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# TaKaRa LA PCR Kit:

## *Proven Powerful to Any Length*

Using *TaKaRa Ex Taq* in conjunction with a special reaction buffer, the new TaKaRa LA PCR Kit generates **Longer and More Accurate PCR Products** in Higher Amplifications.

Extension to **20 kb**

with Ease. The Kit contains 20 kb Control to assure you premium PCR Performance.

With up to **40 kb**

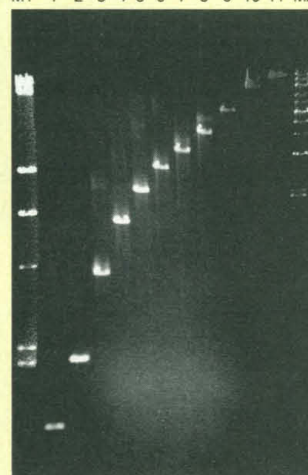
extension capability, the kit meets all your PCR requirements for further studies, such as genome mapping and sequencing.

### Code No. RR011 TaKaRa LA PCR Kit

Designed and developed for Long and Accurate PCR Amplification of the target in any span length up to 40 kb, employing a proprietary LA technology.

#### Typical Performance of TaKaRa LA PCR

M1 1 2 3 4 5 6 7 8 9 10 11 M2 Template: 2.5 ng  $\lambda$ DNA



Lane M1:  $\lambda$ -Hind III digest markers

Lane 1: 1.0 kb  
Lane 2: 2.0 kb  
Lane 3: 4.0 kb  
Lane 4: 6.0 kb  
Lane 5: 8.0 kb  
Lane 6: 10.0 kb  
Lane 7: 12.0 kb  
Lane 8: 15.0 kb  
Lane 9: 20.7 kb  
Lane 10: 27.9 kb  
Lane 11: 34.8 kb

Lane M2: High MW DNA markers



**TAKARA SHUZO CO., LTD.**  
Biomedical Group  
Otsu, Shiga, Japan  
Tel: +81 775-43-7247  
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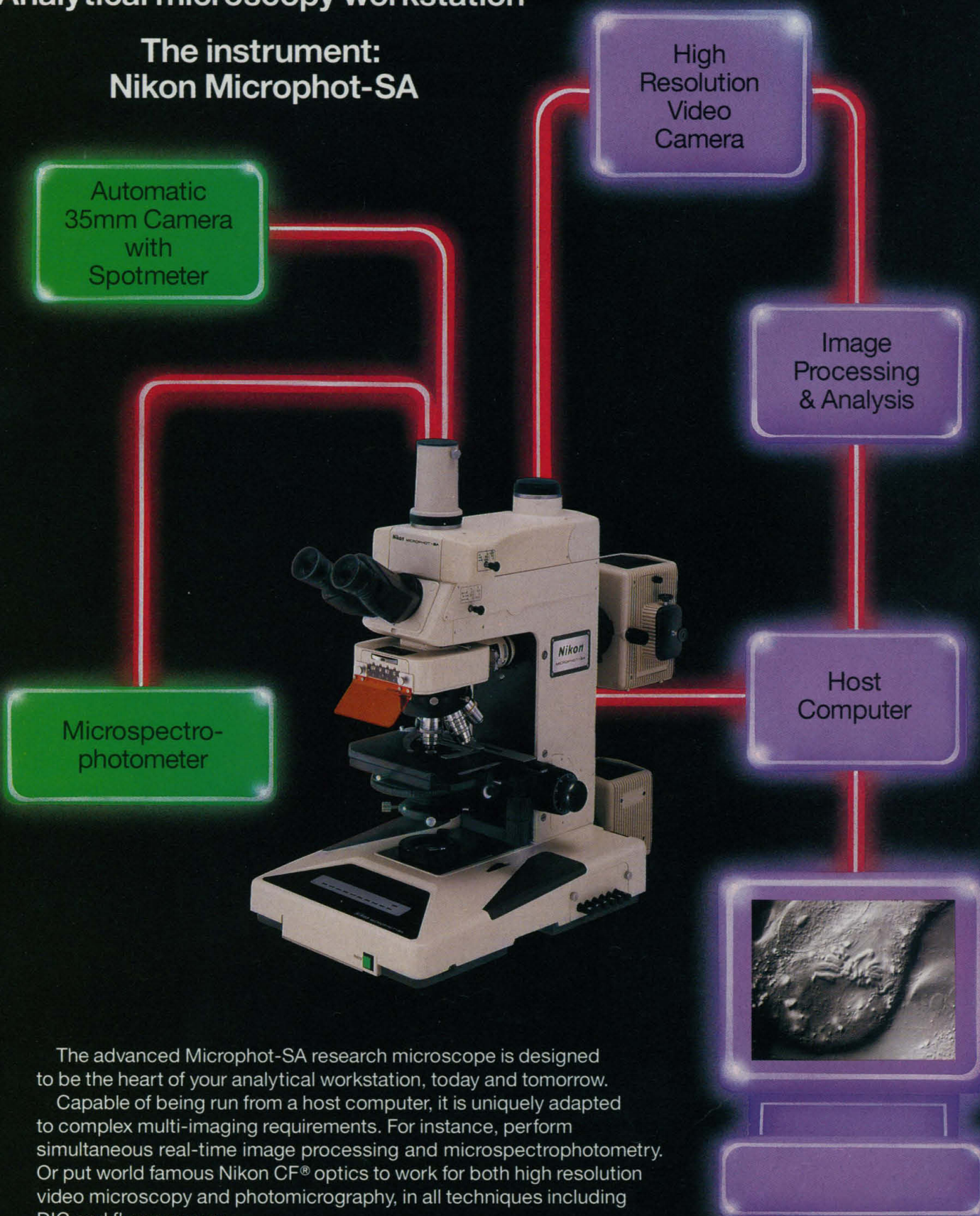
**POWER PCR** products from **TaKaRa** are sold under licensing arrangements with Roche Molecular Systems and F. Hoffman -La Roche Ltd. and The Perkin-Elmer Corporation. Purchase of these products is accompanied by a licence to use them in the Polymerase Chain Reaction (PCR) process in conjunction with an Authorized Thermal Cycler.

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**The system:  
Analytical microscopy workstation**

**The instrument:  
Nikon Microphot-SA**



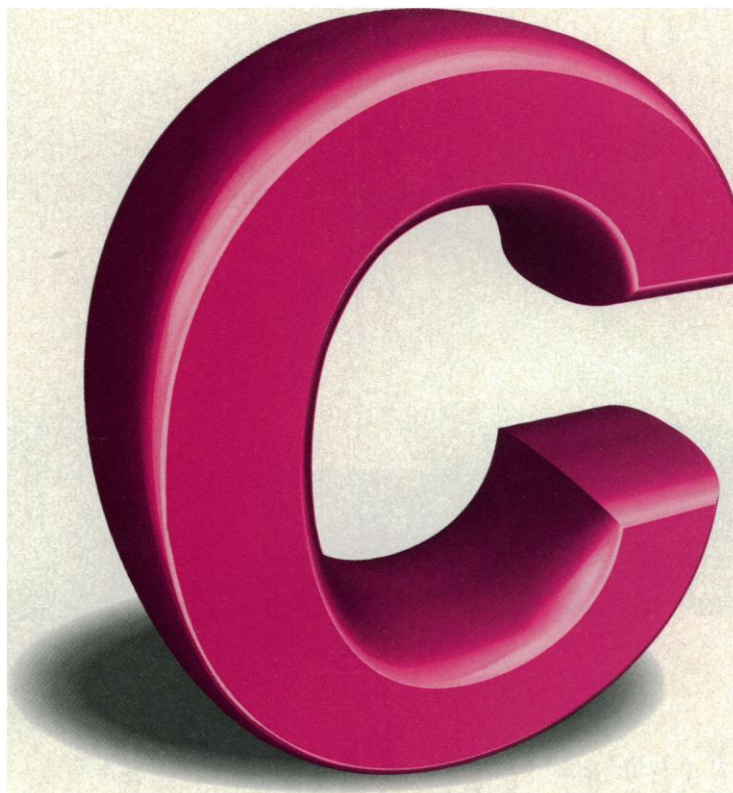
The advanced Microphot-SA research microscope is designed to be the heart of your analytical workstation, today and tomorrow. Capable of being run from a host computer, it is uniquely adapted to complex multi-imaging requirements. For instance, perform simultaneous real-time image processing and microspectrophotometry. Or put world famous Nikon CF® optics to work for both high resolution video microscopy and photomicrography, in all techniques including DIC and fluorescence.

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THE SYSTEM YOU NEED





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**Fast.** With the Pierce PKC Colorimetric Assay Kit, you can perform a spin-column separation in as little as 20 minutes — including all binding and elution steps! Our kit includes Affinity Separation Units, which incorporate specially designed membranes for quick, efficient separation of the phosphorylated peptide. This innovative kit component lets you avoid the tedious wash procedures necessary in  $^{32}\text{P}$  assays, or the electrophoresis separation step required in another non-radioactive assay kit.

**Safe.** The components of this kit are non-hazardous and may be disposed of in the sink, or in dry waste. No special handling is required, and there is no radioactive waste to dispose of.

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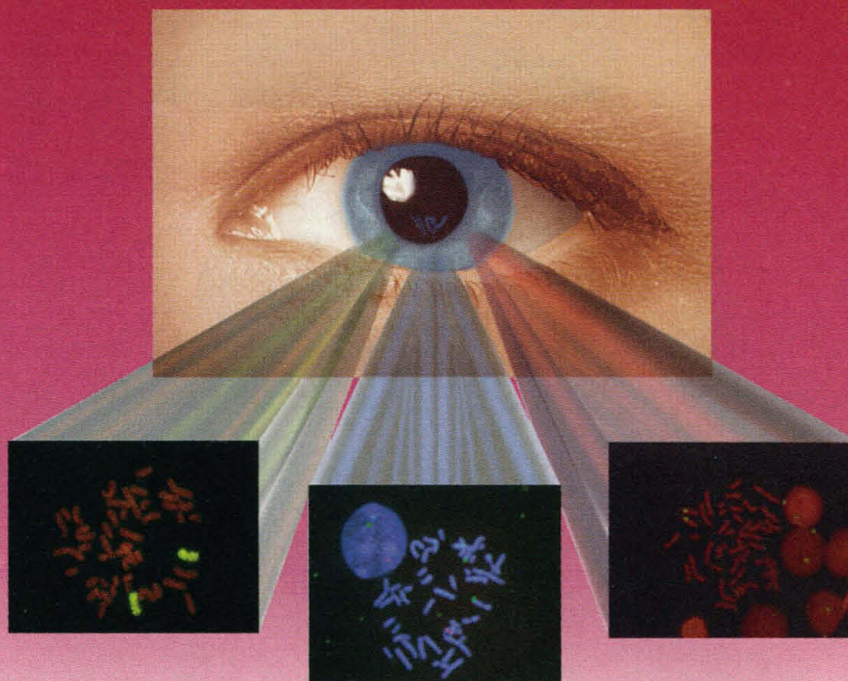
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# There's More to Our New Camera than Meets the Eye



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**You've got to see it ! It's cool !**



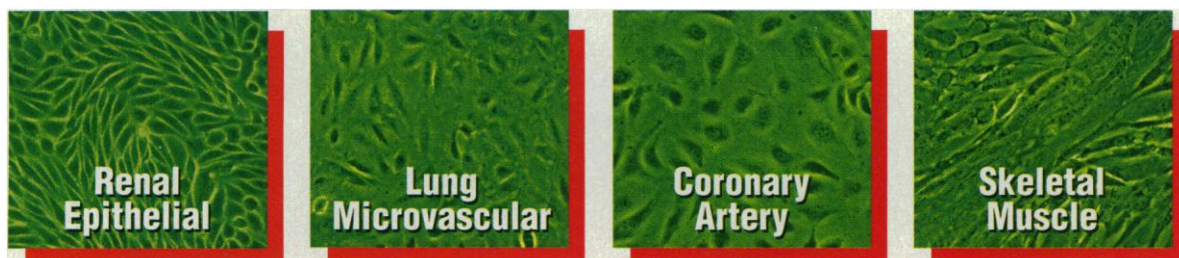
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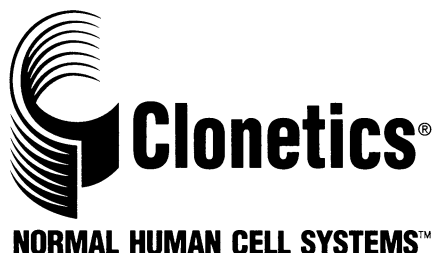


*From left to right: Clonetics' new RenalPack™-PT normal human renal proximal tubule cell system, EndoPack®-MVL normal human lung derived microvascular endothelial cell system, EndoPack®-CA normal human coronary artery endothelial cell system and MyoPack®-Sk, normal human skeletal muscle cell system*

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**(800) 852-5663, voice or (619) 541-0823, fax.**

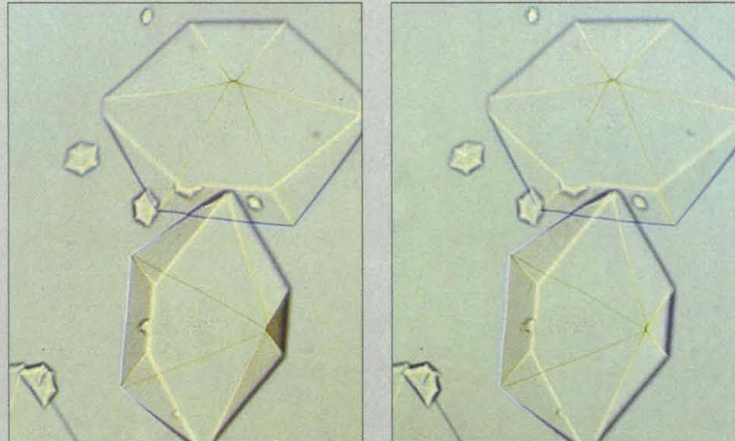


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To view this 3D pair without aid:

Hold the page close to your nose so each eye aligns with each picture. Relax your gaze, then move the page away slowly until a third picture forms in the center. This is the merged 3D image. Continue moving the page away until the image becomes focused. Edge will send you a free lunette which facilitates merging 3D images. The ability to view printed 3D pairs is an increasingly valuable skill. Shown: Turnip yellow mosaic virus crystal; Plan Achromat LWD 10x.

## CAN YOUR MICROSCOPE DO THIS?

The benefits of seeing your specimens in three dimensions seem obvious. Observe the 3D pair above. Merging them forms a 3D picture containing crucial z-axis information that's missing when either image is viewed independently. Yet there's even more here than meets the eyes.

If you can, merge the 3D pair (if you can't do it without aid, we'll send you a free image-merging lunette with our brochure). You'll notice that the resulting 3D picture appears better than the individual 2D pictures in every respect. Resolution, detail, contrast, and – of course – depth. You can thank the Edge Scientific Instruments™ R400 microscope. You also can thank the most powerful image processor in existence: Your brain.

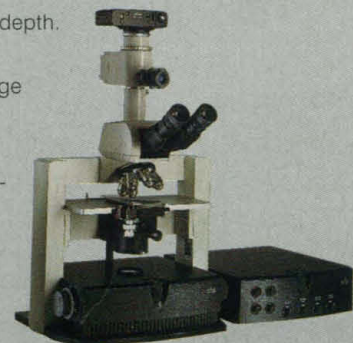
While your eyes encounter two flat pictures, your brain forms one 3D image. And this image carries additional spatial information – in highlights, shadows, and details – that lets your brain better *understand* the specimen as it really exists in three dimensions.

Fortunately, you don't have to think about this. It happens automatically, and instantly.

But you *should* think about the only microscope that gives you 3D images, both for direct observation and for recording. The R400 uses Edge's patented\* Multiple Oblique™ illumination to provide high definition 3D images in true color up to the highest magnification available. No computers or image-enhancement tools are necessary – real-time 3D images are available directly at the eyepieces, although they may be acquired for use in an image-processing system as well.

And whether you observe and record your specimens in three dimensions or in two you'll experience significant improvements in resolution, contrast, and depth of field with Multiple Oblique illumination, compared against the finest conventional light microscopes available.

If you'd like to learn more about the most significant new development in light microscopy, please call Edge at (310) 396-9333 and ask for our free brochure. In it you'll find several examples of the R400's 3D photomicrographs as well as a handy image-merging lunette.



### EDGE R400 PERFORMANCE:

MULTIPLE OBLIQUE™ ILLUMINATION  
REAL-TIME, TRUE-COLOR 3D OBSERVATION  
3D PHOTOMICROGRAPHY & VIDEO  
HIGHER RESOLUTION  
BETTER SHARPNESS  
GREATER CONTRAST  
LARGER DEPTH OF FIELD  
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2D OBSERVATION  
2D PHOTOMICROGRAPHY & VIDEO

### MULTIPLE OBLIQUE™



### EDGE R400 FEATURES:

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\*Covered by one or more of the following U.S. patents: 5,345,333 and 5,305,139. Additional U.S. and Foreign patents pending.  
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## DNA Probe Detection

The Anti-Thymine Dimer Monoclonal Antibody (mAb) is a new way to detect DNA probes in situ hybridization, Southern (DNA) hybridization, Northern (RNA) hybridization, dot blotting, DNA sequencing, chromosome mapping, and more. For this method, the DNA probe is thymine-thymine (TT)-dimerized under normal ultraviolet light instead of directly labeled by the usual, time-consuming methods. After hybridization via standard methods, the TT-dimerized probes are detected by the Anti-Thymine Dimer mAb. The advantages of the method are: no separation of labeled probe from unlabeled probe during DNA probe separation; easy penetration of the probe into cells and tissues as well as easy hybridization with target DNA because the molecular weight of the DNA probes is not increased by labeling; and good probe stability because the physical nature of the DNA probe is not changed by labeling. **Kamiya Biomedical. Circle 141.**

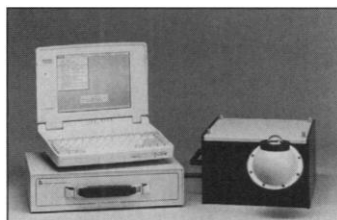
## RNA PCR Kit

The GeneAmp EZ rTth RNA PCR Kit is the first research kit designed for rapid, sensitive, and easy sample screening using RNA polymerase chain reaction (PCR). The kit makes use of both the reverse transcriptase and DNA polymerase activities of a single thermostable DNA polymerase, rTth DNA polymerase. RNA PCR facilitates detection and analysis of gene expression at the RNA level as well as detection of RNA species at very low copy numbers, such as cellular RNAs and viruses. It has become crucial to many aspects of research, from virus and expressed sequence detection to receptor development studies. The kit contains all the components required for reverse transcription of RNA to cDNA and subsequent amplification employing the GeneAmp PCR process with a

single enzyme, in a single reaction vessel, in a single buffer system. **Perkin-Elmer. Circle 142.**

## Portable Spectroradiometer

The OL Series 754 Portable UV-Visible-NIR Spectroradiometer is a line of compact, portable, double monochromator-based spectroradiometers capable of making accurate measurements in the laboratory or in the field. Three optics heads are available for covering the wavelength



range of 200 to 1600 nm. The innovative design combines compact ultraviolet-visible (200 to 800 nm), visible to near infrared (3560 to 100 nm), or near infrared (800 to 1600 nm) optimized double monochromators with a separate controller that houses all data acquisition and control electronics. The system can be configured to measure spectral irradiance, radiance, transmittance, or reflectance. **Optronic Laboratories. Circle 143.**

## Genomic DNA Purification

Genomic-tips are available for small- to large-scale preparation of ultrapure genomic DNA from blood, cultured cells, tissue, yeast, and Gram-negative bacteria. The procedure is convenient, reliable, and safe. It does not require the use of toxic reagents such as phenol or chloroform. DNA purified with Genomic-tips ranges in size

from 20 to 150 kb, with most in the 50- to 100-kb range. It is free of all contaminants such as RNA, protein, and metabolites, with  $A_{260}/A_{280}$  ratios of 1.7 to 1.9. Genomic-tips are available in a range of sizes. **Qiagen. Circle 144.**

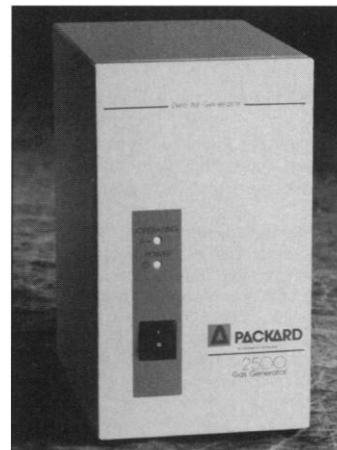
## Antibodies

A new monoclonal antibody (mAb), Anti-P-Selectin (CD-62P), blocks platelet adherence to leukocytes, small cell lung cancer, and myeloid cell lines. Other new mAbs include Anti-Integrin  $\alpha 5$  (CD49e), Anti-Integrin  $\alpha \nu \beta 5$  I, and Anti-Lewis (CD15). **Becton Dickinson. Circle 145.**

Three polyclonal antibodies are available for the study of constitutive and inducible nitric oxide synthases (NOS). The inducible NOS antibody can be used in protein immunoblot, immunocytochemical, and immunoprecipitation experiments of cytokine-induced murine samples. Researchers can detect the constitutive forms of NOS with antibodies to endothelial cell NOS and brain NOS by protein immunoblotting and immunohistochemistry. A mAb to retinoid X receptor  $\beta$  (RXR $\beta$ ) can be used in protein immunoblotting, immunofluorescence, immunoprecipitation, and gel super shift assays to detect human and mouse RXR $\beta$ . Additional steroid receptor antibodies are available against the retinoic acid, thyroid hormone, vitamin D, androgen, estrogen, and progesterone receptors. **Affinity Bioreagents. Circle 146.**

## Zero Air Generator

Model 2500 produces a continuous flow of hydrocarbon-free, ultrapure zero grade air from an existing compressed air supply for



gas chromatography. The generator reduces total hydrocarbon content to less than 0.1 ppm, measured as methane. The air from the generator produces lower, more stable detector baselines than air from cylinders, significantly enhancing the sensitivity of analysis. **Packard Instrument. Circle 147.**

## Literature

*Atlas of Practical Purification: Chromatography Media to Meet Your Needs* identifies the opportunities and problems of purifying each major class of biomolecule, takes the reader step by step through each stage of the purification process, and describes the best combination of prepacked columns and bulk media to achieve specific purification goals. **Pharmacia Biotech. Circle 148.**

*Filters* is a catalog describing more than 450 laboratory filtration products for chromatography, biotechnology, and other applications. **Alltech Associates. Circle 149.**

*The Reporter* is a newsletter on separation technologies. A recent issue discusses the analysis of taxol, a tree bark compound with tumor-fighting properties. A new high-performance liquid chromatography column provides a means for analyzing taxol in complex extracts or in relatively pure drug formations. **Supelco. Circle 150.**

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.



# Science

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## POSITIONS OPEN

### NMR FACILITY DIRECTOR RESEARCH ASSISTANT PROFESSOR University of Vermont

The Department of Biochemistry of the University of Vermont College of Medicine has an immediate opening for a **SPECIALIST** in biological NMR. This person will be responsible for maintaining, operating and scheduling a new 500 MHz instrument, for teaching faculty, postdoctoral associates and graduate students in the proper operation of the instrument, for assisting investigators in design of NMR experiments, including the implementation and use of pulse sequences, and for collaborative research efforts with users. This person will be free, but not required, to seek outside funding to establish his or her own research program. Salary is negotiable and will be commensurate with the background and experience of the candidate. Interested candidates ought to submit a résumé, complete description of NMR experience and the names of three references. Submit application materials to: **Chair, Search Committee, Department of Biochemistry, Given Building, University of Vermont, Burlington, VT 05405-0068.** The University of Vermont is an Equal Opportunity/Affirmative Action Employer. Women and people of diverse racial, ethnic and cultural backgrounds are encouraged to apply. Deadline is November 1, 1994.

### DEVELOPMENTAL PLANT BIOLOGY THE UNIVERSITY OF TENNESSEE

The Department of Botany invites applications for a tenure-track **ASSISTANT PROFESSORSHIP** in developmental plant biology to begin August 1, 1995. Applicants should have a Ph.D. with postdoctoral experience preferred. A commitment to excellence in research and teaching is required. The successful applicant will be expected to establish a vigorous externally funded research program using modern genetic, molecular and/or cellular approaches in the study of plant developmental biology and to supervise graduate students at the M.S. and Ph.D. levels. Candidates will be evaluated on the basis of research accomplishments and teaching effectiveness. Application materials should include curriculum vitae, a statement of research goals/plans, and a statement of teaching interests and philosophy. This material and three letters of reference should be sent to: **Dr. Les Hickok, Developmental Plant Biology Search, Botany Department, University of Tennessee, Knoxville, TN 37996-1100.** Screening of applicant files will begin November 15, 1994. University of Tennessee, Knoxville is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.

**FACULTY POSITION in CHEMISTRY.** The Department of Chemistry at Washington University in St. Louis invites applications for a tenure-track faculty position to begin in September 1995. Teaching responsibilities will be in inorganic chemistry, at both the undergraduate and graduate levels. We are particularly eager to identify candidates having research interests in materials chemistry; however, candidates in other research areas will receive full consideration. Primary consideration will be given to applicants at the **ASSISTANT PROFESSOR** level, but more senior candidates with distinguished records of scholarship and teaching will be considered. Candidates should submit, by 1 November 1994, a curriculum vitae and a concise, specific statement of research plans, and arrange to have three letters of reference sent to: **Professor William E. Buhro, Inorganic Search Committee, Department of Chemistry, Campus Box 1134, Washington University, St. Louis, MO 63130-4899.** Washington University is an Equal Opportunity/Affirmative Action Employer. Individuals from underrepresented groups are especially encouraged to apply.

## ACADEMIC POSITION

**ASSISTANT PROFESSOR.** The Department of Chemistry and Biochemistry of The University of Texas at Austin solicits applications for a tenure-track **ASSISTANT PROFESSORSHIP** position beginning September 1995. Exceptional candidates in all areas of chemistry/biochemistry including chemical education will be considered. Candidates who have demonstrated outstanding research ability and show promise in teaching should forward a curriculum vitae, short descriptions of research plans, and three letters of reference by November 1, 1994, to: **Search Committee, Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX 78712.** Equal Opportunity/Affirmative Action Employer.

## POSITIONS OPEN

### IMMUNOLOGY FACULTY POSITION

The Department of Biology at Georgia State University invites applications for an anticipated **TENURE-TRACK POSITION** for applicants with an established program in immunology, preferably with molecular approaches. The appointment will start on or before September 15, 1995. Applications will be considered at the position of **ASSISTANT** or **ASSOCIATE PROFESSOR**, with the level of entry being commensurate with experience. The successful candidate will be expected to maintain an independent research program(s), supervise M.S. and Ph.D. students, and participate in instruction at the graduate and undergraduate levels. The successful applicant will have the opportunity to be the major user of a new cell sorter. The Department has several core facilities housing numerous shared equipment items, including fermenters, a phosphorimager, DNA/protein synthesizers and sequencers. Applications, including curriculum vitae, reprints, statement of research plans and three letters of reference should be sent to: **Chair of Search Committee, Department of Biology, P.O. Box 4010, Georgia State University, Atlanta, GA 30302-4010.** Deadline for receipt of application is **November 15, 1994.** Georgia State University, a unit of the University System of Georgia, is an Equal Opportunity/Affirmative Action Employer.

### CELLULAR AND MOLECULAR NEUROBIOLOGIST PURDUE UNIVERSITY Department of Biological Sciences

Applications are invited for a tenure-track faculty position at the **ASSISTANT/ASSOCIATE PROFESSOR** level. Candidates must have a Ph.D. degree or equivalent and relevant postdoctoral experience, and are expected to develop a rigorous, extramurally funded research program and to participate in the teaching program of the department.

We seek a neurobiologist who utilizes molecular and cellular approaches to address questions in the areas of development, signal transduction, or receptor function in a vertebrate or invertebrate model system. The position includes competitive salary and start-up funds.

Applicants should send a curriculum vitae, bibliography, a short description of their research and teaching interests, and the names of at least three references to: **Chair, Neurobiology Search Committee, Department of Biological Sciences, Purdue University, West Lafayette, IN 47907-1392.** Applications will be accepted until December 1, 1994, or until the position is filled. An Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR of Chemistry, Rice University (Tenure-track).** Imaginative and energetic candidates are sought in areas of experimental physical chemistry which complement Rice University's initiative in nanoscience and nanotechnology. Emphasis will be placed on innovative research programs which transcend traditional boundaries, especially those concerned with the study of matter on a nanometer scale. Candidates should send letters of recommendation, a résumé, and a description of their proposed research program to: **Professor Philip R. Brooks, Faculty Search Committee, Department of Chemistry, Rice University, P.O. Box 1892, Houston, TX 77251-1892.** Rice University is an Equal Opportunity/Affirmative Action Employer.

### ASSISTANT PROFESSORSHIP BIOCHEMIST/BIOPHYSICIST STANFORD UNIVERSITY

The Department of Biological Sciences invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. We seek individuals using biochemical and biophysical approaches to study basic cell biological problems. This could include the study of macromolecular interactions and mechanisms in process such as DNA replication, RNA transcription, protein transport, cytoskeletal function, signal transduction, cell cycle regulation, and organelle assembly.

Applications from women and members of minority groups are strongly encouraged. Applicants for this position should send a letter of application, a curriculum vitae, a statement of research interests, a statement of teaching experience and interests and the names/addresses of three references to:

**Biochemistry/Biophysics Search Committee  
Department of Biological Sciences  
Gilbert Room 109  
Stanford University  
Stanford, CA 94305-5020**

The closing date for applications is November 30, 1994.



Howard Hughes Medical Institute

# Predoctoral Fellowships in Biological Sciences

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## 1995 Competition

80 Fellowships will be awarded by the Howard Hughes Medical Institute for study toward a Ph.D. or Sc.D. degree in the biological sciences listed below. Awards, based on an international competition, focus on research directed to understanding basic biological processes and disease mechanisms. Fellowships may be held at any academic or research institution with appropriate degree programs.

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## Fellowship Terms

- Full-time study toward the Ph.D. or Sc.D.
- Up to five years of support possible
- \$14,500 annual stipend
- \$14,000 annual cost-of-education allowance

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## Fields of Study

- Eligible fields:

|                       |                      |                    |
|-----------------------|----------------------|--------------------|
| biochemistry          | genetics             | pharmacology       |
| biophysics            | immunology           | physiology         |
| biostatistics         | mathematical biology | structural biology |
| cell biology          | microbiology         | virology           |
| developmental biology | molecular biology    |                    |
| epidemiology          | neuroscience         |                    |

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## Eligibility

- Beginning graduate study (prior study toward an M.P.H. or a medical degree does not rule out eligibility)
  - college seniors
  - first year graduate students
  - medical students and physicians (M.D., D.O., D.D.S., or D.V.M.) not past the first year of a Ph.D. or Sc.D. degree program
  - or in a funded M.D./Ph.D. program
  - o citizenship requirements: U.S. citizens may study abroad, but others must study in the United States

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## Schedule

Application deadline: November 4, 1994  
Awards announced: early April 1995  
Fellowships start: June 1995–January 1996

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## 1995 Program Announcements, Eligibility Guidelines, and Applications

Hughes Fellowship Program  
The Fellowship Office  
National Research Council  
2101 Constitution Avenue  
Washington, DC 20418, United States of America  
Telephone (202) 334-2872  
Fax: (202) 334-3419  
E-mail: [infofell@nas.edu](mailto:infofell@nas.edu)

The Howard Hughes Medical Institute, an Equal Opportunity Employer, welcomes applications from all qualified candidates and encourages women and members of minority groups to apply.

## POSITIONS OPEN

### POPULATION/EVOLUTIONARY GENETICIST

Population or evolutionary genetics, tenure-track **ASSISTANT PROFESSOR** or **ASSOCIATE PROFESSOR**, to begin fall 1995. Applicants must have a strong, independent research program, preferably in an area that complements our faculty's research in population and ecological genetics, molecular evolution and systematics, and the ecological genetics of species interactions. Candidates pursuing both theoretical and empirical research are particularly encouraged to apply. Teaching requirements will include a graduate course in population/quantitative genetics and shared responsibilities with general genetics. The appointment will be at least half-time in the Department of Genetics and Cell Biology, with the balance in either the Department of Zoology or Department of Botany. Postdoctoral experience is preferred. Screening of applications will begin November 15, 1994, and continue until the position is filled. Applicants should indicate a preference for consideration at the Assistant or Associate level. Applicants should send curriculum vitae, a statement of current research and long-term research interests, and three letters of recommendation to: **Chairman, Population Genetics Search Committee, Department of Genetics and Cell Biology, Washington State University, Pullman, WA 99164-4234.** Address Email inquiries to: [popgen@delta.math.wsu.edu](mailto:popgen@delta.math.wsu.edu). *Washington State University is an Equal Opportunity/Affirmative Action Educator and Employer. Members of ethnic minorities, women, Vietnam era or disabled veterans, persons of disability and/or persons age 40 and over are encouraged to apply.*

### TENURE-TRACK FACULTY POSITIONS NEUROSCIENCES CASE WESTERN RESERVE UNIVERSITY

The Department of Neurosciences at Case Western Reserve University School of Medicine invites applications for two tenure-track positions to be filled at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. The department seeks to recruit individuals who will develop strong independent research programs in integrative neuroscience studying how the vertebrate CNS processes and integrates information and/or generates appropriate behavioral output. Individuals using multidisciplinary approaches including reduced preparations and/or model systems are particularly encouraged to apply. While these appointments are designed to develop a focus in integrative neuroscience that will complement the research interests of the 12 primary faculty which include cellular, molecular and developmental neuroscience, outstanding candidates in any area of neuroscience will be considered. Excellent opportunities also exist to interact with 15 additional neuroscientists in other departments who have active roles in research and teaching. The department, recently consolidated in newly renovated space, provides excellent state-of-the-art facilities. Teaching duties involve lecturing on neuroscience to medical and graduate students. Those interested should submit a curriculum vitae and a brief summary of their research plans by November 1, 1994, as well as arrange to have four letters of reference sent to: **Dr. Story Landis, Search Committee, Department of Neurosciences, Case Western Reserve University Medical School, 10900 Euclid Avenue, Cleveland OH 44106-4975.** *Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.*

The Department of Physiology and Cell Biology welcomes applications for **FACULTY POSITIONS** at the **ASSISTANT** and **ASSOCIATE PROFESSOR** levels for individuals interested in joining an ongoing, recognized and productive program in gastrointestinal physiology and integrative mucosal biology. The future emphasis of this program will be to apply advances in molecular and cellular biology to the understanding of integrative functions at the tissue and organ levels.

We are particularly interested in expanding our expertise in the enteric nervous system and mucosal growth development and adaptation. Interested individuals should forward their curriculum vitae and bibliography, together with a brief statement of future research goals and the names of three potential references to: **Dr. Stanley B. Schuktz, Professor and Chairman, Department of Physiology and Cell Biology, University of Texas Medical School, P.O. Box 20708, Houston, TX 77225.**

The deadline for applications is December 15, 1994. *The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*

## POSITIONS OPEN

### TERRESTRIAL PLANT ECOLOGIST Clare Boothe Luce Faculty Chair Creighton University

Creighton University invites applications from women in the field of terrestrial plant ecology for a **Clare Boothe Luce Faculty Chair** in the Biology Department. This appointment is a nine-month, tenure-track position at the **ASSISTANT PROFESSOR** level and begins in August 1995. The position is a rotating chair, established under terms of the Luce Foundation to increase the representation of women on natural science faculties. After an appointment of up to five years, the recipient is eligible for tenure and advancement as a regular member of the Biology Department. We seek an individual with the potential to be an excellent scholar-teacher and an exemplary mentor for undergraduate women interested in scientific careers. The successful applicant will teach two courses per semester (including offerings in terrestrial ecology and introductory botany, a research seminar for Luce Fellows, and advanced courses in their specialty). The chair recipient is also expected to develop an effective and sustainable research program, direct the Luce Scholarship program, and participate in the interdepartmental Environmental Science program. Creighton is a Jesuit, Catholic institution that seeks qualified applicants from all backgrounds who believe they can contribute to the university's outstanding educational traditions. We encourage applications from minorities. To apply, a curriculum vitae, statement of research and teaching interests, documentation of teaching effectiveness (if available), undergraduate and graduate transcripts, and three letters of reference must be received by November 11, 1994. Please direct inquiries and application materials to: **Dr. John F. Schalles, Luce Chair Search Committee, Biology Department, Creighton University, Omaha, NE 68178-0103, USA.**

### BRANDEIS UNIVERSITY MOLECULAR NEUROBIOLOGY

The Biology Department and Center for Complex Systems invite applications for a tenure-track **ASSISTANT PROFESSOR** position in molecular neurobiology. All aspects of this neurobiological area will be considered, but we are particularly interested in candidates who are studying the regulation of expression of genes and proteins within nervous systems and excitable cells. Responsibilities will include teaching at both the undergraduate and graduate levels. Applicants should have at least two years of postdoctoral experience; should send a curriculum vitae as well as a statement of research interests; and should arrange for at least three letters of recommendation. Have all such application materials sent to: **Neurobiology Search Committee, Center for Complex Systems, Brandeis University, 415 South Street, Waltham, MA 02254-9110.** The deadline for applications is November 1, 1994. *Brandeis University is an Equal Opportunity/Affirmative Action Employer. Brandeis University encourages women and minorities to apply.*

**BOTANIST/ECOLOGIST:** Tenure-track appointment at the rank of **ASSISTANT PROFESSOR** beginning late August 1995. Teach botany, general ecology; participate in team-taught general biology course. Familiarity with midwest flora expected. Direct undergraduate students in research and seek external funding for research. Ph.D. required. Review of applications begins October 20, 1994. Send letter of application, curriculum vitae, three letters of recommendation, and transcripts of undergraduate and graduate work to: **Dr. Jim Eckblad, Head, Department of Biology, Luther College, Decorah, IA 52101. Email: [eckbladj@luther.edu](mailto:eckbladj@luther.edu).** *Affirmative Action/Equal Opportunity Employer.*

### HARVARD UNIVERSITY DEPARTMENT OF CHEMISTRY ASSISTANT PROFESSOR OF CHEMISTRY

Applications are invited for an **ASSISTANT PROFESSORSHIP** in any area of chemistry, including inorganic, organic, physical and interdisciplinary fields. Applicants should arrange to have three letters of recommendation sent independently and should provide curriculum vitae and brief descriptions of their future research plans. Applications and supporting materials should be sent no later than 1 November 1994 to: **Professor Roy G. Gordon, Chairman, Department of Chemistry, Harvard University, 12 Oxford Street, Cambridge, MA 02138-2902.** *Harvard University is an Affirmative Action/Equal Opportunity Employer. Applications from women and minority group members are encouraged.*

## POSITIONS OPEN

### ASSISTANT PROFESSOR-BIOCHEMISTRY JOHNS HOPKINS UNIVERSITY

The Department of Biochemistry invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Applicants should have significant research accomplishments, the ability to develop a vigorous basic research program, and a strong commitment to graduate and postdoctoral training. Research areas of special interest include membrane biochemistry, enzyme mechanisms, biophysical aspects of macromolecular function, molecular nutrition, and metabolic regulation. Applicants should submit, prior to November 15, 1994, curriculum vitae, reprints of key publications, and a statement of future research plans (one to three pages), as well as arrange for three letters of recommendation to be sent to: **Dr. Roger McMacken, Chairman, Department of Biochemistry, Johns Hopkins University, School of Hygiene and Public Health, 615 North Wolfe Street, Baltimore, MD 21205.** *Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply.*

### ASSISTANT PROFESSORS COLORADO STATE UNIVERSITY

The Department of Biochemistry and Molecular Biology seeks applications for two tenure-track positions from individuals with biophysical or biochemical backgrounds and research interests in protein folding or protein-nucleic acid interactions. The department has considerable research expertise in the areas of structure-function analysis of macromolecules and the regulation of gene expression. It occupies a new building with modern laboratories and a full complement of core facilities. Emphasis will be to identify individuals whose research both broadens and complements our current expertise. Candidates must have a Ph.D. degree, postdoctoral experience, and a demonstrated ability to develop an independent and productive research program. The successful applicants must also participate effectively in undergraduate and graduate teaching. Send curriculum vitae, a statement of research interests and direct three references by November 30, 1994, to: **Dr. N. P. Curthoys, Department of Biochemistry and Molecular Biology, Colorado State University, Fort Collins, CO 80523.** *Colorado State University is an Equal Opportunity/Affirmative Action Employer. Equal Opportunity Office: 21 Spruce Hall.*

**TENURE-TRACK FACULTY POSITION:** The Department of Pathology at Stanford University School of Medicine seeks candidates for appointment at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**. Individuals must have an established record of scholarly productivity, and must be capable of establishing a strong independent research program. Of special interest are candidates with established credentials or promise in experimental oncology. Applicants should send their curriculum vitae and names of references to: **Klaus G. Bensch, M.D., Professor and Chairman, Department of Pathology, Stanford University Medical School, Stanford University Medical Center, Stanford, CA 94305.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

### ASSISTANT OR ASSOCIATE PROFESSOR, PLANT ECOLOGY The University of Tennessee

The Department of Botany and Graduate Program in Ecology invite applications for a tenure-track **ASSISTANT** or **ASSOCIATE PROFESSOR** position in **PLANT ECOLOGY**. Ph.D. with a strong field orientation and expertise in physiological ecology, population ecology or plant community ecology required. Position to begin in August 1995. The successful applicant will be expected to establish a vigorous, externally funded research program and to teach at the undergraduate and graduate levels. Candidates will be evaluated on the basis of research accomplishments, research potential, teaching effectiveness, and the needs of the Department of Botany and Graduate Program in Ecology. Application materials should include curriculum vitae, a statement of research goals, a statement of teaching interests and philosophy, and three letters of reference. All materials should be sent to: **Chair, Plant Ecology Search Committee, Botany Department, University of Tennessee, Knoxville, TN 37996-1100.** Screening of applicant files will begin January 15, 1995. *University of Tennessee, Knoxville is an Equal Employment Opportunity/Affirmative Action/Title IX/Section 504/ADA Employer.*



**SIBIA** is expanding its interdisciplinary research and development on therapeutics for diseases of the central nervous system. We have established an impressive record in the development of innovative technologies integral to the field of neuroscience and the biopharmaceutical industry. We are now seeking an experienced Scientist for a critical role in drug discovery for the neuropharmaceuticals of the future!

### DRUG SCREENING

You will focus on the identification of novel lead molecules based on high-throughput functional screening of compounds against recombinant brain receptors and/or ion channels. You will interact with members of our Chemistry, Neuropharmacology, Psychopharmacology and Molecular/Cell Biology Laboratories to develop new assays and pursue leads identified in the screening program. You will be responsible for management of the drug screening laboratory, strategic direction, and data analysis. A Ph.D. in Pharmacology or Chemistry with at least five years of postdoctoral experience in drug screening in an industrial setting is preferred.

Located on San Diego's beautiful La Jolla coastline, SIBIA offers not only a challenging and aesthetic environment, but also a competitive salary and benefits package. Send your C.V. with names of three references to: Lynn Alba, SIBIA, 505 Coast Blvd., South, Suite 300, La Jolla, CA 92037. EOE.

**SIBIA**

**A pharmaceutical research centre  
located in the Paris region  
has a position for :**

## **Ph D MOLECULAR BIOLOGY**

for the cloning and transfection of receptors and other drug targets, with expression in stable cell lines. An experience of in situ mutagenesis would be an advantage, as would postdoctoral experience in the pharmaceutical industry.

This position gives a unique opportunity to join a recently formed innovative team collaborating with several other drug discovery groups.

Please send a CV and handwritten letter mentioning reference number 52502 to Media System, 6 impasse des Deux Cousins, 75849 Paris Cedex 17, France.

MEDIA SYSTEM

### **NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT DIVISION OF INTRAMURAL RESEARCH CHIEF, HUMAN GENETICS BRANCH**

The National Institute of Child Health and Human Development is recruiting for the key position of Chief of the Human Genetics Branch, Division of Intramural Research. Applicants must have an M.D. or equivalent degree and experience in research on human genetic diseases.

The Chief, Human Genetics Branch, will have the major responsibility for administering a program in clinical and basic research. Specifically, he/she will conduct research in the area of his/her choice (within the broad framework of human genetics), and administer several independent research groups focused on human biochemical genetics, inborn metabolic errors, neurogenetics, cellular differentiation, developmental genetics, and genetic disorders of drug metabolism.

Applicants must have an established record of excellence in the field of human genetics research and must specifically provide evidence of their capacity to meet the following criteria:

- 1) Ability to supervise and coordinate a large and highly specialized clinical and laboratory program for the investigation of human genetic disorders;
- 2) Knowledge of advanced aspects of molecular and cellular biology;
- 3) Ability to conduct a personal research program of high impact.

The base salary ranges up to \$91,029, depending on qualifications. Applicants will also be eligible for a physician's allowance up to \$20,000 as well as other bonuses and awards (with a current maximum of \$148,400). Please submit curriculum vitae and bibliography to: Dr. Tracey Roualt, Search Committee Chair, NIH, 9000 Rockville Pike, Building 31, Room 2A46, Bethesda, MD 20892-2725 by November 15, 1994.

Under the Affirmative Employment Program, minorities, women and persons with disabilities that meet the eligibility criteria are especially encouraged to apply. U.S. citizenship is required.

**NIH is an Equal Opportunity Employer**

## POSITIONS OPEN

### MICHIGAN STATE UNIVERSITY- DEPARTMENT OF ENERGY PLANT RESEARCH LABORATORY Faculty Positions in Plant Biology

The Michigan State University-Department of Energy Plant Research Laboratory has two tenure-track faculty positions available at the **ASSISTANT PROFESSOR** level. Persons conducting innovative research in plant biochemistry or plant responses to pathogenic microorganisms are particularly encouraged to apply; however, outstanding candidates in other areas of plant biology will be seriously considered. Preference will be given to individuals working in underdeveloped areas that show promise for future advances.

The Plant Research Laboratory, with major funding from the U.S. Department of Energy provides a stimulating atmosphere and excellent facilities for research in the plant sciences. Faculty members are jointly appointed in an appropriate academic department. Adequate laboratory space and set-up funds as well as continuing research support will be provided.

Applicants should have postdoctoral research experience with demonstrated productivity and evidence of potential for independent research. To assure consideration, applications should be received by November 1, 1994. Applications, including curriculum vitae, description of research accomplishments and future interests, and three letters of reference, should be sent to: **Kenneth Keegstra, Director, MSU-DOE Plant Research Laboratory, Michigan State University, East Lansing, MI 48824.** *Michigan State University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are particularly encouraged to apply.*

**RESTORATION ECOLOGY.** The Environmental Studies Board at the University of California, Santa Cruz, is seeking applicants for an **ASSISTANT PROFESSOR** in restoration ecology with research emphasis in such areas as theory of community and ecosystem responses to stress; restoration of species richness, habitat diversity and function; landscape/watershed diversity and dynamics; restoration and management of forest, estuarine, agricultural and wetland; and regulatory and policy aspects of ecological restoration projects. Preference given to candidates who can apply the fundamentals of ecology to land management and conservation policy. Duties include disciplinary and interdisciplinary teaching at the graduate and undergraduate levels. Candidates are expected to show potential for excellence in teaching, have received or will be awarded a Ph.D. degree by September 1995 in biology, ecology, geology, hydrology, forestry, agronomy or a closely related field and have a record of publication in at least one of the above research areas. A letter of application, three letters of recommendation and a curriculum vitae listing two additional reviewers should be sent to: **Michael Soule, Environmental Studies Board, University of California, Santa Cruz, CA 95064** by October 15, 1994. Refer to **00476**. Write for full position description. Appointment contingent upon budgetary approval. *University of California, Santa Cruz is an Affirmative Action/Equal Opportunity Employer.*

**ASSISTANT/ASSOCIATE PROFESSOR:** The Department of Anatomy and Cell Biology in the Faculty of Medicine at the University of Alberta invites applications for a position as **ASSISTANT/ASSOCIATE PROFESSOR** to investigate modern biological questions using cellular/molecular approaches. Salary range: \$40,035 to \$71,725 per annum (under review), plus comprehensive benefits. Applicants should have proven records of research achievement and will be eligible for funding by the Alberta Heritage Foundation for Medical Research. The successful candidate will be expected to carry on an independent research program, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. A contribution to the department's teaching program will also be expected. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Please send a curriculum vitae, statement of research interests, and ask three to five referees to send letters to: **Dr. Richard Rachubinski, Professor and Chair, Anatomy and Cell Biology, University of Alberta, Edmonton, Alberta T6G 2H7 Canada.** Deadline for receipt of applications is December 6, 1994. *The University of Alberta is committed to the principle of equity in employment. The University encourages applications from aboriginal persons, disabled persons, members of visible minorities, and women.*

## POSITIONS OPEN

**CONSERVATION BIOLOGY/ECOLOGY.** The Environmental Studies Board at the University of California, Santa Cruz, is seeking applicants for an **ASSOCIATE** or **FULL PROFESSOR** in conservation biology and ecology with research emphasis in exploitation and viability of populations and communities, genetic biodiversity, habitat loss, or ecosystem management. Duties include disciplinary and interdisciplinary teaching at the graduate and undergraduate levels. Candidates are expected to show evidence of an established research program, including major publications in disciplinary and interdisciplinary arenas and excellence in teaching. Experience in interdisciplinary academic management is highly desirable. Candidates must be at the senior level with a Ph.D. degree and must have a strong research record in biology, ecology, or a closely related biological discipline. A letter of application, three letters of recommendation and a curriculum vitae listing two additional reviewers should be sent to: **Michael Soule, Environmental Studies Board, University of California, Santa Cruz, CA 95064** by October 15, 1994. Refer to **00022**. Write for full position description. Appointment contingent upon budgetary approval. *University of California, Santa Cruz is an Affirmative Action/Equal Opportunity Employer.*

**POLYMER CHEMISTRY:** The College of Staten Island (CSI), a senior college of The City University of New York (CUNY), invites applications for two tenure-track faculty positions at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level. Candidates should have research expertise in areas that complement our strengths in polymers and biopolymers. The successful candidate will be expected to put equal emphasis on establishing a vigorous research program and demonstrating a sustained commitment to undergraduate and graduate teaching. One position is for polymer/analytical-physical chemistry, with primary undergraduate teaching responsibility for analytical chemistry. The research area for the second position is open. The Chemistry Department participates in CUNY Ph.D. programs in polymer chemistry and biochemistry. The College recently moved to a new 204-acre campus equipped with first-rank teaching and research facilities. Ph.D. required, with postdoctoral experience preferred. Appointment is effective February or September 1995. Applicants should submit a curriculum vitae, list of publications, descriptions of research and teaching interests, equipment needs, and names and addresses of three references by October 15, 1994, to: **Professor Nan-Loh Yang, Chair, Search Committee, Department of Chemistry, The College of Staten Island/CUNY, 2800 Victory Boulevard, Staten Island, NY 10314.**

*Equal Opportunity/Affirmative Action Employer.*

**VISITING ASSISTANT PROFESSOR, POST-DOCTORAL FELLOW AND RESEARCH ASSOCIATE** positions are available immediately for research on mechanisms of learning and memory and/or biological clocks in *Aplysia*. We are particularly interested in individuals with backgrounds in neuroscience and experience in biochemistry and molecular biology. Research is carried out in spacious new labs with ample possibilities for interactions with others in strong Biochemistry and Biology Departments and the excellent scientific community of the Houston Medical Center. The learning and memory research involves collaborative projects with **Dr. J. H. Byrne** at the University of Texas Health Science Center. The Visiting Assistant Professor position will involve some instructional duties. Applicants should submit curriculum vitae and names of three references to: **A. Eskin, Department of Biochemistry, University of Houston, Houston, TX 77204-5934.**

*The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.*

**DUKE UNIVERSITY.** Applications and nominations are sought for a tenure or tenure-track position in organic chemistry at the **ASSISTANT** or **ASSOCIATE PROFESSOR** level beginning in August 1995. Each applicant should send a résumé, research plans, and arrange for three letters of recommendation to be sent to: **Faculty Search Committee, 101 P.M. Gross Chemical Laboratory, Duke University, Box 90346, Durham, NC 27708-0346.** *Duke University is an Affirmative Action/Equal Opportunity Employer. Applications from qualified women and minority candidates are especially welcome. Applications will be considered as they arrive; on-campus interviews will begin after October 15, 1994.*

## POSITIONS OPEN

### ASSOCIATE PROFESSOR/ASSOCIATE DIRECTOR MICROBIOLOGY DIVISION Department of Pathology University of California, Irvine

The Department of Pathology is seeking a qualified candidate at the level of tenured **ASSOCIATE** or **FULL PROFESSOR**. Applicants must have an established record of teaching and basic and applied scholarly research accomplishments. The individual chosen will serve as the **ASSOCIATE DIRECTOR** of the Medical Microbiology Division within the Pathology Department with specific service and teaching responsibilities in the Bacteriology and Mycobacteriology Sections. Experience in the laboratory diagnosis of sexually transmitted diseases and mycobacterial infections is desirable. The candidate will be expected to demonstrate ability to compete for extramural funding to support a research program. The candidate for the position should be a nationally recognized Microbiologist with an M.D. or Ph.D. degree and appropriate licensures. The position will be open until filled. Résumés and inquiries should be directed to: **Yutaka Kikkawa, M.D., Professor and Chairman, Department of Pathology, University of California, Irvine, Irvine, CA 92717-4800.** *The University of California, Irvine is rooted in education and enriched by diversity.*

**DEVELOPMENTAL BIOLOGIST,** Eastern Michigan University: Tenure-track **ASSISTANT PROFESSORSHIP** available fall 1995. Department of Biology consists of 23 full-time faculty, offers undergraduate and graduate M.S. programs. We seek a developmental biologist working at the molecular level, able to teach developmental biology and genetics. Position requires Ph.D., teaching experience, successful research program capable of attracting external funding. Submit letter of interest, curriculum vitae, transcripts, descriptions of research and teaching interests/philosophy, recent reprints, three letters of reference by October 31, 1994, to: **Position F9501, 204 King Hall, Eastern Michigan University, Ypsilanti, MI 48197.** For additional information contact: **Dr. Douglas Shapiro, Department Head, Telephone: 313-487-4242.** *Women and members of minority groups encouraged to apply. Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT PROFESSOR OF FOOD CHEMISTRY

The Department of Food Science at Cornell University invites applications for a 12-month tenure-track **ASSISTANT PROFESSORSHIP**. Responsibilities will include teaching a junior/senior level course in food chemistry, participation in a graduate level team-taught course in advanced food chemistry, and development of an innovative research program in food chemistry that will attract external funding and provide research training for undergraduate and graduate students. Qualifications include a Ph.D. in food science, biochemistry, chemistry, or closely related field and demonstrated achievement or potential in effective teaching and creative research. Applicants should submit a letter of application; statement of teaching and research interests and goals; curriculum vitae; undergraduate and graduate transcripts; and have three letters of reference sent to: **Dennis D. Miller, Department of Food Science, 106 Stocking Hall, Cornell University, Ithaca, NY 14853-7201. Telephone: 607-255-7616.** Review of applications will begin on Nov. 1, 1994. *Cornell University is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITIONS/BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry and Molecular Biology of New York Medical College has two anticipated positions available. Position 1 - Two-year, non-tenure-track **ASSISTANT PROFESSOR**. A primary responsibility will be participating in the teaching of Medical Biochemistry. Prior teaching experience, with particular expertise in carbohydrate metabolism is strongly preferred. This position is available immediately, but no later than December 1, 1994. Position 2 - **ADJUNCT PROFESSOR** - To participate in teaching of Medical Biochemistry. Previous experience in teaching of medical students is required and expertise in intermediary metabolism is highly preferred. This position is available for the two months of January - February 1995. Send curriculum vitae to: **Dr. Ira Schwartz, Department of Biochemistry and Molecular Biology, New York Medical College, Valhalla, NY 10595. Email: Schwartz@nymc.edu.**

*An Equal Opportunity Employer.*



## Research Scientist Hematopoiesis

**Progenesys**, a new joint venture between SyStemix, Inc. and Sandoz Pharmaceutical Corp., is applying its highly advanced hematopoietic cell-based, somatic gene therapies against HIV infection. We are seeking a team expert in hematopoiesis and stem cell biology to work toward optimization of retroviral transduction of hematopoietic stem cells.

Requires a PhD in hematology and 2+ years' post-doctoral experience in stem/progenitor cell growth, differentiation and behavior. Experience with gene transfer into hematopoietic stem/progenitor cells highly desirable.

We offer a highly competitive compensation package. For immediate consideration, please send your CV to Progenesys, Dept. SRL94, 3155 Porter Drive, Palo Alto, CA 94304; fax (415) 813-4121. EOE.

## Deputy Director

The National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIH) is recruiting for the Senior Executive Service position of Director, Division of Intramural Research. Salary range between \$96,830 - \$116,529 PA. (M.D.s may be eligible for up to \$20,000 Physician's Comparability Allowance.) The incumbent of this position provides overall executive direction and scientific leadership to a staff of over 900 employees in 17 basic and clinical research laboratories, and manages an annual budget in excess of \$128,300,000. Responsibilities include developing directing, and coordinating the research program, allocation of staff and physical and financial resources, program planning and oversight of day-to-day program operations. Applicants must hold either an M.D. degree or Ph.D. degree in one of the biomedical sciences, and demonstrate a record of scientific accomplishment in the fields of microbiology, infectious diseases, and basic or clinical immunology, or other closely related fields. U.S. Citizenship is required. Submit a application for Federal Employment, (SF-171), C.V., and bibliography to:

**Mrs Janie R. Lacy**  
Personnel Officer, NIAID  
National Institutes of Health  
Building 31, Room 7A-2  
9000 Rockville Pike  
Bethesda, Maryland 20892  
(301) 496-9686

Selection for this position will be based solely on merit, with no discrimination for nonmerit reasons such as race, color, religion, sex, national origin, political affiliation, marital status, sexual orientation, handicapping condition, age, or membership or nonmembership in an employee organization

NIH is an Equal Opportunity Employer

## WAKE FOREST UNIVERSITY

### ASSISTANT PROFESSOR BACTERIAL OR VIRAL IMMUNOLOGY

The Department of Microbiology and Immunology of the Bowman Gray School of Medicine, Wake Forest University, invites applications for a tenure-track position, beginning July 1, 1995, for an individual with a research program that focuses on the nature of the immune response against pathogenic bacteria or viruses. The successful candidate will be expected to establish a strong, independent research program and participate in the training of Ph.D. students and the teaching of medical students. The Department has strong research programs in the areas of cytokines, T cell biochemistry, bacterial pathogenesis, virus assembly and pathogenesis, neutrophil biochemistry, and mRNA metabolism. NIH-funded training grants in *Immunology and Pathogenesis* and *Cell Signaling* (with the Department of Biochemistry) are available for the support of students. The Comprehensive Cancer Center of Wake Forest University and the Program in Molecular Genetics provide outstanding core facilities for a range of research needs and offer outstanding opportunities for research collaborations. Applicants should send a curriculum vitae, description of research plans, and the names and addresses of three references to: **Dr. Steven B. Mizel, Department of Microbiology and Immunology, Bowman Gray School of Medicine, Medical Center Blvd., Winston-Salem, NC 27157-1064.**

Wake Forest University is an Equal Opportunity/Affirmative Action Employer.

## Put your knowledge on the map.

The King Faisal Specialist Hospital and Research Centre in Riyadh, Saudi Arabia, in collaboration with the Department of Genetics, Yale School of Medicine, is seeking a Director for the Hospital's new Laboratory of Molecular Genetics and Diagnostics.

The Director will establish the new service and will consult and interact with colleagues at Yale on a continuing basis as part of Yale's ongoing collaboration with KFSH & RC. The laboratory will initially use established probes and techniques for the diagnosis and molecular characterization of metabolic diseases prevalent in the Kingdom. It is expected that the laboratory will gradually expand the number of diseases to which it will apply molecular diagnostic techniques, with particular emphasis on those conditions of special interest to the Section of Inborn Errors of Metabolism. The Director will be eligible for a concurrent appointment as an adjunct faculty member at the Yale School of Medicine.

The position of Directorship is a Scientist or Associate Scientist level position and

requires a Ph.D. or M.D., or equivalent with three to five years of postdoctoral training in molecular genetics, preferably emphasizing human disease. Experience with current techniques of molecular biology and diagnostics including PCR and its many variations, SSCP analysis and DNA sequencing is required.

**Other research positions available. Please call for more information.**

You will enjoy free furnished housing, free airfare, 50 paid days of leave each year, free medical care and a potentially tax-free salary. Please send a comprehensive CV and list of publications to: **HCA International, 2515 Park Plaza, Nashville, TN 37203.** Or call 1-800-932-4685. EOE.



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AND RESEARCH CENTRE  
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YOUR PASSAGE TO INTERNATIONAL HEALTHCARE

## POSITIONS OPEN

### TENURE-TRACK ASSISTANT PROFESSOR/RUTGERS UNIVERSITY

The Institute of Marine and Coastal Sciences of Rutgers University invites applications for a position as a tenure-track **ASSISTANT PROFESSOR**. We seek an oceanographer with research interests in phytoplankton ecology and/or water column geochemistry. Experience in remote sensing desirable.

Applicants must have a Ph.D., and strong record of published research. The successful candidate will be expected to teach primarily at the senior undergraduate and graduate level, and to establish an innovative research program.

A curriculum vitae, a statement of research interests, and the names of four references should be sent prior to November 1, 1994, to: **Dr. J. Frederick Grassle, Director, Institute of Marine and Coastal Sciences, Rutgers University, P.O. Box 231, New Brunswick, NJ 08903-0231.**

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

### CELL BIOLOGIST CARNEGIE MELLON UNIVERSITY

The Department of Biological Sciences, Carnegie Mellon University, is seeking a Cell Biologist for a tenure-track appointment at the **ASSISTANT PROFESSOR** level. Exceptional candidates for appointment at a higher level will also be considered. Candidates using innovative molecular and/or technological approaches to fundamental problems in Cell Biology are especially encouraged to apply. To apply, submit a curriculum vitae along with a description of past accomplishments, present activities and future research plans; also arrange to have three letters of reference sent directly to: **Cell Biology Search Committee, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.** Application deadline: November 15, 1994. *Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.*

**BIOCHEMISTRY:** The Department of Chemistry at The University of Toledo invites applications and nominations for a tenure-track **ASSISTANT PROFESSOR** faculty position in the field of biological chemistry or any associated area of chemistry. The position requires a Ph.D. in chemistry or biochemistry and postdoctoral experience. An outstanding record of achievement in research as well as a clear commitment to excellent instruction in chemistry at all levels will be required. Each application will consist of a detailed résumé, a short synopsis of future research plans and three or more letters of reference. All application materials should be sent to: **Professor Max O. Funk, Jr., Department of Chemistry, University of Toledo, 2801 West Bancroft Street, Toledo, OH 43606.** Review of applications will begin on October 15, 1994, and continue until the post is filled. *The University of Toledo is an Affirmative Action and Equal Employment Opportunity Employer/Male/Female/Disabled/Veterans.*

Boston University seeks an **ASSOCIATE** or **FULL PROFESSOR** for its graduate Department of Cognitive and Neural Systems. Candidates should have an international research reputation, preferably including extensive research experience in modeling nonlinear neural networks, especially in one or more of the following areas: vision and image processing, adaptive pattern recognition, cognitive information processing, speech and language, and neural network technology. Send a curriculum vitae and three recommendation letters to: **Search Committee, Department of Cognitive and Neural Systems, Room 240, 111 Cummington Street, Boston University, Boston, MA 02215.** *Boston University is an Equal Opportunity/Affirmative Action Employer.*

**ASSISTANT PROFESSOR.** Tenure-track, nine-month academic year appointment, Ph.D. in wildlife management or related field and expertise in applied field research on wild mammals required. Responsibilities include establishing a research program oriented towards management of wild mammals; teaching courses in habitat management, wildlife management, and general biology; and advising undergraduate and graduate students. Starting date **August 1995**. All applicants must request complete application materials from: **Wildlife Search Committee, Biology Department, Montana State University, Bozeman, MT 59717.** Telephone: 406-994-4549; FAX: 406-994-3190. Review of applications will begin in October 1994. *Montana State University is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### MICROBIOLOGIST

Tenure-track position at the **ASSISTANT PROFESSOR** level beginning August 1995 for a broadly trained microbiologist studying eukaryotes or prokaryotes with demonstrated expertise in molecular biology. Candidates must possess a Ph.D., and have the potential to develop a research program involving significant undergraduate participation. Duties include teaching courses in microbiology, molecular biology, and the introductory biology program, and academic advising. Applicants should send curriculum vitae, summary of research interests and names and telephone numbers of three references to: **Professor Thomas L. Koppenheffer, Chair, Department of Biology, Trinity University, San Antonio, TX 78212.** Application deadline is October 14, 1994. *Women and minority candidates are strongly encouraged to apply. Trinity University is an Equal Opportunity/Affirmative Action Employer.*

An **ASSISTANT PROFESSORSHIP** is available in the Department of Microbiology, Biozentrum, University of Basel for an individual with research interests in eukaryotic molecular microbiology. The successful applicant will be expected to take an active part in teaching microbiology to undergraduate and doctoral students. The position includes full salary support for the applicant, a doctoral student and a technician. Applications from qualified women are especially welcome. Applicants should send a curriculum vitae, list of publications, concise (one to two page) summary of future research interests and the names, addresses and FAX numbers of three to five scientists who may be contacted for a reference. This material should be sent before 1 December 1994 to **Prof. Thomas A. Bickle, Department of Microbiology, Biozentrum, University of Basel, Klingelbergstrasse 70, CH-4056 Basel, Switzerland** who may be contacted for further information (Telephone: +4161-267-2120; FAX: +4161-267-2118; Email: [bickle@ubaclu.unibas.ch](mailto:bickle@ubaclu.unibas.ch)).

### FACULTY POSITION Department of Medical Biochemistry and Genetics

The Department of Medical Biochemistry and Genetics invites applications for a tenure-track **ASSISTANT PROFESSOR** or tenured **ASSOCIATE PROFESSOR** faculty position. Candidates are expected to establish or maintain a vigorous research program and participate in medical and graduate instruction. Applications from individuals with research interests in any area of biochemistry, molecular biology, or molecular genetics are encouraged but teaching responsibilities will be in the Medical Genetics course. Submit curriculum vitae, description of research interests, and names of three references to: **Dr. Garret Ihler, Department of Medical Biochemistry and Genetics, Texas A&M College of Medicine, College Station, TX 77843-1114.** *Equal Opportunity through Affirmative Action.*

### FACULTY POSITION IN CELL OR DEVELOPMENTAL BIOLOGY

The Department of Embryology of the Carnegie Institution of Washington seeks a **FACULTY MEMBER** with a nascent or established research program in any aspect of cell or developmental biology. The Department of Embryology is part of a nonprofit research institution (Carnegie Institution of Washington) and is affiliated with and is situated on the campus of The Johns Hopkins University in Baltimore. Applicants should send a curriculum vitae, statement of research interest, and have three letters of recommendation sent to: **Director, Department of Embryology, Carnegie Institution of Washington, 115 West University Parkway, Baltimore, MD 21210.** *An Equal Opportunity/Affirmative Action Employer.*

The Department of Biochemistry at Baylor College of Medicine (BCM) invites applications for two **TENURE-TRACK FACULTY POSITIONS**—one in X-ray crystallography and one in computational biology. This heavily research-oriented department is seeking outstanding scientists who are committed to establishing excellent research programs in an expanding structural biophysics group. BCM provides a unique and interactive community of researchers with strengths in structural, molecular, and cellular biology, in molecular genetics and in molecular medicine. Applicants should send a curriculum vitae, a research plan and three letters of recommendation to: **Professor Florante A. Quiocho, Faculty Search Committee, Department of Biochemistry, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA.** *BCM is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### VICE PRESIDENT FOR RESEARCH MEDICAL COLLEGE OF GEORGIA

The Medical College of Georgia invites applications and nominations for the position of **VICE PRESIDENT FOR RESEARCH**. The Vice President for Research, reporting directly to the President, will be the senior administrative leader of research development efforts. This will involve all aspects of research program planning and implementation. In particular, the Vice President will serve a liaison and advocacy function not only with the university administration, but also with federal, foundation, and corporate research entities. The Vice President also oversees various research support services, including the Office of Grants and Contracts. The successful candidate should have a doctoral degree or its equivalent, as well as established scientific and academic credentials reflecting significant expertise in the development and funding of research efforts. Academic appointment to one of the departments within the institution is desirable, and opportunities exist for ongoing involvement in academic and research programs. Interested applicants should submit a curriculum vitae, a cover letter describing the candidate's research, academic and administrative experience, and the names and addresses of three references no later than October 1, 1994, to: **Dr. Barry D. Goldstein, Chair of Search Committee, Medical College of Georgia, 1120 15th Street, Augusta, GA 30912-7605.** *The Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer. Qualified women and minority candidates are encouraged to apply.*

**BIOCHEMISTRY TENURE-TRACK FACULTY POSITION** at California State University, Sacramento for fall 1995: Seeking an energetic and adaptable individual to teach biochemistry and general chemistry courses and develop undergraduate biochemistry research projects at a primarily undergraduate teaching university. Degree Requirements: Ph.D. (Biochemistry or related areas); B.S., B.A. or M.S. (Chemistry/Biochemistry). For specific application requirements contact: **James C. Hill, Chair, Chemistry Department, California State University, Sacramento, 6000 J Street, Sacramento, CA 95819.** Telephone: 916-278-6684. Deadline for all application materials is November 1, 1994. *California State University, Sacramento is an Affirmative Action/Equal Opportunity Employer.*

### FACULTY POSITION BIOLOGICAL CHEMISTRY

The Department of Chemistry at the University of North Carolina at Chapel Hill invites applications for a **TENURE-TRACK POSITION** in biological chemistry. The successful applicant must have a Ph.D., postdoctoral experience, a strong record of research, and the ability to teach biological chemistry effectively at the undergraduate and graduate levels. Preference will be given to individuals who can establish a strong research program in biological chemistry, interact enthusiastically with other chemists and whose appointment would be at the rank of **ASSISTANT PROFESSOR**. Review of the applications will begin October 15, 1994. Send a curriculum vitae, a brief research plan, a statement of teaching interests and four letters of recommendation to: **Dr. Linda Spremulli, Department of Chemistry, CB No. 3290, University of North Carolina, Chapel Hill, NC 27599-3290.** *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

The Departments of Molecular and Human Genetics, and Pediatrics are jointly recruiting a **DIRECTOR** for the Baylor College of Medicine Mental Retardation Research Center (MRRC). The Baylor MRRC was founded in 1988, and is one of the 14 NICHD-supported Centers dedicated to the study of the prevention, treatment, and amelioration of mental retardation and developmental disabilities. The Baylor MRRC currently supports eight core laboratories, 53 research projects, 48 investigators from 13 departments, and one New Project Development Awardee. The successful applicant will be a Physician Scientist with an established research commitment to the molecular biology of mental retardation. Board certification in a Medical Genetics specialty and Pediatrics are desirable. Applicants should send a letter describing their commitment to mental retardation research and a current curriculum vitae, and should request that three letters of reference be sent to: **C. Thomas Caskey, M.D., Chairman, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030.** *Baylor College of Medicine is an Equal Opportunity/Affirmative Action Employer.*



## SCIENCE's 1994 Recruitment Advertising Calendar of Events

**16 September:** NIH Research Week; Meeting Bonus Distribution, Bethesda, MD.

**23 September:** CAREERS IV Editorial Focus; La Jolla, CA & Cambridge, MA Biotech/Pharmaceutical Job Fair Distribution.

**30 September:** Genome Map Editorial Focus; Human Genome Conference Distribution, Washington, D.C.; Lab Expo Distribution, London, England.

**7 October:** Human Genetics Meeting Bonus Distribution, Montreal, Canada.

**28 October:** Frontiers in Biology Editorial Focus.

**4 November:** Minority Distribution - Science Education Editorial Focus; Bonus Distribution to 18 Major Minority Science Organizations; Medica '94 Meeting Bonus Distribution, Dusseldorf, Germany.

For Advertising Information  
call Janis Crowley in the U.S. at (212)496-7704  
or fax to (202)682-0816.  
In Europe, call Gordon Clark +44 (0)223 302067  
or fax to +44 (0)223 302068.

## Staff Scientist/Molecular Biology Research Associate

The **Theobald Smith Research Institute, Inc.** (TSRI) is a not-for-profit corporation established in 1985 to conduct research and development in the field of public health. In concert with the New England Regional Newborn Screening Program, TSRI develops and evaluates methodologies for efficient, low-cost laboratory screening of newborns to prevent sequelae of disorders that could cause mental retardation and other life-compromising conditions.

The scientist will work as an integral part of an applied research team dedicated to implementation of molecular diagnostics for neonatal disorders. The successful candidate will have experience in amplification technologies, a solid background in chemistry, interest in microprocessor-based instrumentation and a strong appreciation for quality control. A Ph.D. with 2 years post-doctoral work or equivalent experience is preferred.

Please send resumes with cover letter and salary history to: **Personnel Office.**

**Theobald Smith Public Health Services Laboratory**  
**305 South Street**  
**Jamaica Plain, MA 02130** Attn: Julie Schmitt  
EEO/AA Employer

## The Hopkins Marine Station of Stanford University Announces the Availability of The David and Lucile Packard Chair in Marine Biology

The Hopkins Marine Station of Stanford University invites applications for the *David and Lucile Packard Chair in Marine Biology*. We seek candidates who have made outstanding scholarly contributions in marine biology and who would like to focus a significant portion of their future research on the biota of Monterey Bay and its surrounding waters. We are particularly interested in candidates who are intellectually broad based with preference given to experimental biologists who use an interdisciplinary approach to fundamental biological questions. Candidates with expertise at any level of analysis (e.g., molecular, cellular, organismic, ecological, or population) are encouraged to apply, especially those with a significant portion of their research focused at the organismal level or above.

The successful candidate will be expected to participate in the undergraduate and graduate teaching programs at the Marine Station and develop new courses in their area of expertise.

The appointment will be made at the full professor level in Stanford's Department of Biological Sciences with residence at the Hopkins Marine Station.

Applications, including research interests, *curriculum vitae*, and the names of five references, should be sent to: Marine Biology Search Committee, Hopkins Marine Station, Stanford University, Pacific Grove, CA 93950, no later than October 30, 1994.

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



**THE UNIVERSITY  
OF HONG KONG**

## Chair of Biochemistry

(Re-advertisement: Ref. 93/94-66)

Applications are invited for the Chair of Biochemistry. Applicants should possess an outstanding record of academic achievements, and be able to provide strong leadership in vigorously promoting the Department's teaching and growing research activities. The Chair is open to applicants within the broad disciplines of molecular life sciences.

The Department is engaged in active research in molecular genetics of inherited diseases, developmental immunology, neurochemistry, biochemical parasitology, enzymology, signal transduction, glycoconjugate and protein structure and function, calcification and molecular embryology. There are strong research links with the clinical departments of the Faculty of Medicine.

Appointment will normally be made on a two or three-year fixed term contract, but consideration may also be given to appointment on superannuable terms.

The University reserves the right not to fill the Chair or to fill the Chair by invitation or to make an appointment at a lower level.

**Annual Salary:** (under review) [non-superannuable but attracting 15% (taxable) terminal gratuity] will be within the professorial range, of which the minimum is HK\$836,580 and the average is HK\$1,034,760 (approx US\$108,647 and US\$130,950 respectively; US Dollar equivalents as at 19 July 1994), with starting salary depending on qualifications and experience. At current rates salaries tax will not exceed 15% of gross income. Housing at a charge of 7.5% of salary, children's education allowances, leave and medical benefits are provided.

**Further particulars and application forms** may be obtained from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (fax: (852) 559 2058; E-mail: APPTUNIT@HKUVM1.HKU.HK). Particulars are also available on the University's listserv accessed by E-mail as "listserv@hkuvml.hku.hk" (specify "get apptment filelist" for list of vacant posts, and "help" for details of listserv commands). Closes **27 October 1994**.

## POSITIONS OPEN

### PROGRAM DIRECTOR FOR SLSTP

A **PROGRAM DIRECTOR** position is open at Florida A&M University (FAMU) in the NASA-sponsored Space Life Sciences Training Program (SLSTP). Duties include serving as a Program Director in conducting the day-to-day operations of the program in consultation with the Kennedy Space Center in Florida. An applicant must possess a Ph.D. degree in Life Sciences or related areas and some experience in teaching and research at a college or university. Please submit a detailed curriculum vitae and three letters of recommendation before October 30, 1994, to:

**Dr. K. Ken Redda**  
College of Pharmacy and Pharmaceutical Sciences  
Florida A&M University  
Tallahassee, FL 32307  
Telephone: 904-599-3910

*FAMU is an Equal Opportunity and Equal Access Institution. Women and minorities are encouraged to apply.*

### FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY University of Illinois College of Medicine

Applications and nominations are invited for tenured faculty positions at the level of **ASSISTANT, ASSOCIATE** or **FULL PROFESSOR**. Applicants at the Assistant Professor level should have a Ph.D., postdoctoral experience, a strong record of research accomplishments, and demonstrable potential for the development of an independent research program. Senior level applicants should have a nationally/internationally recognized extramurally funded research program. All areas of biochemistry will be considered; however, we are especially interested in individuals using transgenic mouse technology to investigate problems related to gene regulation in the context of molecular biology and medicine, development, signal transduction and molecular immunology. The department is one of six basic science departments in the largest College of Medicine in the United States and consists of 19 full-time faculty and 13 joint appointees. The department, college, and campus are well equipped and have research facilities that will support any area of contemporary biomedical research. In recent years we have recruited several senior and junior faculty and are most interested in fostering independent research in an environment of interactive collegiality. Applications should include a curriculum vitae, a summary of current and future research plans and the names, addresses, telephone/FAX numbers of at least three individuals for references. All inquiries will be held in confidence. Review of applications will begin after November 1, 1994. Send applications or nominations to: **Chair, Faculty Search Committee, Department of Biochemistry (M/C 536), University of Illinois College of Medicine, 1819-53 West Polk Street, Chicago, IL 60612.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

### RICE UNIVERSITY

#### Department of Biochemistry and Cell Biology Faculty Position

Applications are invited for a tenure-track faculty position in biological sciences including the areas of cell and developmental biology, biochemistry, neurobiology, and molecular biology. Clear evidence of research excellence and teaching potential is essential. Emphasis in recruiting will be at the **ASSISTANT PROFESSOR** level, but other levels may be considered. Review of applications will commence on October 15, 1994, and the position will remain open until filled. Please send curriculum vitae, summary of past research and future research plans, and four letters of reference to:

**Faculty Search Committee**  
Department of Biochemistry and Cell Biology  
Rice University, MS-140  
Houston, TX 77251-1892

*Rice University is an Equal Opportunity/Affirmative Action Employer; women and minority candidates are encouraged to apply.*

### BIOCHEMIST RESEARCH SCIENTIST

La Jolla Pharmaceutical Company seeks a dynamic **BIOCHEMIST** for its inflammation research group. Candidates should have a Ph.D. in biochemistry, with training or experience in enzyme kinetics and assay development, enzyme purification and molecular biology. Experience in protein expression in insect cells or yeast will be a plus. For immediate consideration, please send your résumé to: **La Jolla Pharmaceutical Company, c/o BCPOS, 6455 Nancy Ridge Drive, San Diego, CA 92121.**

## POSITIONS OPEN

### PLANT PHYSIOLOGY

University of Toronto, Scarborough Campus

The Life Sciences Division at the Scarborough Campus of the University of Toronto invites applications for a **TENURE-STREAM POSITION** in plant physiology. Applicants must have a Ph.D. (or equivalent), and preferably one or more years of postdoctoral experience. The successful candidate will be expected to take an active role in undergraduate and graduate teaching, and to develop a strong research program.

Interested applicants should submit a complete curriculum vitae, a statement of research and teaching interests, three letters of recommendation, and copies of recent reprints to: **Professor Colin M. MacLeod, Chair, Division of Life Sciences, University of Toronto, Scarborough Campus, Scarborough, Ontario M1C 1A4 Canada.** Deadline for receipt of applications is 15 December 1994. The appointment will be at the **ASSISTANT PROFESSOR** level, and salary will be commensurate with qualifications. The position will be effective 1 July 1995, subject to budget approval. *In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and landed immigrants (permanent residents) of Canada. The University of Toronto has an employment equity policy and encourages applications from qualified women or men, members of visible minorities, aboriginal peoples, and persons with disabilities.*

**FACULTY POSITION IN CARDIOVASCULAR PATHOPHYSIOLOGY.** The Department of Anesthesiology at the University of Michigan Medical Center has a beginning level tenure-track position available in the area of cardiovascular physiology or cardiovascular pathology. A Ph.D. and/or M.D. degree is required with training in an appropriate scientific discipline. Experience in the integration of physiological, tissue culture systems, biochemical and cardiovascular pharmacological principles with analytical methodologies such as HPLC, GC, fluorescent probes and electrophysiology are required. Experience with ischemia-reperfusion models, free radical injury, intra- and intercellular communication and biological effects of anesthetic agents will be given preference. Candidate must have a minimum of three years of postdoctoral experience and will be expected to conduct a research program which will lead to extramural funding in these areas and teach within the department. Submit curriculum vitae and three reference letters with a brief statement of research plans to: **Dr. B.N. La Du, M.D., Ph.D., Director of Research, Department of Anesthesiology, University of Michigan Medical Center, 1500 East Medical Center Drive, Ann Arbor, MI 48109-0572.** Applications will be accepted through November 15, 1994. *The University of Michigan is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged.*

### FACULTY POSITION IN RADIATION BIOLOGY AT STANFORD UNIVERSITY

The Division of Radiation Biology of the Department of Radiation Oncology is seeking an **ASSISTANT PROFESSOR** (tenure-line) to complement existing programs in bioreductive drugs, gene therapy, tumor physiology and DNA repair. The division is seeking an individual who is applying basic molecular approaches to the repair of DNA damage by ionizing radiation and/or stress responses to low oxygen environments. Applicants should have a strong publication record and demonstrated ability to obtain grant support. Applicants should submit curriculum vitae and names of three references to: **Dr. J. Martin Brown, Director, Division of Radiation Biology, Department of Radiation Oncology, Stanford University School of Medicine, Stanford, CA 94305-5468.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

### DEAN COLLEGE OF SCIENCE

California State Polytechnic University, Pomona, California, is seeking applications and nominations for **DEAN OF THE COLLEGE OF SCIENCE.** Required qualifications: earned doctorate; record of research, teaching and scholarship to support a senior faculty appointment; and three or more years of administrative experience requiring academic leadership and stewardship. For application/job description, Telephone: 909-869-3409; FAX: 909-869-4395; or Email: [sjcardona@csupomona.edu](mailto:sjcardona@csupomona.edu). *Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### FACULTY POSITION, UCLA PLANT DEVELOPMENTAL BIOLOGY

The Department of Biology, Division of Cell and Molecular Biology, would like to add to existing strength in Plant Molecular Biology by hiring a person of proven research and teaching accomplishment in the area of Plant Developmental Biology. The level of the appointment is open. The successful candidate's research program will be expected to use molecular and genetic techniques to address questions of fundamental importance for plant development. We are particularly interested in establishing a collaborative group in the areas of plant reproduction and signal transduction. The candidate will participate in teaching undergraduates in an integrated life sciences curriculum at both the lower and upper division levels. Applicants should send their curriculum vitae, a concise research statement indicating future plans as well as the current program, and a brief statement of teaching interests and experience to: **Plant Development Search Committee, Biology Department, UCLA, Los Angeles, CA 90024-1606.** Candidates for a junior position should have three letters of recommendation sent to the same address. Candidates for a senior position should include names of three references. The committee will start considering candidates by November 1, 1994, and continue until the position is filled.

*UCLA is an Affirmative Action/Equal Opportunity Employer. Women, minorities, and persons with disabilities are encouraged to apply.*

### BIOMEDICAL RESEARCH IN CELL AND NEUROBIOLOGY

**FACULTY POSITIONS** are available at the junior or senior level in cell biology, including the cell biology of neurons. Areas of interest are cell growth control, signal transduction mechanisms, synaptic function and neurodegenerative disease, but other areas which fortify and complement existing research strengths in cell and neurobiology will also be considered. Direct relevance to problems of medical interest, and the use of molecular, genetic, and transgenic approaches are desirable. Appointments carry institute-backed salary guarantees and liberal start-up packages for personnel, equipment and operating costs.

Submit a detailed curriculum vitae, a brief summary of research interests and future research plans, and three letters of recommendation to:

**Dr. Richard Vallee, Scientific Director**  
c/o Human Resources  
The Worcester Foundation for  
Experimental Biology  
222 Maple Avenue  
Shrewsbury, MA 01545

Review of applications will begin November 1, 1994. *An Affirmative Action/Equal Opportunity Employer.*

**RESEARCH INSTRUCTOR**—(Grant Funded). The Department of Molecular Microbiology and Immunology at the Oregon Health Sciences University is seeking to fill a non-tenure-track position. Candidates must have a Ph.D. (Molecular Biology or Microbiology), three years of postdoctoral training in research on microbial pathogenesis and DNA repair, bacterial iron acquisition systems and molecular biology of prokaryotic transposons, one year teaching, and the first authorship of six research articles in peer-reviewed journals. Position will remain open for 30 days following publication of advertisement. Send curriculum vitae and the names of four references to: **Joan Cossey, Department of Microbiology and Immunology, L220, Oregon Health Sciences University, Portland, OR 97201-3098.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH FELLOW** positions (two) are immediately available in microcirculation and cardiac/skeletal muscle biochemistry/molecular biology. Candidates must have a Ph.D., M.D., or equivalent degree. The Microcirculation Postdoctoral Fellow will conduct research involved with the microvascular responses to acute inflammation and septic shock. The Cardiac/Skeletal Muscle Postdoctoral Fellow will be involved in the cellular and molecular biology of muscle degeneration. Send letter of application, curriculum vitae, recent publications, and names, addresses and telephone numbers of three references to: **C. David Ianzuzzo, Ph.D., Director, Deborah Research Institute, Trenton/Pine Mill Roads, Browns Mills, NJ 08015-1799.** *An Equal Opportunity Employer.*





Department of Biochemistry

## POSTDOCTORAL RESEARCH

### Recognition of Specific RNA Sequences by Proteins

Applications are invited for an MRC-funded post investigating the molecular mechanisms by which proteins involved in RNA splicing recognise specific RNA sequences. The post is available for three years. The salary is on the R&A IA scale (£13,941 to £20,953 pa), with a starting salary of up to £17,813 pa. A PhD and a good first degree are required, with experience in protein biochemistry or molecular biology. International applications are welcomed.

Applications (including a CV and the names of two referees) should be sent to **Dr Ian Eperon, Department of Biochemistry, University of Leicester, University Road, Leicester LE1 7RH.UK.** Informal enquiries should be made on tel: (0116) 2523482.

Towards equal opportunities.

## RESEARCH SCIENTIST

Mangrove Ecologist

(Job No 31)

The Australian Institute of Marine Science (AIMS) conducts marine science research and development and facilitates the use of these results for national and international dissemination. Headquarters are located at Cape Ferguson, 50km south of Townsville, and our Western Australia facilities are located at Karratha.

AIMS invites applications from suitably qualified persons for appointment as a Research Scientist in the Institute's Coastal and Shell Processes Program. A major focus of the program is to understand food web processes in mangrove forests and in adjacent coastal ecosystems. We require an innovative ecologist to define, design, establish and conduct research projects within the broad objectives of existing mangrove research at AIMS, which are to investigate the structure and function of pelagic and benthic food chains in tropical mangrove forests, and their linkage to adjacent coastal ecosystems. They will have a PhD or equivalent experience in ecological research, preferably on fish and/or crustaceans in marine ecosystems. Postdoctoral experience is desirable.

The appointment is initially for a 5 year fixed term with extension subject to performance and funding availability. A salary within the range of AUS\$44,005 to \$59,166 is offered depending on qualifications and experience.

Applications, including a resume and the names of three professional referees, should be addressed to:

**General Manager Support Services  
Australian Institute of Marine Science  
PMB No 3  
Townsville MC Qld 4810**

Applications close Friday 14 October.

For further information about this position contact Dr. Daniel Alongi on (077) 78 9313 Fax (077) 72 5852. Duty Statement and Selection Criteria are available from (077) 78 9210 (24 hour answering machine). Please quote the applicable Job No.

*AIMS is an Equal Opportunity Employer and  
promotes a smoke free work environment.*



**AUSTRALIAN INSTITUTE  
OF MARINE SCIENCE**

AB1-95/10-57713

## Virology Scientist IV

Baxter Biotech Hyland Division, Research and Development, seeks an energetic individual who can contribute effectively in a multi-disciplinary R&D environment.

This motivated individual shall participate in virus risk reduction studies and technology development in the area of Virology. The position requires an MS in Virology, Microbiology, Biology, Biochemistry or related field with 3 to 5 years experience in viral assays process validation and/or viral inactivation technology, or PhD with 1 to 3 years experience. Strict interpretation and compliance with sterile techniques and biohazard containment are required. Understanding of GLP/GMP along with excellent written and oral communication skills are required. Computer literacy would be beneficial.

The name Baxter Healthcare Corporation is synonymous with products, systems and services devoted to improving health care throughout the world. We are a Fortune 100 company providing a smoke-free environment, competitive compensation and benefits. Please send your resume in confidence to: **Baxter Biotech Hyland Division, Human Resources Department 1710 Flower Avenue, Duarte, CA 91010.** Employment is contingent upon the result of a drug screening test. An Affirmative Action/Equal Opportunity Employer.

Hyland Division

**Baxter**

## POSITIONS OPEN

The Division of Biology, California Institute of Technology, seeks a **JUNIOR FACULTY MEMBER** in the area of Immunology for a tenure-track position. Successful applicants are expected to generate creative and productive research programs that will interface with the diverse scientific interests represented in the Biology Division. Applicants should send a curriculum vitae, list of publications, and a brief statement of research interests and plans. In addition, the candidate should arrange to have three letters of reference sent directly to the search committee to coincide with receipt of the application. Letters of reference and applications should be sent to: **Ms. Joyce Kato, Immunology Search Committee, Division of Biology 147-75, California Institute of Technology, Pasadena, CA 91125.** The deadline for receiving applications and letters of reference is November 1, 1994. *The California Institute of Technology is an Equal Opportunity/Affirmative Action Employer and encourages the applications of qualified women and minorities, veterans and disabled persons.*

**POSTDOCTORAL FELLOW:** Position available January 1, 1995. Research focuses on cellular and molecular mechanisms of apoptosis (ref. *Molec Endo*, 7:686-93, 1993; *PNAS*, 91:6569-73, 1994). Send curriculum vitae and three letters of reference to: **Dr. Clark Distelhorst, Case Western Reserve University, School of Medicine, 10900 Euclid Avenue, Cleveland, OH 44106-4937. Telephone: 216-368-1176; or FAX information to: 216-368-1166.** Must be a U.S. citizen or permanent resident. *Women and minorities are encouraged to apply.*

**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE** to work on the molecular regulation of nitric oxide-guanylyl cyclase signalling pathway with dynamic vascular biology research group at the University of Virginia. Molecular biology expertise essential, promoter analysis experience preferable. Applications detailing molecular biology experience to: **Roger A. Johns, M.D., University of Virginia Health Sciences Center, Box 238, Charlottesville, VA 22908, USA.** *An Equal Opportunity/Affirmative Action Employer.*

**POSTDOCTORAL POSITIONS** are available to study protein-DNA interactions and protein assembly using biophysical and biochemical approaches. Current projects include (1) mechanistic studies of helicase-catalyzed DNA unwinding and (2) thermodynamic and kinetic studies of protein-DNA interactions. Send curriculum vitae and have three letters of reference sent to:

**Dr. Timothy M. Lohman**  
Biochemistry and Molecular Biophysics  
Washington University School of Medicine  
Box 8231  
660 South Euclid Avenue  
St. Louis, MO 63110

**POSTDOCTORAL POSITION** - Role of frontal cortical networks in motor learning. Experience with behavioral neurophysiology in primates preferred. Applications deadline November 1, 1994. Send curriculum vitae with names of three references to: **John P. Donoghue, Ph.D., Department of Neuroscience, Box 1953, Brown University, Providence, RI 02912.** *Equal Opportunity/Affirmative Action Employer. Women and minorities encouraged.*

**POSTDOCTORAL POSITIONS** available to study (1) the cloning of novel mRNAs regulated by drugs of abuse using subtractive hybridization techniques, or (2) the role of thyrotropin-releasing hormone (TRH) in mental disorders. Candidates should have a strong background in molecular biology and/or neuroendocrine techniques. Applicants must be U.S. citizens or permanent residents. Send curriculum vitae and the names of three references to: **Dr. Kevin A. Sevarino, Division of Molecular Psychiatry, Department of Psychiatry, Yale University School of Medicine, 34 Park Street, New Haven, CT 06508.** *Affirmative Action/Equal Opportunity Employer.*

### POSTDOCTORAL FELLOWSHIP

A position is available in January 1995 to study mechanisms of signal transduction across cell membranes. The work will focus on the structure, function and cellular regulation of G proteins. Experience in molecular biology is essential. Send curriculum vitae and names of three references to: **Dr. Eva J. Neer, Harvard Medical School, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** *Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### YEAST MOLECULAR GENETICS

**POSTDOCTORAL FELLOW/VISITING ASSISTANT PROFESSOR** position available to study transposition of retroviral-like transposable elements in yeast. This project will focus on the identification of host genes essential for transposition and replication of these elements by the characterization of defective mutants. Position requires a Ph.D. degree and experience in molecular genetics, preferably in a microbial system. This is a non-tenure-track position and funding is available for a minimum of two years. The position will have instructional duties. To apply, please send summary of research experience and interests, curriculum vitae and the names of three references to: **Dr. Michael Benedik, Department of Biochemical Sciences, University of Houston, Houston, TX 77204-5934.** *The University of Houston is an Equal Opportunity/Affirmative Action Employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.*

### THE HEISER PROGRAM FOR RESEARCH IN LEPROSY AND TUBERCULOSIS

Support for research in leprosy and tuberculosis is being continued. Beginning **POSTDOCTORAL RESEARCH FELLOWSHIPS** available in amounts up to \$28,000 per year, plus other allowances, and **RESEARCH GRANTS** in amounts up to \$20,000. Applicants should have M.D., Ph.D., or equivalent degree. Application deadline: February 1, 1995, for awards to be activated July through December 1995. For information write: **The Heiser Program, 450 East 63rd Street, New York, NY 10021, or FAX: 212-688-6794.**

**POSTDOCTORAL POSITION:** A postdoctoral position is available with the National Institute of Child Health and Human Development. Duties include conducting basic research and training of reproductive endocrine fellows in support of new IVF and pre-implantation genetics programs. Applicants must have an M.D. or M.D./Ph.D. with specialty training in OB/GYN and IVF and experience in basic studies of follicular-oocyte growth and maturation. The salary range is \$50,000 to \$60,000 per annum according to qualifications and experience. Send curriculum vitae and names of three references by October 31, 1994, to: **Dr. C. Bondy, National Institutes of Health, Developmental Endocrinology Branch, 9000 Rockville Pike, Building 10, Room 10N262, Bethesda, MD 20892.** U.S. citizenship is required. *NIH is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** in Endangered Species Conservation: Available immediately for one year to study impacts of human activity on fitness of endangered red-cockaded woodpeckers. Activities include design and implementation of human impacts work and developing proposals for the future. Some field activity possible, depending on interests and experience of incumbent. The research associate will have the opportunity to select portions of large longitudinal data set to pursue questions of mutual interest. Send curriculum vitae and names of three references by October 1, 1994, to: **Dr. Phil Doerr, Zoology Department, North Carolina State University, Box 7617, Raleigh, NC 27695-7617.** *North Carolina State University is an Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** to study vasoactive peptide regulation of vascular growth. Candidates must have Ph.D., and experience in cell culture and molecular biology. Please send curriculum vitae and three references to: **Dr. Nabil Andrawis, Division of Clinical Pharmacology, Georgetown University Medical Center, Building D, Room 364, 3800 Reservoir Road, NW, Washington, D.C. 20007. Telephone: 202-687-7888; FAX: 202-687-7894.** *An Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH POSITIONS** in Cardiothoracic Surgery: The Department of Cardiothoracic Surgery at the University of Louisville has research positions available for scientists or clinicians (Ph.D. and/or M.D.). Ongoing projects involve developing models of a univentricular heart, aortoplasty, cardiomyoplasty, pediatric cardiac assist devices, and pharmacologic modification of graft hemodynamics. Experience in cardiac physiology helpful but not essential. Send curriculum vitae and references to: **William Santamore, Ph.D., Department of Surgery, The University of Louisville School of Medicine, Louisville, KY 40292.**

## POSITIONS OPEN

### FISHERIES STATISTICIAN University of Washington

**POSTDOCTORAL POSITION** as a Research Consultant at Center for Quantitative Science, School of Fisheries, is available immediately to develop, design, and implement fish and wildlife tagging studies. The project involves estimation of in-river and ocean survival rates of Columbia-Snake River salmonids using tag-recapture methodologies. The candidate should have a Ph.D. in statistics or biometry with experience in applying estimation theory to environmental problems. Expertise in numerical analyses, statistical programming, technical writing and mark-recapture theory desired. Salary: \$38,000 to \$45,000. Questions may be referred to: **Dr. John R. Skalski, jrs@cqs.washington.edu or 206-543-1191.** Send curriculum vitae, summary of research experience, and two letters of recommendation to: **Ms. Phebe Burgos, School of Fisheries, WH-10, University of Washington, Seattle, WA 98195.** *Affirmative Action/Equal Opportunity Employer.*

**POSTDOCTORAL POSITION**—To participate in studies of the molecular basis of cell division and chromosome segregation in *E. coli*. The research involves the combined use of molecular genetics and biochemistry to study the mechanisms responsible for the division process, for the proper placement of the cell division site, and for the coordination of the division process with the partition of daughter chromosomes into progeny cells. Send curriculum vitae, brief description of prior research experience, and the names of several references to: **Dr. L. Rothfield, University of Connecticut Health Center, Farmington, CT 06032.**

*An Affirmative Action/Equal Opportunity Employer. Male/Female/People with Disabilities/Veterans.*

**POSTDOCTORAL POSITION** available to study the molecular and cellular role of opioid receptors in the function of T-cells. Studies will include a molecular analysis of the receptor structure and processing. Experience in molecular and/or cellular biology required. Applicants must be U.S. citizens or have resident alien status. Please send curriculum vitae and at least three letters of reference to: **Dr. Thomas J. Rogers, Department of Microbiology and Immunology, Temple University School of Medicine, 3400 North Broad Street, Philadelphia, PA 19140. FAX: 215-707-7788.** *An Equal Opportunity/Affirmative Action Employer. Applications from women and minorities are encouraged.*

### UNIVERSITY OF CALIFORNIA, BERKELEY

**POSTDOCTORAL POSITIONS** are available to study the mechanism of action of folate-dependent enzymes, the regulation of one carbon metabolism, and the regulation of expression of genes encoding folate-dependent enzymes by nutritional factors and by antifolates. Ph.D. in biochemistry or related field and background in protein biochemistry or gene expression advantageous. Send curriculum vitae and three letters of recommendation to: **Dr. Barry Shane, Department of Nutritional Sciences, University of California, Berkeley, CA 94720.**

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

### CELL CYCLE STRUCTURAL BIOLOGISTS

**POSTDOCTORAL POSITIONS** available now for collaborative research between **Steve Reed's** Cell Biology Group and **John Tainer's** Structure Group to pursue joint structure-function studies on cell cycle control proteins using the techniques of cell and molecular biology, biochemistry, and X-ray crystallography and leading toward novel cancer drug design. Relevant experience preferred. Excellent environment and facilities. Send curriculum vitae and names of three references to: **Steve Reed or John Tainer, Molecular Biology MB4, The Scripps Research Institute, La Jolla, CA 92037. FAX: 619-554-6880; Email: jat@scripps.edu.** *Minority applicants encouraged.*

### POSTDOCTORAL SCHOLAR

NIH-funded positions in University of Kentucky Medical Center to study expression of viral and eukaryotic genes, or to perform advanced studies in protein biochemistry. Send curriculum vitae, with names and telephone numbers of three references to: **Ms. N. Demaree, Graduate Center for Toxicology, 204 Funkhouser Building, University of Kentucky, Lexington, KY 40506.** *An Equal Opportunity/Affirmative Action Agency.*





**BIOCHEMISTRY & MOLECULAR BIOLOGY**  
**OREGON HEALTH SCIENCES UNIVERSITY**

The Department of Biochemistry and Molecular Biology at OHSU, School of Medicine, will be embarking on a period of significant growth during the next several years. We will be recruiting tenure track faculty at all levels, although our emphasis will be on junior colleagues. Our main focus will be in (i) structure and function of membrane proteins, (ii) structural biology, especially diffraction methods, and (iii) nucleic acid structure and enzymology. Interested candidates in related areas are also encouraged to apply.

We will offer attractive start-up packages, competitive salaries, and the opportunity to participate in the growth and development of a dynamic and interactive department in a highly desirable location. Faculty will be expected to establish competitive research programs and assist in graduate and medical school teaching. Applicants at the Assistant Professor level should have a Ph.D. with several years of postdoctoral experience. Applications for our first series of appointments should be received by November 30, 1994.

Interested applicants should send a copy of their curriculum vitae, a description of their research plans and interests, and the names of three references to:

**Dr. Jack H. Kaplan, Faculty Search**  
**Professor and Chair-Designate**  
**Department of Biochemistry and Molecular Biology**  
**Oregon Health Sciences University**  
**3181 S.W. Sam Jackson Park Road, L-224**  
**Portland, OR 97201-3098**

OHSU is an Affirmative Action/Equal Opportunity Employer

## ANNOUNCEMENT



### POTAMKIN PRIZE FOR RESEARCH IN PICK'S, ALZHEIMER'S AND RELATED DISEASES

A prize of \$100,000 will be awarded by the American Academy of Neurology to a person(s) in recognition of major contributions to the understanding of the causes and the prevention, treatment, and ultimately the cure for Pick's, Alzheimer's and related diseases.

Candidates may be nominated on a world-wide basis from any of the biological disciplines including biochemistry, molecular biology, molecular genetics, pharmacology, immunology, physiology, cell biology, neuropathology or epidemiology.

A nomination application, nominating letter citing the scientific accomplishments of the candidate in detail, two supporting nominating letters, a curriculum vitae, and up to six (6) selected reprints in nine (9) complete sets are required.

The deadline for receipt of materials is November 1, 1994. No nomination will be considered unless it is complete. The awardee(s) must be present for the AAN Scientific Program, at its annual meeting in Seattle, Washington, on Tuesday, May 9, 1995.

Request application and submit nomination to:

Potamkin Prize for Research in Pick's,  
 Alzheimer's and Related Diseases  
 American Academy of Neurology  
 2221 University Avenue S.E. - Suite 335  
 Minneapolis, MN 55414  
 (612) 623-8115

The Potamkin Prize is funded through the philanthropy of the Potamkin Foundation.



## CABM SYMPOSIUM

October 27-28, 1994, Piscataway, NJ

### Transcriptional Control in Growth and Development

|               |             |
|---------------|-------------|
| C. Abate      | T. Curran   |
| J. Darnell    | C. G  linas |
| G. Felsenfeld | J. Kadonaga |
| M. Levine     | S. McKnight |
| S. Orkin      | D. Reinberg |
| S. Tilghman   | C. Wu       |

*Sponsored by the Center for Advanced Biotechnology and Medicine  
 in cooperation with Johnson & Johnson and Janssen Pharmaceutica*

**Registration:** Linda Van Derveer, CABM Symposium,  
 679 Hoes Lane, Piscataway, New Jersey 08854;  
 908-235-5309. \$75 Registration Fee; No charge  
 for Students or Post-Docs (with certification);  
 \$10 Box Lunch for October 27 (Register by  
 October 7, 1994).



## FARMING SYSTEMS RESEARCH SCIENTIST

A Farming Systems Research (FSR) program is being developed at the University of Guelph as a component of a broader Agri-food Systems Research Program. The FSR program will also be closely associated with the program of a Chair in Ecosystem Health funded for four years through ECO-RESEARCH: A Tri-Council Green Plan program of the Government of Canada.

A tenure track position in the Ontario Agricultural College, is available at the Assistant or Associate Professor level for an established scientist to provide leadership in the FSR program. Candidates must have a broad understanding of the components of agricultural systems, a strong commitment to a systems approach to multidisciplinary research and a demonstrated ability to provide leadership to an interdisciplinary team. Familiarity with the use of mathematical analysis and modelling procedures in agricultural systems research is desirable. As a faculty member of the University of Guelph, genuine commitment to student education and interaction is essential.

*The University of Guelph is committed to an Employment Equity Program that includes special measures to achieve diversity among its faculty and staff. We therefore, particularly encourage applications from qualified aboriginal Canadians, persons with disabilities, members of visible minorities and women.*

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

Position subject to final budgetary approval.

Interested applicants or nominators should provide a full curriculum vitae, and a list of three references, by **October 31, 1994** to:

**Dr. L.P. Milligan**  
**Vice-President, Research**  
**University of Guelph**  
**Guelph, Ontario N1G 2W1.**



## POSITIONS OPEN

### BEHAVIORAL PHARMACOLOGIST ANTIEPILEPTIC DRUG RESEARCH Pharmaceuticals Division Novo Nordisk A/S



**The Candidate.** Must have documented experience in antiepileptic drug research using *in vivo* methods. The successful candidate must be dynamic, result-oriented, with good collaboration skills. Applications are welcome from individuals with only postdoctoral experience as well as individuals who qualify as senior scientists.

**The Job.** The successful applicant will be responsible for running an epilepsy drug research laboratory. The lab is part of the CNS pharmacology group within the drug discovery unit of the Pharmaceuticals Division. The job involves rodent anticonvulsant screening and characterization of drugs in a strongly project-oriented environment. It is also expected that the candidate is involved in independent/collaborative research which may lead to new drug discovery research projects. The company offers a competitive salary and many possibilities for development of personal and professional skills.

**The Company.** Novo Nordisk is one of the world's leading biotech companies and a major supplier of insulin and industrial enzymes (more than 11,000 employees). The Pharmaceuticals Division is located in a newly built research facility in Maaloev, some 20 kilometres outside of Copenhagen. The building is located on a hilltop overlooking beautiful countryside.

**Applications** with the mark "Chemist.702" should be forwarded to: PD Human Resources, Novo Nordisk A/S, DK-2880 Bagsvaerd as soon as possible. Further information about the job may be obtained by contacting: Dr. Erik B. Nielsen, telephone: +45 44424690; FAX: +45 44662980.

**POSTDOCTORAL POSITION** available immediately to study the neuronal and genetic basis of behavior in the nematode *C. elegans*. Cell-attached, whole-cell, and perforated patch recordings will be used to analyze biophysical properties of identified neurons contributing to normal and mutant behaviors. Extensive patch clamp experience is preferred. Please send curriculum vitae and names of three references by 1 November 1994 to: Dr. S. R. Lockery, Institute of Neuroscience, 1254 University of Oregon, Eugene, OR 97403. The University of Oregon is an Affirmative Action/Equal Opportunity Institution committed to cultural diversity and compliance with ADA.

### POSTDOCTORAL POSITIONS AT MEMORIAL SLOAN-KETTERING CANCER CENTER

Available to examine the role of chimeric transcription factors in human leukemia using biochemical, overexpression, antisense, and transgenic mice approaches. Ph.D. or M.D. degree and extensive molecular biology experience required. Send a description of your research interests, curriculum vitae and names of two references to: Dr. Stephen Nimer, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

**SENIOR SCIENTIST/TOXICOLOGIST**—for scientific affairs group of New York agrochemicals company. Responsibilities include the generation, monitoring and defense of FIFRA related studies for the EPA as well as staff work related to EPA interactions. Previous FIFRA experience, good communication skills and ability to work independently required. Ph.D./M.S. Send résumé to Makhteshim-Agan of North America Inc., 551 Fifth Avenue, No. 1100, New York, NY 10176, Attention HR. FAX: 212-661-9043.

**LAB SPECIALIST ADVANCED.** Virginia Commonwealth University is recruiting a Lab Specialist Advanced to design/conduct experiments, analyze data, prepare results for presentation and assist in the supervision of the research lab. B.S., M.S., or Ph.D. Expertise with protein biochemistry, hybridoma production, immunoassay development, enzyme kinetics and molecular techniques. Submit résumé indicating position number R5049 to: Virginia Commonwealth University, Personnel, P.O. Box 980066, Richmond, VA 23298-0066. Equal Employment Opportunity/Affirmative Action. Women, minorities and disabled are encouraged to apply.

## POSITIONS OPEN

### STRUCTURAL BIOLOGIST MOLECULAR VIROLOGIST PURDUE UNIVERSITY Department of Biological Sciences

Applications are invited for two tenure-track faculty positions with the Structural Biology-Biophysics Group of the department. Candidates must have a Ph.D. degree or equivalent, and relevant postdoctoral experience. Each is expected to develop a rigorous, extramurally funded research program and to participate in the teaching program of the department.

**Structural Biologist.** We seek an individual with interests in any of the following fields: large macromolecular/cellular complexes (viruses, membranes, cytoskeletal elements, organelles, etc.) as studied by crystallography, electron microscopy, or electron diffraction; cellular processes (e.g., receptor-mediated interactions, motility); protein folding; physical biochemistry; modeling.

**Molecular Virologist.** We seek an individual with interests in viral structure, assembly, replication, or virus-host cell interactions who has a strong molecular biology background and a desire to apply structural approaches to specific problems.

These appointments offer an excellent opportunity to join and to interact closely with 10 other faculty members in the Markey Center for Structural Biology. This group includes experts in X-ray crystallography, electron microscopy and image reconstruction, NMR spectroscopy, molecular dynamics, molecular graphics and modeling, molecular virology and immunology, membrane biophysics, and enzyme mechanisms.

Applicants should send a curriculum vitae, bibliography, a short description of their research interest and teaching experience, and the names of at least three references to: Chair, Structural Biology (or Molecular Virology) Search Committee, Department of Biological Sciences, Purdue University, West Lafayette, IN 47907-1392. Applications will be accepted until December 1, 1994, or until the position is filled.

An Equal Opportunity/Affirmative Action Employer.

### RESEARCH POSITION IN REPRODUCTIVE ENDOCRINOLOGY

Beth Israel Hospital seeks a Ph.D. with at least two years of experience after postdoctoral training with ability to function as an independent investigator. Applicant must be willing to collaborate in projects with other investigators as well as to develop individual areas of interest. Some teaching responsibilities at Harvard Medical School are required.

Submit curriculum vitae and names, addresses, and telephone numbers of three references to: Joseph F. Mortola, M.D., Department of Obstetrics/Gynecology, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215. Beth Israel Hospital is an Affirmative Action/Equal Opportunity Employer.

The Division of Endocrinology of the University of Mississippi Medical Center invites applications for faculty positions for **CLINICIAN/RESEARCHERS** at the levels of ASSISTANT or ASSOCIATE PROFESSOR. Applicants holding an M.D. degree who are Board-Certified/Eligible in Endocrinology are preferred. Opportunities exist to perform basic or clinical research at a dynamic and growing state-supported academic Medical Center as well as to participate in the development of a diabetes clinical program and in student and housestaff teaching. Send curriculum vitae to: Don McClain, M.D., Ph.D., Director, Division of Endocrinology, Department of Medicine, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216. Equal Opportunity Employer, Male/Female/Disabled/Veterans.

### COORDINATOR OF SCIENTIFIC PROGRAMS Cleveland Metroparks Zoo

Responsible for grant development, staff research project development, supervision of research projects by outside scientists, and personal research. Requires Ph.D. in biology, behavior, or related field. Experience conducting research in a zoo and a proven grant development and publication record preferred. For further information contact: Dr. Hugh Quinn, 216-661-6500, extension 213 or send curriculum vitae by November 4, 1994, to: Cleveland Metroparks Personnel Department, 4101 Fulton Parkway, Cleveland, OH 44144.

## POSITIONS OPEN

### IMMUNOLOGISTS

Two tenure-accruing Ph.D. and/or M.D. faculty positions at the ASSISTANT or ASSOCIATE PROFESSOR levels are available, to join a group of investigators to establish a Center for Immunological Research. Successful applicants are expected to be able to develop independent research programs supported through extramural funding, and to participate in graduate and postdoctoral level training programs. Rank and salary will be competitive and commensurate with qualifications and experience. The anticipated starting date will be February 1, 1995. Please send curriculum vitae, together with a statement of interests and plans, and three letters of reference by January 1, 1995, to:

Chairman's Office  
Attn: Richard T. Smith, M.D.  
University of Florida  
College of Medicine

Department of Pathology and Laboratory Medicine  
Box 100275 JHMC  
Gainesville, FL 32610-0275

The University of Florida is an Equal Opportunity/Affirmative Action Employer and specifically invites and encourages applications from qualified women and minority candidates.

## COURSES AND TRAINING

**DOCTORAL PROGRAM IN MOLECULAR AND CELLULAR BIOLOGY AND PATHOBIOLOGY.** Interdisciplinary program in fundamental molecular and cellular biology and its application to disease. Competitive stipends of \$15,000 available. Contact: Director, MCBP Program, College of Graduate Studies, Medical University of South Carolina, 171 Ashley Avenue, Charleston, SC 29425-2501.

**MEDICAL UNIVERSITY OF SOUTH CAROLINA** offers programs leading to Ph.D. and M.D./Ph.D. degrees in each of the basic Biomedical Sciences (Biochemistry, Microbiology/Immunology, Pathology, Pharmacology, Physiology), Biometry/Epidemiology, Pharmaceutical Sciences, and Molecular and Cellular Biology. Competitive stipends of \$15,000 available. Contact: College of Graduate Studies, MUSC, 171 Ashley Avenue, Charleston, SC 29425-2501.

## ANNOUNCEMENTS



Dystonia is a neurological disorder. The Dystonia Medical Research Foundation supports research grants, usually limited to \$25,000 per year for one, two, or three years.

Dystonia-related research should be hypothesis-driven. Typically, studies focus on the basal ganglia and related brain circuitry, genetics, and human brain tissue.

**Deadline is December 15.** Secure applications from: Dystonia Medical Research Foundation, One East Wacker Drive, Suite 2430, Chicago, IL 60601-2001. Telephone: 312-755-0198; FAX: 312-321-5710.

**PROPOSALS SOUGHT TO DEVELOP IMPROVED METHODS OF CONTRACEPTION.** The Contraceptive Research and Development (CONRAD) Program is seeking applications to develop contraceptive methods that are safe, effective, and acceptable. Areas of particularly high interest at this time include: mechanical barrier methods that protect against the transmission of HIV and other STD pathogens, and are controlled by the female user; improved formulations of existing vaginal products; progestin-releasing single subcutaneous implants or IUDs; adhesives, chemicals, or other techniques to achieve non-surgical male or female sterilization; and high-potency non-peptide GnRH antagonists. Program focus is on initial phases of clinical testing and product-oriented preclinical studies. The next application deadlines are November 15, 1994, and May 1, 1995. For information, contact: Lee E. Claypool, Ph.D., CONRAD Program, 1611 North Kent Street, Suite 806, Arlington, VA 22209. Telephone: 703-524-4744; FAX: 703-524-4770; Email: conrad@conrad.org.



# Postdoctoral Opportunities In The Biomedical Sciences.

Listed below are a few of the outstanding opportunities for conducting research that are now available with leading scientists at the National Institutes of Health.

## **Cellular and Gene Therapy** **Gary D. Swergold, MD, PhD**

Expression of the human LINE-1 element in germ cell tumors, its mechanism of transposition, and its role in the formation of human mutations are being investigated. Studies include the role of isochromosome 12p (a feature of testicular tumors) in LINE-1 expression, and the development of a novel transposition assay. Experience in cell culture and molecular biology or genetics preferred. Division of Cellular and Gene Therapy (OE-53), FDA/CBER (HFM 515) 1401 Rockville Pike, Rockville, MD 20852-1448.

## **Immunopathogenesis of Tuberculosis** **Michael Brennan, PhD**

Virulence factors associated with mycobacterial pathogenesis are currently being identified and characterized using immunological, molecular, and microbiological techniques. Applicants must be US citizens or permanent residents with experience in cellular immunology and vaccine delivery systems. Laboratory of Mycobacteria (OE-53), FDA/CBER (HFM 431), 1401 Rockville Pike, Rockville, MD 20852-1448.

## **Mechanisms of DNA Repair** **Miriam Sander, PhD**

Mechanisms of DNA repair in *Drosophila* are being investigated with focus on the *in vivo* and *in vitro* functions of Rrp1 (Recombination repair protein 1). This protein is potentially important in DNA repair and homologous recombination. Future studies will include enzymatic, physical, and genetic characterization of Rrp1. Applicants must have less than five years postdoctoral experience. Laboratory of Molecular Genetics (OE-53), NIEHS, P.O. Box 12233, Mail Drop D3-04, Research Triangle Park, NC 27709.

## **Molecular Biology in the Eye Lens** **Graeme J. Wistow, PhD**

Lens crystallins arose by gene recruitment of enzymes and stress proteins. The mechanisms of this novel process in molecular evolution, including lens-specific gene expression, and the lens and non-lens functions of crystallins are being studied. Another area of interest is in small development-specific proteins with important general roles in cell growth and differentiation. Experience in molecular biology preferred. Laboratory of Molecular and Developmental Biology (OE-53), NEI, Building 6, Room 222, 6 CENTER DR MSC 2730, BETHESDA MD 20892-2730.

## **Neurophysiology and Molecular Biology** **Mark L. Mayer, PhD**

Positions are available in a multidisciplinary group of physiologists and molecular biologists working on ion channels and glutamate receptor structure and function. Current interests include allosteric regulation, agonist selectivity, and regulation of desensitization. Applicants must have less than five years postdoctoral experience and training in electrophysiology or molecular biology. Laboratory of

Cellular and Molecular Neurophysiology (OE-53), NICHD, Building 49, Room 5A78, 49 CONVENT DR MSC 4495, BETHESDA MD 20892-4495.

## **Regulation of Gene Expression** **Ana B. Chepelinsky, PhD**

A position is available to study the tissue specific expression of genes encoding channel proteins in the lens. Research focuses on the interaction of transcription factors with cis regulatory elements of these genes, using transient assays, *in vitro* binding assays and transgenic mice. Applicants must have less than five years postdoctoral experience. Laboratory of Molecular and Developmental Biology (OE-53), NEI, Building 6, Room 211, 6 CENTER DR MSC 2730, BETHESDA MD 20892-2730.

## **Signal Transduction and Molecular Biology** **Larry M. Wahl, PhD**

The signal transduction pathway leading to the production of matrix metalloproteinases by monocytes is being investigated. Problems under analysis include the effect of cytokines on the kinases, prostaglandin synthase, and transactivating factors involved in metalloproteinase synthesis. Applicants should have less than five years postdoctoral experience. Laboratory of Immunology (OE-53), NIDR, Building 30, Room 325, 30 CONVENT DR MSC 4352, BETHESDA MD 20892-4352.

## **Additional Postdoctoral Fellowship Opportunities**

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet ([wylbur.cu.nih.gov](http://wylbur.cu.nih.gov)) or modem (1,301-402-2221 or 1,800-358-2221 with parameters set at "7,Even,1"). When connected to NIH, type in "vt100" for terminal emulation, "F5E" for initials, and "AJL1" for account number.

The *Postdoctoral Research Fellowship Opportunities Catalog*, which describes intramural laboratories at the NIH, is also available by request. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System ([gopher.nih.gov](http://gopher.nih.gov)) or the World Wide Web (<http://www.nih.gov/>). When connected, select *Research Opportunities at the NIH from the Office of Education*. If you would like to request a catalog or have further questions, please contact the Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, 301-496-2427, FAX: 301-402-0483.

## **To Apply**

If you hold a doctoral degree (e.g., PhD, MD/PhD, MD, DO, DDS, 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

The NIH is an Equal Opportunity Employer

## Faculty in Genetics Dartmouth Medical School

The Lucille P. Markey Charitable Trust has awarded Dartmouth Medical School funds to develop a genetics program involving faculty at both the Medical School and Dartmouth College. Our goal is to attract outstanding geneticists who are engaged in basic research. We seek to fill an initial position with an individual who is currently at the rank of Associate Professor or higher. Exceptional applicants of all ranks, however, are encouraged to apply.

Candidates must hold a doctoral degree. The individual will receive an appointment in one of the departments in the Medical School or in the department of Biological Sciences in the College. Joint appointments are possible. Preference will be given to applicants who have broad intellectual interests, whose research program focuses on human genetic diseases or on genetic model organisms, who are highly interactive, and who can amplify the efforts of existing faculty in genetics and molecular biology. Candidates will also be expected to lead an expanded genetics curriculum for medical and graduate students. Applicants should forward a curriculum vitae; statement of research interests; and the names, addresses, and telephone numbers of three references to: Professor Constance Brinckerhoff, Ph.D., Chair of the Genetics Search Committee, Dartmouth Medical School, Hanover, NH 03755.

Review of applications will begin November 1.

*Dartmouth College is an affirmative action/equal opportunity employer.*

## McGill University DEPARTMENT OF BIOLOGY

The Department of Biology at McGill University invites applications for three tenure-track positions at the ASSISTANT PROFESSOR level in the following areas of specialization:

**EVOLUTIONARY MOLECULAR BIOLOGY** - The Department seeks an evolutionary biologist working at the molecular level, or a molecular biologist whose work has a pronounced evolutionary orientation. Applications from candidates whose work concerns the evolution of the genome are especially welcome. The Department has active research groups in evolutionary and molecular genetics, and would provide an excellent environment for someone working at the interface between the two disciplines.

Deadline for application: November 15, 1994

**MOLECULAR BIOLOGY** - The Department seeks candidates whose research addresses fundamental problems in cell and developmental biology using a genetically well-characterized fungal, plant or animal system.

Deadline for application: November 25, 1994

**CONSERVATION BIOLOGY** - The Department seeks an ecologist with an interest in Conservation Biology. Candidates are encouraged to apply if their primary interests bear on the maintenance of species diversity, the biology of invasions, the sustainability of natural systems, landscape ecology or similar problems in biological conservation of marine, freshwater or terrestrial systems. The Department provides a vigorous research environment with strength in marine and freshwater ecology, behavioral ecology, evolutionary ecology, and physiological ecology. Willingness and ability to participate in teaching a large course in introductory biology would be an asset.

Deadline for application: December 10, 1994

The successful applicants will join a large (40 full-time faculty) and dynamic department with research strengths in cellular, molecular, and developmental biology, ecology, and neurobiology. The Department also has excellent technical facilities, including centres for photography, light and electron microscopy, biotechnology, field stations and the McGill Phytotron.

Applicants should hold the Ph.D. degree in biology or a related field, and demonstrate capacity for independent research. Duties will include the development of a vigorous research program and participating in teaching of undergraduate- and graduate-level courses. The positions must be filled by September 1, 1995.

Please send CV, a statement of research interests, and representative reprints. Request three letters of reference. All materials should be sent to:

Dr. Robert Carroll, Chair  
Department of Biology  
McGill University  
1205, ave. Dr. Penfield  
Montreal, Quebec, Canada  
H3A 1B1

*In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. McGill University is committed to equity in employment.*

## Postdoctoral Fellowships for Minority Candidates

St. Jude Children's Research Hospital, a premier research center for biomedical research offers a minority postdoctoral fellowship. Minorities defined by NIH guidelines as underrepresented populations must be American citizens or a permanent resident. The fellowship was established by the American Lebanese Syrian Associated Charities/St. Jude Children's Research Hospital's Board of Governors. Recent M.D., Ph.D., D.V.M. or Pharm.D. fellows are eligible to train with leading scientists in several basic biomedical research laboratories which include biochemistry, experimental oncology, experimental hematology, genetic, infectious diseases, immunology, pharmaceutical sciences, molecular pharmacology, tumor cell biology and virology/molecular biology.

Fellowship awards are given for up to three years and are based on merit, recommendation and promise of a productive career in biomedical research. Stipends are highly competitive.

Minority applicants should provide a curriculum vitae, a brief description of their research interests, and have three references. This should be sent to:



Academic Programs  
**St. Jude Children's  
Research Hospital**  
332 N. Lauderdale  
Memphis, TN 38105  
USA

*All information must be received by December 31, 1994.*

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## DEAN—DIVISION OF BIOLOGICAL SCIENCES University of California, Davis

The University of California, Davis invites applications and nominations for the position of Dean—Division of Biological Sciences. The division is an intercollegiate unit that administers academic units in basic biology for the College of Agricultural and Environmental Sciences and the College of Letters and Sciences. It is organized into five sections: Evolution and Ecology; Microbiology; Neurobiology, Physiology and Behavior; Molecular and Cellular Biology; and Plant Biology. The division administers seven undergraduate majors in biology involving more than 3,200 students in the College of Agricultural and Environmental Sciences and the College of Letters and Science. It provides administrative support for nine campus-wide graduate groups involving more than 350 students.

The Dean is the chief academic and administrative officer of the Division responsible for academic planning, budgetary operations, and academic and staff personnel administration for all five sections. The Dean participates in campus-wide policy development through membership on the Council of Deans and Vice Chancellors and chairs the Administrative Coordinating Council for Biological Sciences, which is responsible for coordinating and planning campus wide programs in basic biology.

We seek candidates with a deep commitment to academic excellence who can lead the Division in its continuing development. Qualifications include a distinguished record of research, teaching, and professional service; demonstrated ability for creative leadership and management, and the energy and vigor to translate ideas into action. The University of California, Davis, has a strong institutional commitment to the achievement of diversity among its faculty, staff and students and seeks an individual who shares that commitment.

Review of candidates will begin October 31, 1994. The position will remain open until filled. Nominations, applications, and requests for additional information should be addressed to:

Larry N. Vanderhoef, Chancellor  
Office of the Chancellor  
University of California, Davis  
Davis, CA 95616-8558.

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At Berlex, we've built our reputation on FDA-approved product successes and a proven track record in the pharmaceutical industry. To meet the challenges before us, we're seeking the following Scientists to help us advance key research and drug design programs. If you've been looking to join forces with an internationally recognized pharmaceutical team, imagine building your career with Berlex in the beautiful San Francisco Bay Area.

## SENIOR SCIENTIST Oncology

Focusing on cell cycle regulation and progression in the mammalian cell, you will investigate specific cell cycle checkpoints and regulatory proteins as targets for therapeutic intervention in cancer. This will involve establishing and coordinating concept research programs and collaborating with other research teams both inside and outside of the company. In addition to a Ph.D. with 8+ years' industrial or academic experience, your background must demonstrate training in cell biology and molecular biology. Skills in PCR analysis, cloning techniques, transcription activation assays, and Northern and Southern blots, as well as training in flow cytometry analysis of the cell cycle and cell cycle kinase assays are strongly desired. Dept. B94-027.

## SCIENTIST

### Computational Chemistry

Working on structured-based drug design, you will be involved in computational studies related to the binding of inhibitors to enzymes and the structure of small peptides. You will also build models of receptors based on experimental data. Along with a Ph.D. in chemistry or biophysics, you will need 1-3 years of experience performing computational studies of conformational structure and molecular properties. Experience in computational studies of enzyme inhibitor binding and/or solvation effects desired. Dept. B94-030.

As a US subsidiary of an international Fortune 500 company, Berlex is proud to offer competitive salaries and a generous benefits package. To apply, send your C.V./resume, indicating the dept. number corresponding with the position of your interest, to: BERLEX, HUMAN RESOURCES EMPLOYMENT, 15049 SAN PABLO AVE., RICHMOND, CA 94804-0099. EOE. Principals only please.

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# SCIENCE



## Department of Biochemistry POSTDOCTORAL RESEARCH

### Recognition of Specific RNA Sequences by Proteins

Applications are invited for an MRC-funded post investigating the molecular mechanisms by which proteins involved in RNA splicing recognise specific RNA sequences. The post is available for three years. The salary is on the R&A 1A scale (£13,941 to £20,953 pa), with a starting salary of up to £17,813 pa. A PhD and a good first degree are required, with experience in protein biochemistry or molecular biology. International applications are welcomed.

Applications (including a CV and the names of two referees) should be sent to **Dr Ian Eperon, Department of Biochemistry, University of Leicester, University Road, Leicester LE1 7RH.UK.** Informal enquiries should be made on tel: (0116) 2523482.

**Towards equal opportunities.**

## SEARCH REOPENED



### ASSOCIATE VICE PRESIDENT for RESEARCH LOYOLA UNIVERSITY OF CHICAGO

Loyola University of Chicago invites applications or nominations for the position of Associate Vice President for Research. The Associate Vice President for Research will also serve as the Director of University Research Services. We seek candidates with an earned doctorate (M.D., Ph.D., etc.), outstanding academic credentials commensurate with senior faculty member in a university department, previous experience in research administration, and a strong commitment to facilitating research and its development in a university setting.

The Associate Vice President for Research will be responsible for 1) the development, implementation, and supervision of policies governing the conduct of research and research programs throughout the University, 2) the coordination and management of research services offices and activities provided at Loyola's Lake Shore, Water Tower, and Medical Center Campuses, 3) serving as the representative and advocate for the research community by providing advice and consultation to the University administration, Deans, Academic Chairs, and Faculty that will enhance the University's research mission, 4) representing the University research community in matters pertinent to local, state, and federal research related issues, 5) working with Faculty and the University Development office to identify and facilitate opportunities for research funding, 6) overseeing the University Research Committee, safety committees, and all technology transfer activities. The Associate Vice President for Research reports jointly to the Senior Vice President and Dean of Faculties, and to the Executive Vice President for the Medical Center.

Loyola University of Chicago, a private Jesuit institution, is composed of the College of Arts & Sciences, Mundelein College, and the Schools of Business, Education, Law, Medicine, Nursing, Social Work, and the Graduate School.

Please address all questions and nominations/applications with a current Curriculum Vitae by October 30, 1994.

Associate Vice President for Research Search Committee

Loyola University Chicago  
Room 0742  
2160 South First Avenue  
Maywood, Illinois 60153  
TX: 708-216-5840  
FAX: 708-216-9433

LOYOLA UNIVERSITY CHICAGO is an Equal Opportunity/Affirmative Action Educator and Employer.

**Mark 4 November 1994 on Your Calendar!**

# **Get Bonus Distribution to Minority Scientists with the Science Education Issue.**

The unique challenges facing minority scientists begin with education. Place your full page recruitment advertisement in the 4 November 1994 issue of **SCIENCE** and reach minority candidates. The Science Education Issue gets bonus distribution at these distinguished minority universities and organizations:

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  - Central State University
  - Florida A&M University
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  - Morehouse College
  - Morris Brown College
  - University of Hawaii
  - University of Puerto Rico-  
Recinto de Ciencias
  - Wayne State University
  - SUNY/College at Old Westbury
- Minority Access to Research Careers
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**In Europe, Gordon Clark, telephone  
(44) 0223 302067 or fax (44) 0223 302068.**

# **SCIENCE**

# 11th INTERNATIONAL SYMPOSIUM ON AFFINITY CHROMATOGRAPHY AND BIOLOGICAL RECOGNITION

Trinity University  
San Antonio, Texas  
May 25 to 31, 1995

Chairman: W.H. Scouten  
Secretariat: N. Ashcroft  
Biotechnology Center  
Utah State University

Posters and oral presentations are solicited in the following areas:

- Protein Purification Methods
- Matrices & Materials in Affinity Systems
- Younger Scientists Session
- Biorecognition in Therapeutics
- Emerging Technologies in Biorecognition
- Biosensors and Diagnostics
- Molecular Aspects of Biorecognition
- DNA-Protein / DNA-RNA Interaction
- Molecular Imprinting / Polymeric Artificial Biorecognition Sites

A special session will be devoted to presentations by Younger Investigators. Two \$500 Awards for posters and two \$500 Awards for oral presentations will be conferred by Separation Industries, Inc. for presentations of Younger Investigators (under 35). After review and acceptance, poster manuscripts will be published twice, once in *Journal of Molecular Recognition* and once in a separate Proceedings volume. Posters of unusual and general interest will be selected for a short *ad hoc* presentation. The abstracts should be sent to:

**Dr. Christopher Bieniarz**  
Abbott Laboratories  
Abbott Park AP20, D-90U, IL 60064-3500.  
Tel: (708) 937-2239; Fax: (708) 938-7072  
and they must be received by December 1, 1994.  
The abstract forms are from the above address.

# NATIONAL INSTITUTE ON DRUG ABUSE National Institutes of Health

Seeks research scientists for 1-4 year appointments to develop major extramural research programs.

The National Institute on Drug Abuse is seeking research scientists in several discipline areas to work at the Institute for the next 1-4 years in the development of major extramural research and research training programs that would be carried out through grants to universities. In particular, the Institute is seeking science administrators to develop and administer extramural programs in the areas of behavioral sciences, neurosciences, and human development.

Individuals must have a Ph.D. or M.D. degree and at least several years of post-doctoral experience, must be currently employed at a university or state/local government, and would be on detail to NIDA from their home university position. Assignment will be made under the Intergovernmental Personnel Act (IPA). Depending on the particular circumstances, NIDA can provide reimbursement for a portion of the salary (up to 100%). U.S. citizenship not required. Inquiries from minority and women scientists are particularly welcome. Send curriculum vitae and statements of interests to: Marge Hutton, Personnel Officer, 5600 Fishers Lane, Rockville, MD 20857.

NIH is an Equal Opportunity Employer.

# CENTER FOR NEUROSCIENCE UNIVERSITY OF CALIFORNIA, DAVIS

The Center for Neuroscience and the UC Davis Medical School are seeking applications for a position at the level of Assistant, Associate, or Full Professor. Younger candidates will be given primary consideration. The Center is an interdepartmental unit involving faculty embracing many disciplines within the field of neuroscience. Through its recent growth, the Center has established strength in systems and cognitive neuroscience. Candidates are encouraged to apply whose research interests are complementary with this emphasis. Examples of such interests include computational neuroscience, the anatomical or physiological study of local circuits, and human functional brain imaging. However, academic excellence will be considered more important than research specialty.

The University of California is interested in candidates who are committed to the highest standards of scholarship and professional activities and are committed to the development of a campus climate which supports equality and respect for diversity. This position is open until filled, but applications should be received by November 15, 1994 to be assured full consideration.

Applicants should send curriculum vitae and the names of at least three references to: Michael S. Gazzaniga, Ph.D., Center for Neuroscience, University of California, Davis, CA 95616.

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# Postdoctoral Positions in Biochemistry University of Missouri-Columbia

**Dr. Susan Deutscher**  
*Antibody engineering, nucleic acid-protein interaction*  
**Dr. David Emerich**  
*Symbiotic nitrogen fixation*  
**Dr. Milton Feather**  
*Protein glycation*  
**Dr. William Folk**  
*Animal and plant cell gene regulation*  
**Drs. Tom Guilfoyle & Gretchen Hagen**  
*Regulation of plant gene expression*  
**Dr. mark Hannink**  
*Transcription factors and oncogenesis*  
**Dr. Dennis Lubahn**  
*Biochemical genetics of estrogen receptors*  
**Dr. Mark Martin**  
*Transcription factors and development*  
**Dr. Thomas Mawhinney**  
*Cystic fibrosis and glycoprotein genetics*  
**Dr. Bruce McClure**  
*Angiosperm self-incompatibility*  
**Dr. Roy Morris**  
*Phytohormone biosynthesis and control*  
**Dr. Beryl Ortwerth**  
*UV photochemistry and cataract formation*  
**Dr. Charlotte Phillips**  
*Biochemical genetics of collagen expression*  
**Dr. Joseph Polacco**  
*Genetics of plant nitrogen assimilation*  
**Dr. R.M. Roberts**  
*Interferons, reproductive tract*

**Dr. John Rogers**  
*Hormonal regulation of plant genes and vacuolar protein targeting*  
**Dr. Frank Schmidt**  
*RNA structure and function*  
**Dr. Cleopas Samudzi**  
*Macromolecular crystallography*  
**Dr. Grace Sun**  
*Signal Transduction in neuronal cells*  
**Dr. Roger Sunde**  
*Selenoprotein molecular biology*  
**Dr. Peter Tipton**  
*Enzyme mechanisms*  
**Dr. Suresh Tyagi**  
*Regulation of proteinases and antiproteinases*  
**Dr. Steve Van Doren**  
*Protein structure by multidimensional NMR*  
**Dr. Judy Wall**  
*Genetics of microbial bioremediation*  
**Dr. Gary Weisman**  
*Mammalian cell nucleotide receptors*

Applicants should send CV and two letters of reference to one of the above faculty at:  
Department of Biochemistry  
117 Schweitzer Hall  
University of Missouri  
Columbia, MO 65211  
Fax: 314-882-5635

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**FOOD AND DRUG ADMINISTRATION** The Center for Biologics Evaluation and Research (CBER) and the Center for Drug Evaluation and Research (CDER) are searching for outstanding physicians and scientists. CBER regulates blood, vaccines, biological therapeutics and related products according to statutory authorities in order to protect and enhance the public health. CDER promotes, protects, and enhances the health of the public through the drug development and evaluation process. **Candidates should have special interest in mechanisms of action, benefits and risk of drugs; skill in critically analyzing; skill in writing; knowledge of biostatistics, clinical trial design and computers; and experience in research and/or teaching.** These positions have a high degree of independence and involve complex medical, scientific, and regulatory issues. **QUALIFICATIONS:** US Citizenship required. Some positions will accept Staff Fellowship applications from Permanent Residents eligible for citizenship within four years. **Physicians:** All requirements for a Doctor of Medicine or Osteopathy Degree from an accredited institution must be completed. Graduates of Foreign medical schools must submit a copy of their permanent Educational Commission for Foreign Medical Graduates (ECFMG) certification. Board eligibility or certification in a primary specialty, or having completed at least four years of residency training or possess equivalent experience is desirable. **Scientists:** Doctoral level degrees in biology or physical sciences, pharmacology, toxicology, or related disciplines, along with advanced training and/or experience in the development, manufacture or testing of biologics is desirable. **SALARY Range for GS-13 to GS-15:** Physicians: \$59,099 to \$91,029 per annum. In addition, physicians may also be eligible for a physicians comparability allowance up to \$20,000 per annum. **Scientists:** \$35,045 to \$90,252 per annum. Salary, benefits, research support, and level of responsibility are commensurate with education and experience. Send an Application for Federal Employment. **APPLY:** (SF-171) and/or current detailed Curriculum Vitae along with bibliography, statement of regulatory/research interest, transcripts, and names of three references to:

**CBER:** FDA/Center for Biologics Evaluation and Research (12), 1401 Rockville Pike, Suite 200N, HFM-50, Rockville, MD 20852-1448. **CDER:** FDA/Center for Drug Evaluation and Research (184), 5600 Fishers Lane, Room 11B-22, HFD-505, Rockville, MD 20857.

*FDA is an Equal opportunity employer and has a smoke free environment.*

#### OFFICE OF LEGISLATIVE AND PUBLIC AFFAIRS NATIONAL SCIENCE FOUNDATION Arlington, VA 22230

The National Science Foundation seeks qualified applicants for the following Senior Executive Service positions within its Office of Legislative and Public Affairs (OLPA):

- **Director, Office of Legislative and Public Affairs** (ES-4 \$96,830 to ES-6 \$120,594)
- **Director, Division of Public Affairs, OLPA** (ES-1 \$96,830 to ES-4 \$111,839)

Federal appointment will be on an SES career or 2-3 year limited term appointment basis. Alternatively, selectees may be assigned under Intergovernmental Personnel ACT (IPA) provisions, retaining current salary and benefits.

Applicants should contact George Pittmon 703-306-1187 (hearing impaired individuals may call TDD 703-306-0090) to request vacancy announcements for complete qualification requirements and application procedures. Please refer to the following announcement numbers when requesting material and specify appointment type(s) in which you are interested. Director, Office of Legislative and Public Affairs (EP 94-13); Director, Division of Public Affairs, OLPA (EP 94-20). Applications must be received by October 18, 1994.

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#### University of California San Francisco Postdoctoral Fellowships in Cancer Biology

Several fellowships are available for research on the genetic, molecular, cellular, and developmental aspects of cancer biology. The faculty include: Michael J. Banda (wound repair; proteinases and proteinase inhibitors), James E. Cleaver (DNA repair and transcription disorders; transgenic models of repair-deficient diseases), William F. Morgan (molecular mechanisms of chromosome damage and repair; delayed chromosomal instability), John P. Murnane (mechanisms of rearrangement of the mammalian genome), Roger A. Pedersen (early mammalian development; gastrulation; genomic imprinting; transgenic mice; homologous recombination), Zena Werb (ECM signaling; metalloproteinases; mammalian development; tissue repair; mammary epithelium), and Sheldon Wolff (chromosome damage and repair, radiation cytogenetics, SCEs). Stipends are funded through NIEHS. The requirements are a Ph.D. degree or equivalent, preferably in genetics, biochemistry, molecular biology, cell biology or development. Trainees must be U.S. citizens or permanent residents. Send resume, graduate transcript, statement of research interests, and three letters of recommendation by December 15, 1994 to: Dr. Zena Werb, Program Director, Laboratory of Radiobiology and Environmental Health, University of California, San Francisco, CA 94143-0750.

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#### Scientist - Bioassay Development

We are currently seeking a creative scientist to design, develop and validate bio/immunoassays used in detecting novel drugs in preclinical and large-scale clinical trial samples. Primary responsibilities will involve evaluating new assay techniques, investigating methods for increasing reagent shelf-life, participating in general lab operations, preparing reagents, and maintaining records/equipment as required by cGMP. Candidates must hold a PhD in a related discipline and have 1-3 years' of relevant industry experience. A strong familiarity with the measurement of drugs in biological fluids, automated assay systems, bio- and chemiluminescence, protein conjugation chemistry, assay validation, statistical analysis, and cGMP's is highly desirable.

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Profitability, and Growth. In addition, our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, you have an opportunity to join us now. Please forward your resume, to: Joe Tringali, Biogen, Inc., 14 Cambridge Center, Cambridge, MA 02142, FAX: (617) 252-9595. Biogen is an Equal Opportunity Employer.

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## CHIEF LABORATORY FOR EXTRATERRESTRIAL PHYSICS

THE NASA/Goddard Space Flight Center invites applications and nominations for this Senior Executive Service position, located in Greenbelt, Maryland.

The Chief of the Laboratory for Extraterrestrial Physics is responsible for developing and conducting a state-of-the-art program of experimental and theoretical research in specific areas of space science. These areas include highly advanced studies of the physical properties, composition, structure, and dynamics of solar, interplanetary, and interstellar media, planetary atmospheres, comets, astrophysical sources and magnetohydrodynamics of space plasmas, radio and infrared emissions received from solar, planetary, interplanetary, and interstellar sources, and laboratory investigations. The incumbent participates in the overall development and implementation of Centerwide space science objectives.

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

Desirable qualifications include a Ph.D. degree with extensive post-graduate research experience; and experience in the scientific and administrative management of research programs which has established the candidate as an authority in space physics, planetary physics, and/or solar terrestrial physics.

Compensation is ES-1 through ES-6 (currently \$92,900 to \$115,700, plus 4.23% locality rate). Submit SF-171's (Application for Federal Employment) to:

Nelson Rodriguez  
Personnel Management Branch, Code 111  
Office of Human Resources  
NASA/Goddard Space Flight Center  
Greenbelt, MD 20771

*Inquiries should be directed to Mr. Rodriguez at (301) 286-9220  
Complete application must be postmarked by September 28, 1994*

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## CARDIOVASCULAR PHARMACOLOGIST

SmithKline Beecham Pharmaceuticals has an international reputation for taking an innovative approach to drug discovery and development. Our success is built on the collaboration of multidisciplinary teams of scientists who share ideas and expertise while working in top-flight facilities on projects that are challenging and diverse.

Currently, we are seeking an Associate Scientist in Cardiovascular Pharmacology to assist in applying cellular biochemical and molecular biology approaches to the identification of novel factors that regulate vascular smooth muscle and endothelial cell growth.

This position requires a B.S./B.A./M.S./M.A. in Biomedical Science, 1-3 years' relevant cardiovascular biology experience and a background in cell culture, molecular biology and computers. A working knowledge of vascular pharmacology with emphasis on endothelial and smooth muscle cell biology further qualifies you.

Based in our modern, state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation and benefits package. For confidential consideration, please submit your resume and the names of three references to: SmithKline Beecham Pharmaceuticals, Employment Administrator, H0050, PO Box 679, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.



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**CHAIRPERSON OF IMMUNOLOGY:** The Medical College of Georgia invites applications from individuals with M.D., Ph.D., or M.D./Ph.D. degrees for the position as Chairperson of the Department of Immunology and Microbiology. We seek an outstanding candidate who will provide strong scientific leadership and the ability to recruit additional faculty for a Department that has support in place for major growth and expansion. The position will include an appointment within the new Institute of Molecular Medicine and Genetics which has an overall focus on mechanisms of cell signalling. The individual sought for Chairperson of Immunology should have a strong background in signal transduction within the immune system and be able to lead the development of a major transgenic animal facility. He or she should also have an established background in training biomedical scientists. A specific interest in tolerance and autoimmunity is highly desirable.

The position provides excellent opportunities for developing collaborative research programs among the Clinical and Basic Science Departments at the medical school and with the Division of Biological Sciences at the University of Georgia. This is a tenure track position at the Professor level.

**APPLICATIONS AND NOMINATIONS:** The deadline for receipt of applications and nominations is October 31, 1994. Applications should include a current vita and a letter describing the significant qualifications and particular interests the applicant would bring to the position. Provisions of the Georgia Open Records Act are applicable; vitae of applicants must be revealed on request.

Applications, nominations, and requests for additional information regarding the position should be sent to:

John A. Hardin, M.D.  
Chair, Search Committee for Chairperson,  
Department of Immunology and Microbiology  
Chairman, Department of Medicine, BI W548  
Medical College of Georgia  
Augusta, GA 30912-3100  
Fax: 706-721-6918

*The Medical College of Georgia is an affirmative action, equal opportunity employer. We especially urge applications and nominations of women and racial minorities.*

## The Queen's University of Belfast

### LECTURESHIP IN BIOREMEDIATION School of Biology and Biochemistry

This is a new post, tenable from 1 December 1994, or such other date as may be agreed.

The lecturer will be required to maintain an active research programme in the area of bioremediation, with special emphasis on the application of molecular biological techniques to the solution of problems in the area of the physiology, biochemistry and genetics of micro-organisms which play a role in bioremediation and microbial biodegradation processes, to seek external funding for such a programme and to collaborate as appropriate with staff in the School, in the QUESTOR Centre and elsewhere.

Applicants must have a B.Sc. or equivalent and a Ph.D. or equivalent in biological or other appropriate area(s), a strong research record appropriate to the interests of the School and obvious potential as an independent research academic. Postdoctoral experience, University lecturing experience, and an ability to obtain outside funding and to publish independently are desirable.

Informal enquiries may be made to Professor Martin, Director of School ((0232) 245133 ext. 2060).

Salary scale: Lecturer Grade A: £14,756 - £19,326, or Grade B: £20,133 - £25,735 with eligibility for USS. Assistance with relocation as appropriate.

Further particulars are available from the Personnel Officer, The Personnel Department, The Queen's University of Belfast, BT7 INN Northern Ireland (telephone (0232) 245133 ext 3044/3246 or FAX (0232) 324944/310629). Closing date: 7 October 1994.

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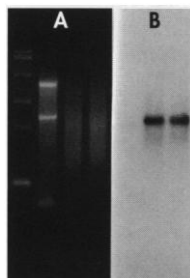


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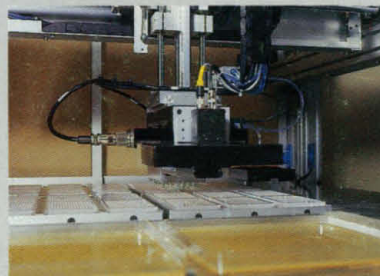
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