physiology, or a related field. Experience with electrophysiological recording is preferred. Interested candidates should send a curriculum vitae with the names and addresses of three references to: **Dr. Linda A. Toth, St. Jude Children's Research Hospital, Department of Infectious Diseases, 332 North Lauderdale Street, P.O. Box 318, Memphis, TN 38101.** Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION

Available for genetic, biochemical, and molecular studies on the *Arabidopsis* TCH genes (*Cell*, 60:357, 1990; *Plant Cell*, 6:1553, 1994; *Plant Cell*, 7:1555, 1995). Experience with genetics, molecular biology, and plant biology desirable. Send curriculum vitae, research interests, and three letters of recommendation to: **Janet Braam, Biochemistry/Cell Biology, Rice University, Houston, TX 77005-1892.** Equal Opportunity Employer.

**Graduate Fellowships
Center for the Study of Evolution and the Origin of Life
UCLA**

ORIGIN OF THE UNIVERSE...
FORMATION OF THE EARTH...
BEGINNINGS OF LIFE...
EVOLUTION OF THE BIOSPHERE...
ADVENT OF HOMOSAPIENS...

CSEOL invites applications for five graduate fellowships for 1996-97. In addition to support provided Fellows by UCLA departments, CSEOL will grant each Fellow a stipend of \$5,000 per year, for each of the first two years of graduate study, with no teaching or other duties. Stipends may be used for any purpose the Fellow deems appropriate -- travel, lodging, attendance at scientific meetings, purchase of books, computers, research equipment -- for any purpose, without restriction. Fellows are included in a select group of graduate students invited to interact with Center faculty in a weekly dinner/seminar/discussion series. Applicants should be planning to carry out doctoral research under the direction of a CSEOL faculty member in a subject area relating to virtually any aspect of evolution -- of the cosmos, of the solar system, of Earth, of the environment, of life, of humans. Areas of particular interest for 1996-97 include (1) planetary evolution and exobiology; (2) origin and early evolution of life; and (3) biochemical evolution and molecular phylogeny. Faculty are member of the UCLA Departments of Anthropology, Astronomy, Atmospheric Sciences, Biology, Chemistry & Biochemistry, Computer Science, Earth & Space Sciences, Economics, Geography, History, Microbiology Philosophy, Psychology, and Sociology; the School of Medicine; the School of Public Health; the Institute of Geophysics and Planetary Physics; and the Molecular Biology Institute. Fellowship applicants must apply (preferably, by 15 March 1996) both to an appropriate academic department and to CSEOL. For application forms and a list of CSEOL members, contact:

**CSEOL Fellows Committee
Geology Building, Room 5687
University of California, Los Angeles
Los Angeles, CA 90095-1567
Telephone: (310) 825-11700
FAX: (310) 825-0097
e-mail: SCHOPF@ess.ucla.edu**

NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE ON DRUG ABUSE

The National Institute on Drug Abuse (NIDA) is currently recruiting for a **Supervisory Health Scientist Administrator**, GS-601-15, with a salary range of \$71,664 to \$93,166, OR a **Supervisory Medical Officer**, GS-602-15, with a salary range of \$72,471 to \$93,166. This position is located in Rockville, MD.

The selectee will serve as the Chief of the Etiology and Clinical Neurobiology Branch (ECNB) in the Division of Clinical and Services Research (DCSR). The Chief is responsible for a national extramural program of clinical research on the neurobiology of human drug abuse disorders. The research program targets how abused drugs affect the structure, function, and development of the human brain, as well as neurobiological factors that may render individuals vulnerable to drug abuse disorders.

Qualifications Required: *AS A HEALTH SCIENTIST ADMINISTRATOR:* A Bachelor's or higher degree with major study in an academic field related to the health sciences. *AS A MEDICAL OFFICER:* A doctor of medicine or osteopathy from a school in the U.S. or Canada; or an equivalent degree from a foreign medical school. In addition, at least 1 year of specialized experience, equivalent to the GS-14 level in the Federal service, which is directly related to the position to be filled. This experience should include direct clinical research studies or administering an extramural clinical neuroscience research program.

Detailed information is provided in vacancy announcement number NIDA-95-43. To request a copy, please call the NIDA Personnel Office on (301) 443-9593. Applications must be submitted to:

**NIDA PERSONNEL OFFICE
5600 FISHERS LANE, ROOM 10-21, ROCKVILLE, MD 20857;
ATTN: EARLE STALFORD**

This position is included in the Federal Affirmative Action Program and is therefore targeted to EEO recruitment efforts. Applications must be postmarked by the closing date of the vacancy announcement. U.S. citizenship is required. NIH is an Equal Opportunity Employer.

D EVELOPMENT BIOCHEMISTS

Contribute to a better world!

We currently have exciting and challenging opportunities in our Diagnostics Division in Glasgow, Delaware. We have positions in our Chemistry Development Group where your primary responsibilities will be to develop assays, calibrators and control products for use in in-vitro diagnostics.

We also have positions in our Advanced Technology Group where your primary responsibility will be to explore and evaluate new assay technologies for use in in-vitro diagnostics.

The ideal candidate for these positions will have a Ph.D. in Biochemistry, Clinical Chemistry, Analytical Chemistry, or immunochemistry with experience in protein chemistry, enzymology, latex particle immunoassay or related field.

We offer an excellent compensation and benefits package. To be considered, please forward your resume to: DuPont Human Resources, PSS-0114, Wilmington, DE 19898 or you may fax it to: 800-631-2206, Attn: PSS-0114. An Equal Opportunity Employer.

 **Medical Products**

SENIOR SCIENTIST

SHAMAN Pharmaceuticals is a growing company engaged in the discovery and development of novel plant-derived medicines for diabetes and virology.

We are seeking a Ph.D. or M.D. with experience in physiological, cellular and/or molecular biological aspects of carbohydrate metabolism to contribute to the research program of drug discovery and development for the treatment of non-insulin dependent diabetes. You must also possess strong oral and written communication skills, excellent interpersonal skills, and the desire to effectively participate in a multidisciplinary group environment.

Shaman offers competitive compensation and benefits. Please respond to **SHAMAN Pharmaceuticals, Inc., Attn: SCI1122, 213 E. Grand Ave., So. San Francisco, CA 94080-4812**. We are committed to a diverse workforce/Equal Opportunity Employer.



POSITIONS OPEN

NORTHWESTERN UNIVERSITY MEDICAL SCHOOL

Two **POSTDOCTORAL POSITIONS** that are supported by an NIH Training Grant in Endocrinology are available July 1, 1996. M.D. and Ph.D. fellows train with one of 26 leading scientists in biomedical research laboratories with research interests that encompass a wide range of endocrine topics. There is a particular emphasis in molecular endocrinology, endocrine genetics, and clinical investigation. For clinical fellows, the program also offers an outstanding clinical experience and provides board eligibility in Endocrinology and Metabolism. *Only U.S. citizens and permanent residents are eligible for training grant positions.*

Additional information and application forms can be obtained by writing to:

Dr. J. Larry Jameson
Center for Endocrinology, Metabolism and
Molecular Medicine
Tarry 15-703
Northwestern University Medical School
303 East Chicago Avenue
Chicago, IL 60611

All information must be received by January 15, 1996.
An Affirmative Action/Equal Opportunity Employer.

A **POSTDOCTORAL POSITION** (M.D. or Ph.D.) is available in the Department of Medicine at Massachusetts General Hospital, Harvard Medical School, to study transcriptional mechanisms of neuron-specific gene expression and to characterize forebrain-specific transcription factors involved in neuronal differentiation. Use is made of immortalized clonal cell lines established in our laboratory from different forebrain structures of embryonic rats. Experience in molecular biology is preferred. *U.S. permanent residency or U.S. citizenship required.* Applicants should send a curriculum vitae and three letters of recommendation to: Mario Vallejo, M.D., Ph.D., Reproductive Endocrine Unit, Massachusetts General Hospital, Boston, MA 02114.

POSTDOCTORAL POSITIONS are available to study transcriptional and posttranscriptional regulation of gene expression in human and rodent hepatocytes. NIH-funded projects focus on cyclic nucleotide regulation of plasminogen activator inhibitor mRNA degradation, and on cytokine regulation of inhibitor gene transcription *in vivo* and *in vitro*. Molecular biology experience is required. Send curriculum vitae, statement of research interests, and names of three references to: Dr. Thomas Gelehrter, Department of Human Genetics, Box 0618, University of Michigan Medical School, Ann Arbor, MI 48109-0618. *Equal Opportunity/Affirmative Action Employer.*

CRYPTOSPORIDIUM CELL BIOLOGY

POSTDOCTORAL POSITION immediately available to study host cell alterations during infection. Excellent project in an open field for candidate with strong background in cell biology. Doctorate, *U.S. citizenship/employment eligibility* required. Send curriculum vitae, three references to: Dr. Jeffrey Griffiths, Department of Comparative Medicine, Tufts University School of Veterinary Medicine, 200 Westboro Road, Grafton, MA 01536. FAX: 508-839-7977; Email: jgriffi2@opal.tufts.edu.

POSTDOCTORAL POSITION to study the molecular genetics of human DNA replication. Epstein-Barr and papilloma virus sequences and immunoglobulin, globin, and *myc* gene families are being used as model systems both *in vivo* and *in vitro* to define mammalian origins of replication and to study their cell cycle regulation. Apply by mail and a FAX copy to: Dr. Carl Schildkraut, CH 416, Albert Einstein College of Medicine, Jack and Pearl Resnick Campus, 1300 Morris Park Avenue, Bronx, NY 10461. FAX: 718-829-7619; Email: schildkr@aecom.yu.edu. *Equal Opportunity Employer.*

POSTDOCTORAL POSITION available to study the mechanism and regulation of iron transport. Ongoing projects include molecular cloning of transport proteins and comparison of their intracellular membrane traffic pathway with that of the transferrin receptor. Recent graduate with background in biochemistry and molecular biology preferred. Send curriculum vitae and names of three references to: Dr. Marianne Wessling-Resnick, Department of Nutrition, Harvard School of Public Health, 665 Huntington Avenue, Boston, MA 02115.

POSITIONS OPEN

POSTDOCTORAL FELLOW University of California, Los Angeles Department of Anesthesiology

POSTDOCTORAL POSITION is available immediately to study molecular aspects of the action of anesthetics on cloned voltage-dependent Na, K, and Ca channels. This ongoing project uses a combined approach that includes state of the art electrophysiology and molecular biology to unravel the mechanism(s) of action of general anesthetics at the molecular level. The research will be conducted under direct supervision by and in the laboratory of Dr. A. M. Correa, which is housed in the Basic Research Division of the Department of Anesthesiology. The department is composed of a very interactive group focused on ion channels and receptors, signal transduction, and pain. Members of the Research Division are: Drs. F. Bezanilla, L. Birnbaumer, M. Birnbaumer, A. M. Correa, T. Hales, E. Stefani, and L. Toro.

Candidates are expected to have previous training in electrophysiology and molecular techniques. Salaries will follow UCLA guidelines and will be adjusted to the candidate's experience. Please send curriculum vitae, a description of previous research experience, and the names, addresses, telephone or FAX numbers of three references to: Dr. Ana M. Correa, UCLA Department of Anesthesiology, BH-612 CHS, BOX 951778, Los Angeles, CA 90095-1778. FAX: 310-206-3970. *UCLA is an Equal Opportunity/Affirmative Action Employer.*

HIV RESEARCH

POSTDOCTORAL POSITION available immediately to study cytokine and cytokine antagonist control of HIV replication and immune response. The *in vitro* research is oriented toward designing therapeutic approaches for *in vivo* use. A Ph.D. or M.D. degree is required and a strong background in HIV research or molecular biology is highly desirable. Send curriculum vitae and names of three references to: Paul Skolnik, M.D., Division of Infectious Diseases, Tufts University-New England Medical Center, 750 Washington Street, NEMCH 67, Boston, MA 02111. FAX: 617-636-3216; Email: paul.skolnik@es.nemc.org. *New England Medical Center is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

C. H. BEST POSTDOCTORAL FELLOWSHIP

Molecular and genetic research in the areas of diabetes, cell differentiation and hormone action, signal transduction, transcription and translation, membrane transport, neurobiology, cancer, and lipids. Tenable in the Banting and Best Department of Medical Research, University of Toronto, for two years after July 1, 1996 with a competitive stipend. Available to new Ph.D.'s or candidates with less than two years of postdoctoral training by June 30, 1996. Send curriculum vitae, academic transcripts, three letters of reference, and relevant reprints, before January 19, 1996, to: Dr. Alexander Marks, Fellowship Committee Chair, Banting and Best Department of Medical Research, University of Toronto, Toronto, Ontario M5G 1L6 Canada.

POSTDOCTORAL POSITION MUSCLE PHYSIOLOGY LABORATORY WEST VIRGINIA UNIVERSITY

One **POSTDOCTORAL POSITION** is available to study the mechanisms of muscle strain injury in rats *in vivo*. Applicants must have a Ph.D. in biomedical engineering, biomechanics, or physiology. Experience in muscle mechanics and muscle fatigue is preferred along with knowledge of contraction-induced muscle injury. Position is available immediately. Send curriculum vitae and three letters of reference to: William T. Stauber, Ph.D., Department of Physiology, West Virginia University, P.O. Box 9229, Morgantown, WV 26506-9229.

Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL POSITIONS available to study molecular biology of avian cytokines and *Eimeria* parasites. Applicants should have a Ph.D. in molecular biology or related field and experience in PCR, gene cloning and expression. Salary: \$37,000. To apply, send curriculum vitae and three letters of reference to: Dr. Hyun Lillehoj, Immunology and Disease Resistance Laboratory, LPSI, USDA-ARS, BARC-East, Building 1040, Beltsville, MD 20705 by December 30, 1995. *Equal Opportunity Employer.*

POSITIONS OPEN

COMPUTATIONAL STRUCTURAL BIOLOGY

A new Sealy Center for Structural Biology has been established at the University of Texas Medical Branch (UTMB), Galveston, Texas. A **POSTDOCTORAL POSITION** is immediately available in the computational unit.

Research projects aim for the development of efficient algorithms and software tools for structure determination of biological macromolecules from NMR data and modeling three-dimensional protein structures. Interested scientists should send curriculum vitae and the names of three references to: Dr. Werner Braun, Sealy Center for Structural Biology, UTMB, Galveston, TX 77555-1157. Email: werner@nmr.utmb.edu.

UTMB is an Equal Opportunity/Affirmative Action University.

EDITORIAL FELLOW

The American Journal of Human Genetics

One- to two-year full-time **POSTDOCTORAL FELLOWSHIP** in Seattle. To assist editor, write commentary and summaries of articles, make papers more accessible to the readers. We seek a broad range of interests in genetics, a lively writing style, and strong interest in scientific communications. Send letter of interest, curriculum vitae, and writing sample to: Fellowship, The American Journal of Human Genetics, University of Washington, Box 357470, Seattle, WA 98195.

Research Associate I—Engineering for university in central Ohio. Design and manufacture of (single and doubly tuned) radio frequency antennae for *in vivo* magnetic resonance spectroscopy and imaging. Maintenance and upkeep of high field Nuclear Magnetic Resonance (NMR) spectrometers and Magnetic Resonance Imaging (MRI) clinical scanners. Pulse sequence programming of a research grade NMR console for ultra-fast imaging techniques. Preparation of research papers in magnetic resonance and critical analysis of the existing literature. Devise new experimental methods to conduct magnetic resonance experiments. Magnetic resonance hardware interfacing and repair. Maintenance of computers and software used in magnetic resonance imaging and spectroscopy. Master's in electrical engineering or biomedical engineering and two years of experience in above-described duties, or two years of experience in magnetic resonance hardware or alternatively one year of experience in magnetic resonance hardware and thesis on magnetic resonance hardware. One year of experience in design and construction of radio frequency antennae. One year of experience in computer hardware and software maintenance. Experience may have been gained during or after Master's degree. Experience may have been gained concurrently. At least one publication on magnetic resonance hardware-related topic in a scientific journal. 40 hours per week, 8 a.m. to 5 p.m., Monday through Friday, \$26,664. Send two résumés and cover letters (no calls) to: K. Shockey, Reference 1355, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

JUNIOR RESEARCH ASSOCIATE. Research projects are regulation of IGF (insulin-like growth factor) and developmental regulation of IGFs (insulin-like growth factor binding proteins) in vascular smooth muscle cells. Independent laboratory research in the areas of characterization IGF proteinase, Western immuno- ligand blotting, protein radio-labelings, IGF proteinase assays, cell-tissue culture, cell fractionation, 5'-nucleotidase and other enzyme marker assays, HPLC, size-exclusion, ion-exchange and affinity chromatography, protein purification, RNA extraction, and Northern blotting. Additional responsibilities are data interpretation and literature search for use in manuscript, grant submission, and research conference presentation. Requirements: M.S. (except for thesis) in chemistry (biochemistry). Experience: one year in the job offered. Experience may be before, during, or after degree. 40 hours per week; 8:00 a.m. to 5:00 p.m.; \$29,400 per year. Send résumés and proof of requirements in duplicate (no calls) to: G. Maugans, REF 1501, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216. *Those who are not authorized to work permanently in the U.S. need not apply.*

BE AT THE FOREFRONT!

Vysis, Inc., a leader in the development and commercialization of research and decision making products for molecular disease management, has excellent professional opportunities available at our Downers Grove, IL headquarters. We manufacture and market an integrated line of products (advanced imaging systems, including instrumentation, software, nucleic acid probes and reagents for research genetic analysis) aimed at providing genomic information critical to the evaluation and treatment of genetically based diseases. Vysis's development programs are directed at expanding current research products and developing clinical products to permit earlier, specific detection of prenatal disorders, cancer and other genetic diseases, increasing patient survival and reducing the cost and trauma of treatment. We currently have openings in our **GENOSENSOR, INSTRUMENTATION, GENETICS PRODUCT DEVELOPMENT and ADVANCED TECHNOLOGY GROUPS** for the following professionals:

ANALYTICAL CHEMIST

PhD in Chemistry, Analytical Chemistry, Physics, Biophysics, Biochemistry, or related science and either post-doctoral or prior industrial experience are required. Demonstrated expertise in analytical techniques, including isotachopheresis, isoelectric focusing, and capillary electrophoresis.

NUCLEIC ACID BIOCHEMIST

PhD in Genetics, Biochemistry, Molecular Biology, Microbiology, or a related science, and either post-doctoral or industrial experience are required. Demonstrated proficiency in DNA-based research and diagnostics is essential and should include sample preparation, fluorescent and/or chemiluminescent labeling, hybridization kinetics, nucleic acid amplification strategies, probe-based clinical assay and detection systems, and data analysis skills.

SENIOR OPTICAL ENGINEER

MS in Computer or Electrical Engineering (or equivalent), or a PhD in Physics, Biophysics, or Physical Biochemistry is required. Demonstrated expertise in image analysis and pattern recognition (microscope or direct CCD-based), including the development of appropriate hardware and software are essential.

SENIOR MANAGER-INSTRUMENTATION

MS or PhD in Computer Science, Engineering, Chemistry or Molecular Biology with 5-10 years experience that includes 3-5 years of staff management responsibility and involvement in the design and development of commercial instrumentation systems required.

In return for your expertise, you'll enjoy excellent growth opportunities on a team poised for future success. Please send or fax resume with cover letter and salary history in confidence to: **Human Resources, Vysis, Inc., 3100 Woodcreek Dr., Downers Grove, IL 60515 Fax 708-271-7008.**

PATHOLOGIST/ PATHOBIOLOGIST

We are seeking a PhD and/or MD with extensive experience in human pathobiology. A thorough knowledge of histology, pathology, and molecular and cellular biology and testing of human genetic disease, especially cancer. You must possess excellent interpersonal and communication skills along with the ability to plan, coordinate and analyze preclinical studies of in vitro diagnostic products.

HUMAN MOLECULAR BIOLOGIST

To qualify, you must be a PhD with 3-5 years experience in human molecular biology. Good knowledge of human genetics and molecular and cellular basis of cancer, familiarity with current molecular biology techniques, and skill in the use of genetic databases are also required.

IMMUNOHISTOCHEMIST

A PhD in Biochemistry, Molecular Biology or Cell Biology and two or more years of post-doctoral training are required. This position requires significant work with fluorescence and chromogenic immunohistochemical techniques and handling of clinical specimens.

MOLECULAR BIOLOGISTS

Considerable experience in amplification technology relevant to DNA and immunological assays, working knowledge of spectral detection methodologies, PhD in Biochemistry, Molecular Biology or Cell Biology and two or more years of post-doctoral training are essential.

RESEARCH ASSOCIATES

MS/BS in Biology, Molecular Biology, Microbiology, Biochemistry or related science is required. 2 years lab experience in Cytotechnology or Pathology is essential for Bachelor's candidates. Experience in maintaining bacterial cell cultures, DNA extraction, labeling, hybridization, blotting, PCR, *in situ* hybridization assays, immuno and enzyme assays and fluorescent microscopy preferred. Related openings exist in all of our groups.



EEO - No Phone Calls Please.

MOLECULAR IMMUNOLOGY

Investigator

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity for a Molecular Immunologist to join the newly formed Department of Molecular Immunology. This unit, consisting of 40 molecular biologists and immunologists, focuses on cytokines, cytokine receptors, B and T cell biology and antibody engineering. Disease foci include autoimmunity, R.A., asthma, allergy and diabetes. Using the DNA sequence base available through our mass sequencing effort, the unit identifies novel targets relevant to immune modulation as well as innovative approaches to more conventional drug targets.

The ideal candidate will have at least three years' postdoctoral experience in a leading laboratory performing state-of-the-art research in molecular immunology. Extensive biological/immunological expertise in a particular area of relevance is required, as is being versed in the standard repertoire of molecular techniques. Publication records must include senior author papers in leading journals.

SmithKline Beecham broadly seeks the best possible scientists, but areas of interest include cytokines, kinases, hematopoiesis, T cell biology, autoimmunity and allergy. The desire to work in a highly interactive environment on problems directly relevant to drug discovery is a must, as are excellent communication and interpersonal skills.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send a resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job #H5-0050, PO Box 2646, Bala Cynwyd, PA 19004. We are an Equal Opportunity Employer, M/F/D/V.



SmithKline Beecham
Pharmaceuticals

Challenging the natural limits.

EXECUTIVE DIRECTOR

Nominations and applications are invited for the position of Executive Director of the Center for Coastal, Energy, and Environmental Resources (CCEER) at Louisiana State University. CCEER is a college-level unit within LSU dedicated to excellence in basic and applied research, graduate education, policy analysis, and public service focussed on coastal/marine, energy, and environmental sustainable and nonrenewable resources. The Executive Director reports to the Vice-Chancellor for Research and Economic Development.

Its faculty are organized in six major institutes: Basin Research, Coastal Ecology, Coastal Fisheries, Coastal Studies, Environmental Studies, and Wetland Biogeochemistry; and two Centers: Energy Studies and Nuclear Science. The academic program comprises the Department of Oceanography and Coastal Sciences (M.S. and Ph.D.), Environmental Sciences (M.S.), and Nuclear Science (M.S.).

The Executive Director administers a scientific and support staff of almost 200 (30 of whom are academic faculty), a graduate student body of 167; an operating budget of more than \$5,000,000; extensive facilities that will include a new \$13.5 million, 110,000 sq ft research complex under architectural design; and an active, extramural and multidisciplinary research program of approximately \$9,098,458 in FY 1994-95.

The successful candidate must have a record of academic and research excellence, scholarly achievement commensurate with appointment as a full professor, and significant administrative experience. The Executive Director will: 1) provide administrative and programmatic leadership to growing academic, interdisciplinary research, and advisory programs; 2) effectively communicate with, and attract continued support from governmental, public, and private sector groups; and, 3) continue and expand collaboration with other departments, programs, and schools within LSU, and with the Louisiana Sea Grant program, the Louisiana Universities Marine Consortium (LUMCON), and other public and private entities state- and nation-wide.

Nominations (including the nominee's name, current position, mail and email addresses, phone/FAX numbers), and applications (including a detailed resume, explanation of interest and qualifications, and names, addresses, and phone/FAX numbers of at least five [5] references) should be sent to:

Dr. Russell L. Chapman, Interim Executive Director
Center for Coastal, Energy, and Environmental Resources
302 Howe-Russell Building, Louisiana State University
Baton Rouge, LA 70803-7503

Review of nominations and applications will begin in January 1996 and will continue until the position is filled. The successful candidate could begin as early as 1 July 1996.

LSU is an affirmative action, equal opportunity employer.

The Healthcare of Tomorrow Relies on Your Skills Today.

At Baxter Healthcare Corporation, our commitment to R&D is evident where state-of-the-art facilities and top-of-the-line employees come together. Our pioneering medical technology has resulted in innovative health care that has improved human life worldwide. Today, we are seeking the following research professionals to join our Blood Substitutes R&D Division, in our far north suburban Chicago Round Lake, IL location:

SR. RESEARCH ASSOCIATE

You will be responsible for supervising development projects of analytical methods and performing analytical testing of stability and release samples for a hemoglobin therapeutic product being developed as a blood substitute. This will involve reviewing research plans, monitoring project progress, and reporting research findings to Blood Substitutes management. You will also lead multidisciplinary teams to provide analytical biochemistry expertise.

Qualified candidates will possess a PH.D. or equivalent in Analytical Chemistry, plus 2 years experience in biopharmaceutical research and development. Demonstrated method development and validation abilities, especially in HPLC, electrophoresis, spectrophotometry, and ion selective electrochemistry are required. Knowledge of GLP and cGMP is also required, along with excellent written and oral communication skills. Previous supervisory and leadership experience is a plus.

RESEARCH ASSOCIATE

You will be responsible for providing technical assistance in analytical method development, validation and testing of final product release, components, residuals and degradants in a hemoglobin therapeutic product being developed as a blood substitute. In addition, you will participate in multidisciplinary teams to provide analytical biochemistry expertise.

Qualified candidates will possess a B.S. in Analytical Chemistry or Biochemistry along with some research experience, or years of equivalent work related experience. Analytical chemistry and biochemistry training and experience in methodologies including HPLC, spectrophotometry, ion selective electrochemistry and reagent chemistries are required, as are excellent oral and written communication skills. Knowledge of instrumentation theory operation and maintenance for the above methods is desirable.

In addition to a professional and challenging work environment, Baxter offers a highly competitive compensation package. For consideration, please send your resume with salary history to: Baxter Healthcare Corporation, Human Resources, WG2-3S, Dept. BP95128, Rte. 120 & Wilson Rd., Round Lake, IL 60073. An Equal Opportunity Employer.

Baxter

Myco Pharmaceuticals is an emerging biopharmaceutical company discovering drugs through microbial genetic engineering using unique biorational and proprietary approaches and materials for the use of natural products in drug screening.

SCIENTIST

Myco has pioneered bio-combinatorial approaches to drug discovery using fungi. We are seeking a Scientist who will develop genetically manipulated fungal strains designed to capture genetic diversity from nature and elicit production of novel secondary metabolites. This position offers interaction with the world-wide leaders in the field. Requires a Ph.D. with 2-5 yrs' exp. in cloning techniques, fungal diversity and molecular genetics. Familiarity with secondary metabolism desired.

Send or fax resume to: **Human Resources, Myco Pharmaceuticals Inc., One Kendall Square, Building 300, Cambridge, MA 02139; FAX (617) 225-2991. Application deadline is December 1, 1995. EOE.**

**MYCO
PHARMACEUTICALS INC.**

THYROIDOLOGIST

The Intramural Research Program of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), seeks an outstanding physician (M.D. or M.D./Ph.D.) to develop a major NIDDK research program on the thyroid. The ideal candidate will combine a strong interest in clinical thyroidology with a proven record of excellence in laboratory research. The individual selected will also participate in the teaching activities of the NIH-Interinstitute Endocrine Fellowship Training Program. This is an outstanding opportunity to join one of the country's leading endocrine programs and to take advantage of the unique environment of the internationally recognized NIH Clinical Center in Bethesda, Maryland. The level of appointment (tenured Scientist or tenure-track Investigator), salary, and research support (space, positions, and laboratory budget) will be commensurate with the qualifications and experience of the selectee. Those interested in applying should send a C.V. and bibliography and three letters of reference to: **Mrs. Margaret Hawker, NIDDK/NIH, 10 CENTER DRIVE MSC 1818, BETHESDA MD 20892-1818.** The NIDDK especially encourages applications from qualified women and minority individuals.

NIH is an Equal Opportunity Employer

EXECUTIVE VICE PRESIDENT RESEARCH AND MEDICAL PROGRAMS

LEUKEMIA SOCIETY OF AMERICA

The Leukemia Society of America seeks a visionary Executive Vice President to help steer our research and medical programs into the next century. We hope to attract a top-tier executive with significant experience in a comparably commanding role.

Internally, this highly visible EVP will provide leadership, strategic direction, and communication for the research and medical initiatives of the Society, with the aim of accelerating cures for leukemia and lymphomas. Reporting to the President and CEO, the EVP will direct all medical and research programs in concert with the Medical and Scientific Committee. This entails administering research program budgets and managing the allocation of grants and awards. The position also encompasses oversight of all relevant staff, operating plans and budgets; management of the Society's professional education programs; and communications with national trustees, staff and chapters.

Externally, the EVP will be a spokesperson and major gifts fund raiser for the Society, communicating our message to the public, the medical/scientific communities, government officials, and donors. He or she will also lead our efforts to serve as a clearinghouse for scientists, clinicians, and corporations working towards the same goals worldwide.

An M.D. and professionally recognized research and publications in leukemia/lymphoma are required. Experience on the level of a clinical section chief, knowledge of the peer review process, and superb communication skills are essential. Talents in public speaking and organizational administration are extremely important. In return, we offer a strong compensation and benefits package. Location of domicile and continuing active research are open for discussion. Qualified candidates are invited to mail curricula vitae and salary requirements confidentially to:

Research and Medical Leadership Search
Leukemia Society of America
600 Third Avenue, New York, New York 10016
Equal Opportunity Employer M/F/D/V

DISCOVER A UNIQUE APPROACH

Amgen is a world leader in developing and delivering cost effective therapeutics based on advances in cellular and molecular biology. We are currently in the process of initiating a program in small molecule drug discovery which is focused on high-throughput synthesis and medicinal chemistry involving a variety of therapeutic areas. The following positions are currently available at our Thousand Oaks, Southern California headquarters, just 45 minutes from downtown Los Angeles.

MEDICINAL CHEMISTRY

Research Scientists - Research Associates

We are seeking Research Scientists and Research Associates with a strong record of research accomplishment to join our program, working in new laboratories equipped with the latest computer and spectroscopic technologies. Scientist candidates will possess a Ph.D in Synthetic Organic Chemistry; Associate candidates will have a BS or MS in Chemistry. Recent graduates as well as individuals with previous experience in the pharmaceutical industry are being sought.

HIGH THROUGHPUT SCREENING

Professionals with the following backgrounds are being sought for the area of High Throughput Screening.

Lab Head, High Throughput Assays

We are seeking a Lab Head to direct a screening program involving small organics generated via high-throughput synthesis. This individual will be responsible for leading a team in the generation of assay components and in assay validation. A close working relationship with the Medicinal Chemistry Group will be necessary. The qualified candidate will have a Ph.D in Pharmacology or related discipline, a strong record of research accomplishment and a minimum of five years' experience in high-throughput assays.

Research Scientists - Research Associates

We are seeking Research Scientists and Research Associates with a strong record of research accomplishment to join the high-throughput screening program. Qualified Scientist candidates will have a Ph.D in Pharmacology or related discipline; Associate candidates will have a BS or MS in Biological Sciences. Preferred candidates will have previous experience in the pharmaceutical industry.

ROBOTICS

We are seeking candidates who can assist and direct in the development of automation involving both small molecule drug discovery and high-throughput screening. These individuals will develop and maintain all aspects of automation with respect to the synthesis of organic compounds and their screening, integrate new and existing robotic systems, and assist in identifying and introducing new approaches/systems which may increase throughput. The qualified candidates will possess a strong background in robotics and automation, including database management and a minimum of five years' experience in the area of automation.

We recognize that diverse perspectives are a key factor in the process of discovery.

We offer a highly competitive compensation and benefits package. For immediate consideration, please e-mail your resume to: jobs@amgen.com and indicate resume as your subject, or mail your resume to: Amgen, Staffing Dept., Job Code: (TPSC), P.O. box 2569, Thousand Oaks, CA 91319-2569. Please consult our on-line Job Bulletin Board at <http://www.bio.com> for information on other career opportunities available at Amgen. Principals only, please.

EEO/AA Employer M/F/D/V

AMGEN.

Research Scientist II

Genetic Therapy, Inc., based in the Washington, D.C. area, is a leader in the development of human gene therapy products for genetic and acquired diseases. Founded in 1986, GTI and its collaborators represent one of the largest groups of scientists dedicated to research and development in the field. We are seeking a Research Scientist II in our Virology Department to participate in virus vector development. The individual will be a member of a team that designs and tests new viral vectors for use in gene therapy. The applicant should have a Ph.D. and at least 2 years of relevant experience or equivalent. Must have a strong background in virology, immunology and molecular biology. GTI offers a stimulating and challenging research environment with an excellent salary and benefits package. Please specify position when applying. Fax or send resume to:



Genetic Therapy, Inc.
938 Clopper Road
Attn: 63-011-7/WP
Gaithersburg, MD 20878
Fax: (301) 948-0503

*Genetic Therapy is an
Equal Opportunity Employer*

SENIOR VICE PRESIDENT PATIENT SERVICES

LEUKEMIA SOCIETY OF AMERICA

The Leukemia Society of America, a leading national voluntary health organization, is dedicated to finding cures for leukemia and lymphomas and improving quality of life for patients and their families. As we approach the 21st century, we seek an accomplished Senior Vice President to help advance our patient services mission.

Reporting to the President and CEO, the Sr. VP will lead, manage, and support the Society's programs of patient and public education, information services, patient aid, psychosocial support, and marrow registration. With national committees, the Sr. VP will develop strategic directions and policies for services, and he or she will also manage the operational plans, budgets, and staff dedicated to patient services.

External duties include assisting professional volunteers in developing strategic partnerships with targeted corporations, federal agencies, individuals and health organizations. The Sr. VP will also serve as public spokesperson for all our program services.

Qualifications for this pivotal position begin with an advanced degree in public health, with concentration in the health services arena. An outstanding, hands-on track record in health field experience is essential; oncology experience is preferred. At least three years' successful administrative, staffing, management, and budget control responsibility is required. Experience with telecommunications systems to provide information services is highly desirable.

The Leukemia Society of America offers an outstanding compensation and benefits package to the right person. Qualified candidates are invited to send their resumes and salary histories in confidence to:

Patient Services Leadership Search
Leukemia Society of America
600 Third Avenue, New York, New York 10016
Equal Opportunity Employer M/F/D/V

Executive Director

American Association for Accreditation of Laboratory Animal Care (AAALAC)

The Executive Director is the Chief Executive Officer of the American Association for Accreditation of Laboratory Animal Care (AAALAC). Principal duties are in four areas: 1) operation of the AAALAC office; 2) fiscal and personnel management for the Association; 3) oversight of the accreditation program; 4) professional spokesperson for the organization. In all matters, the Executive Director accepts policies formulated by the Board of Trustees and the Executive Committee and implements programs consistent with those policies.

The applicant must have the following qualifications: An earned post-graduate degree; Familiarity with the structure and function of NIH, USDA, and other federal agencies with respect to their roles in animal care and use programs; Ability to articulate and communicate the position of AAALAC to professional, scientific, and public constituencies. The following qualifications are desirable: Expertise and experience in the management of non-profit organizations; Experience in the administration of animal care and use programs; Familiarity with the role of AAALAC as an accrediting agency, and with the issues of animal care and use in research, teaching, and testing.

Send Resume and at least 3 letters of recommendation to: Hugh L. Evans, Ph.D., Chair, AAALAC Search Committee, Nelson Institute of Environmental Medicine, New York University Medical Center, Long Meadow Rd., Tuxedo, N.Y. 10987.

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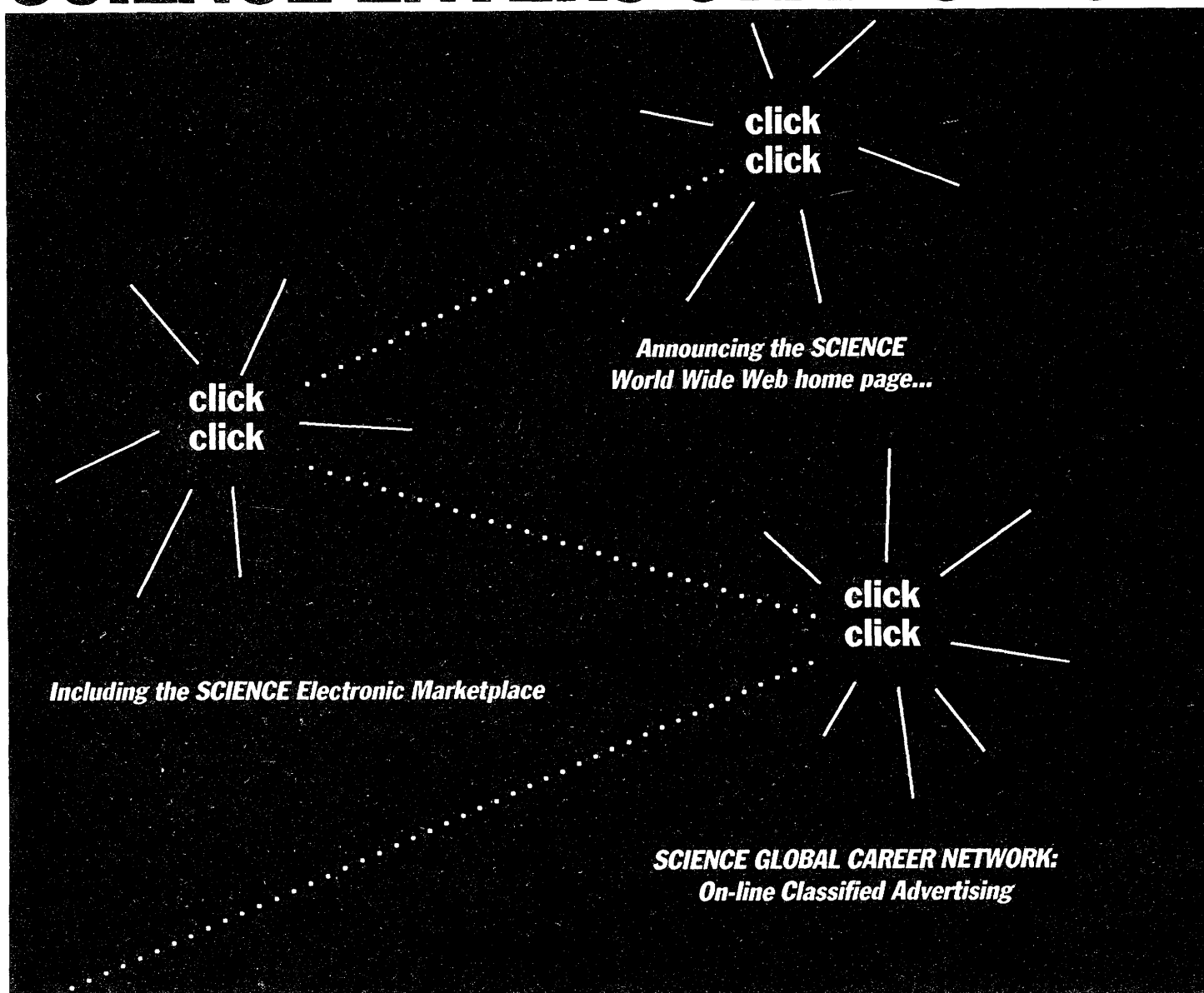
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Marketplace ads continue on page 1266

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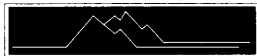
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Radiation Hybrid e-mail Server now On-Line

The Stanford Radiation Hybrid e-mail server is now up and running on the world wide web. The server can be accessed at <http://www-shgc.stanford.edu>. Together this server and the Stanford G3 RH DNA available from Research Genetics constitute a new, powerful system for the chromosome localization of PCR based markers. Unlike somatic cell hybrid panels, which only assign an unknown marker to a chromosome, this simple system will give both chromosome assignment and precise chromosome location. Currently, an unknown marker is linked to one or more of over 900 markers in the Stanford G3 database. The number of markers in this database is expected to increase rapidly, allowing even more precise mapping. Once the Stanford Human Genome Center homepage is before you, there are two choices for gaining information on radiation hybrids. By clicking on the RH Procedure button, a standardized radiation hybrid assay procedure will be presented. This assay procedure has been tested and proven reliable, and therefore is the suggested procedure when working with radiation hybrids.

The other option is to click on the rhserver button and go directly to the server itself. A vast amount of information is available here including the status of the radiation hybrid server, general user information, and the current and complete instructions for using the server. In addition, the raw data can be accessed here via an FTP site. This raw data will provide a list of markers already submitted to the radiation hybrid server including GDB locus, scores, etc. The complete submission information is also available from this portion of the rhserver homepage. The instructions for submission are very specific as to the format which must be followed. Submissions are made by e-mail (not over the web) and will be acknowledged when submitted. A complete example is given to help clarify any confusion that may remain after reading the instructions for submission. Once a researcher has submitted a request, the radiation hybrid server will return the results of the analysis typically within a matter of minutes.

The following notes may make the server a little bit easier to use. First, the server is valid only for the Stanford G3 radiation hybrid panel produced by David Cox, Rick Myers, and Douglas Vollrath. The server will not work with the GENEBRIDGE 4 panel, which is also available from Research Genetics. Definitions of LOD and conversion of centiray to base pairs can be found under the Chromosome 4 RH Map ver. 3.0 heading on the Stanford Human Genome Center homepage by clicking on the README button. And finally, help is easily obtained by sending an e-mail message to the webmaster of the page.



Cat. No.	Description	Price
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