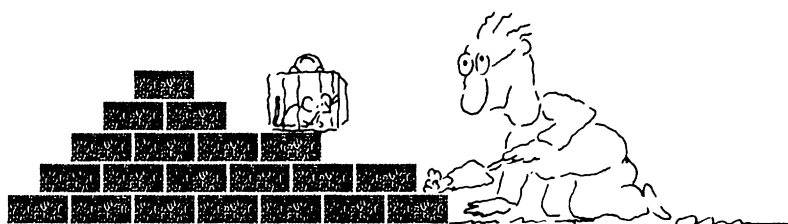


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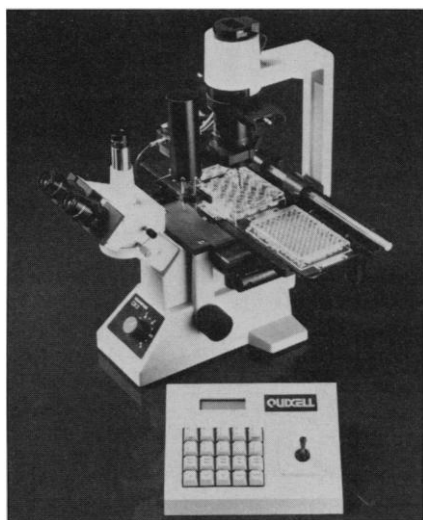
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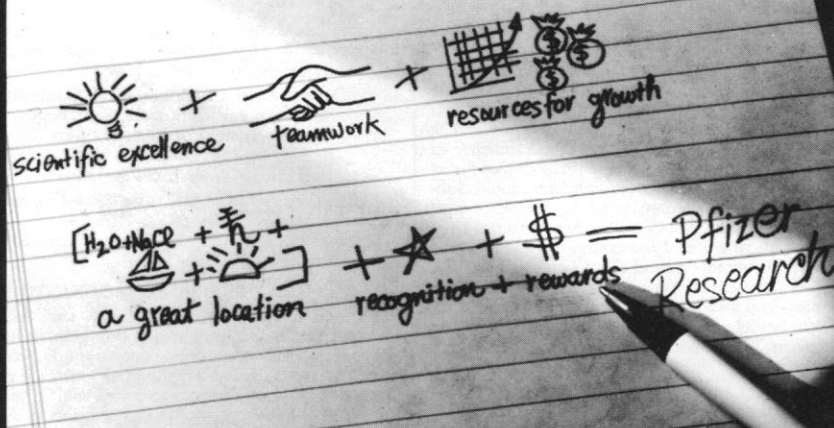
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Our Diabetes and Obesity research group is currently seeking scientists with a PhD in Biochemistry or related fields and experience with either Molecular Biology techniques or with *in vivo* modeling. Research experience in mechanisms controlling energy expenditure, insulin action, or carbohydrate metabolism would be advantageous.

We are also seeking laboratory scientists to conduct research in our Diabetes and Obesity group. A BS/MS or equivalent in a biological science, plus previous laboratory research experience, especially in the areas described above, would be a definite advantage.

We offer competitive salaries and a full range of benefits including medical and dental insurance, paid holidays and vacation, educational assistance, savings and investment plan, pension plan, relocation assistance and more.

To learn how you can be part of the future of Pfizer, send your resume to: Mr. Kym J. Goddu, Employee Resources, Pfizer Inc, Central Research Division, Eastern Point Road, Groton, CT 06340. An equal opportunity employer.



**Central Research**

Bringing science to life.

## POSITIONS OPEN

### BIOCHEMIST/MOLECULAR BIOLOGIST

Hope College has a tenure-track position for a biochemist/molecular biologist beginning August 1992. The appointment is expected to be made at the **ASSISTANT PROFESSOR** level. The position is an interdisciplinary appointment spanning the Biology and Chemistry Departments and is funded by a grant from the Howard Hughes Medical Institute. The successful candidate will have a Ph.D. in biochemistry, molecular biology, or a related field and will have a strong interest in undergraduate liberal arts education. She/he will be expected to teach courses in the areas of biochemistry and molecular biology and will be expected to develop a strong, extramurally funded, research program involving undergraduate students. The area of research is open but applicants with an interest in the biomedical sciences such as cellular regulation and development, macromolecular structure, immunology, neuroscience or protein engineering will be given preference as will applicants with postdoctoral experience. Start-up funds will be provided. Hope College is a co-educational, residential, liberal arts college with approximately 2400 students and is affiliated with the Reformed Church in America. The college has a long tradition of academic excellence in undergraduate science education and is recognized for its well equipped research facilities. Candidates should demonstrate an ability to combine teaching excellence with scholarly activity and should be committed to the character and goals of a liberal arts college with a Christian perspective. Applicants should submit curriculum vitae, appropriate transcripts, and a brief description of research plans and arrange for three letters of recommendation to be sent to: **Dr. Christopher C. Barney, Chairperson, Biochemistry/Molecular Biology Search Committee, Peale Science Center, Hope College, Holland, MI 49423.** Initial review of candidates will begin on 15 January 1992. *Hope College complies with federal and state requirements for nondiscrimination in employment. Applications are strongly encouraged from women and minority persons.*

**BIOCHEMIST.** Knox College invites applications for the new faculty position of biochemist at the **ASSISTANT PROFESSOR** rank with a joint appointment in biology and chemistry. It is funded by a Howard Hughes Medical Institute grant to Knox. The candidate is expected to teach introductory chemistry and biochemistry as well as upper-level biochemistry courses. Undergraduate research is an essential part of our program and the candidate will develop an undergraduate research program. Central to the expectations for this position will be to assist biology and chemistry to shape a new biochemistry major. A Ph.D. in biochemistry is required; some experience in cell tissue culture methods is preferred. The Biology and Chemistry Departments are renowned for the vigor of their programs, quality of the facilities, and extent of undergraduate research. The Chemistry Department is ACS certified. To apply send current curriculum vitae, transcripts, three letters of recommendation, and a description of a research program that could involve undergraduates to: **Robert Kooser, Director-Knox HHMI Program, K46, Knox College, Galesburg, IL 61401.** *Knox College is an Affirmative Action/Equal Opportunity Employer. With its history of commitment to equal rights, Knox especially encourages women and minorities to apply. Application review begins in mid-December and continues until the position is filled.*

### FACULTY POSITION

The Department of Biochemistry and Molecular Biology at the University of Texas M. D. Anderson Cancer Center, invites applications for tenure-track positions at the **ASSISTANT PROFESSOR** level. The department is composed of a group of highly interactive cell and molecular biologists and is entering a growth phase. We are particularly interested in individuals working in the areas of cellular signaling and regulatory processes associated with cell growth and differentiation. Applicants should have a Ph.D. or M.D. and a proven record of accomplishments as a postdoctoral fellow or faculty member. Applicants should send a letter outlining their research interests, their curriculum vitae, and three letters of reference to: **Dr. Eric N. Olson, Department of Biochemistry and Molecular Biology (Box 117), The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, TX 77030.** *The University of Texas M. D. Anderson Cancer Center is a smoke-free institution. An Affirmative Action/Equal Opportunity Employer.*

## POSITIONS OPEN

### THE UNIVERSITY OF CALIFORNIA SAN DIEGO DEPARTMENT OF BIOLOGY FACULTY POSITION

The Department of Biology at the University of California, San Diego invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level. Applicants should have a background in molecular developmental biology with emphasis on vertebrate systems. The successful candidate is expected to develop a vigorous research program and participate in the undergraduate and graduate teaching program.

A Ph.D. degree and several years of productive postdoctoral research is required. Salary will be commensurate with qualifications and experience and based on UC pay scale.

Applicants should send curriculum vitae, statement of interests, copies of publications, and the names of three referees by 31 December 1991, to:

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

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

### BIOLOGY

#### ASSISTANT PROFESSOR-GENETICIST

Tenure-track position to begin fall semester 1992. Teaching duties include: genetics, evolution, introductory biology, and nonmajors courses. Ph.D. required. Research, especially involving undergraduates, is encouraged, but the primary responsibility will be teaching. Send curriculum vitae, transcripts, reprints if available and three letters of recommendation by 31 January 1992 to: **Dr. Richard Gude, Chairman, Department of Biology, c/o Human Resources, The University of Tampa, 401 West Kennedy Boulevard, Tampa, FL 33606-1490.** *The University of Tampa is an Equal Opportunity, Affirmative Action Employer.*

**ASSISTANT PROFESSOR OF BIOLOGY.** Ph.D. required, tenure-track position 15 August 1992. Seeking a broadly trained individual to develop a genetics course for freshmen and an upper level course in biochemistry. Additional teaching duties determined by departmental needs. Research involving undergraduates is expected. Within four weeks after advertisement appears, please send curriculum vitae, copies of undergraduate and graduate transcripts, statement on teaching and research interests, equipment needs, and names of three references to: **Dr. James Watrous, Chairman Biology Department, Saint Joseph's University, 5600 City Avenue, Philadelphia, PA 19131.** *Equal Opportunity/Affirmative Action Employer.*

### PSYCHONEUROIMMUNOLOGIST UNIVERSITY OF TEXAS MEDICAL BRANCH (UTMB)

The Department of Psychiatry and Behavioral Sciences is searching for candidates for a position at the **ASSISTANT PROFESSOR** level. We are looking for an independent scientist to collaborate with an established, multidisciplinary group in studying the interactions between the nervous and immune systems. The applicant should have a Ph.D., or equivalent degree with postdoctoral experience. Preference will be given to individuals with molecular biology experience and interests in neuroendocrinology, cytokines, neurovirology or behavioral disorders. Primarily, the candidate will be expected to carry on an active research program; but clinical participation, dependent upon the individual's qualifications and interests, may be possible. Women and minorities are encouraged to apply. Applicants should submit full curriculum vitae, research interests, three recent reprints, and the name of three references to:

**Dr. Eric M. Smith, Chairman  
Psychoneuroimmunologist Search Committee  
Department of Psychiatry and Behavioral Sciences  
University of Texas Medical Branch  
Galveston, TX 77550**

*Equal Opportunity/Affirmative Action Employer, M/F/H/V. UTMB hires only individuals authorized to work in the United States.*

## POSITIONS OPEN

### NEUROSCIENTIST OBERLIN COLLEGE

The Neuroscience and Biopsychology Program invites applications for a full-time, tenure-track position beginning in the fall of 1992 at the rank of **ASSISTANT PROFESSOR** or higher. Neuroscientists with research interests in development and behavior, sensory systems and behavior, or neuroethology are especially encouraged to apply, although all applicants will be given full consideration. Teaching responsibilities will include a substantial contribution to an introductory course in neuroscience with laboratory; an upper level neuroscience course with laboratory consistent with the candidate's training and interests; and an upper level lecture course in the area of behavior. Candidates should have a commitment to both teaching and research. Teaching experience at the college level and postdoctoral research experience are desirable. Candidates will be expected to engage in sustained scholarly research and to serve as a mentor for research and honors students. Start-up funds are available.

To be assured of consideration, send application, curriculum vitae, undergraduate and graduate transcripts, and at least three letters of recommendation to: **Dr. Mark Braford, Director, Neuroscience and Biopsychology Program, Oberlin College, Oberlin, OH 44074** by 10 January 1992. Application materials received after that date may be considered until the position is filled. *Applications by women and minority candidates are strongly encouraged. Oberlin College is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT PROFESSOR OF BIOLOGY

The Biology Department of Pomona College invites applications for a 2-year, sabbatical replacement position at the assistant professor level in cell biology and genetics beginning fall 1992. The successful candidate will teach genetics in the spring 1993, cell biology in the spring 1994, and a different course in his/her area of specialization in the fall 1992 and 1993. Previous teaching experience in these areas is highly desirable, although not required. Pomona College (member of the Claremont Colleges) is a small liberal arts college where excellent undergraduate teaching is required, and the participation of undergraduates in research is encouraged. Send curriculum vitae, statement of teaching interests and experience, and three letters of reference to: **Search Committee, Department of Biology, Pomona College, Claremont, CA 91711.** To assure full consideration, all materials should be received by Friday, 3 January 1992. *Pomona College is an Equal Opportunity/Affirmative Action Employer and especially invites applications from women and minorities.*

Tenure-track **ASSISTANT PROFESSOR** of statistics and zoology. Ph.D. in statistics or biostatistics or an area of biology with a strong background in design and analysis of field experiments. Interest in application and development of statistical methods in biology, especially ecology. Teaching, research and on-campus consulting. Résumé to: **Joint Search Committee, Department of Statistics, University of Wyoming, Laramie, WY 82071-3332**, by 6 January 1992. *The University of Wyoming is an Affirmative Action and an Equal Opportunity Employer.*

### FACULTY POSITION DEPARTMENT OF MOLECULAR BIOLOGY MASSACHUSETTS GENERAL HOSPITAL DEPARTMENT OF GENETICS HARVARD MEDICAL SCHOOL

The Department of Molecular Biology at Massachusetts General Hospital and the Department of Genetics at Harvard Medical School invite applications for a joint appointment at the level of **ASSISTANT PROFESSOR**. The laboratory will be located in the Massachusetts General Hospital Department of Molecular Biology and the faculty appointment will be in the Harvard Medical School Department of Genetics. *We encourage applications from women and minority groups.* Applications should include curriculum vitae, reprints of publications, a statement of research plans, and three letters of recommendation. This material should be sent by 15 January 1992 to: **Howard M. Goodman, Chief, Department of Molecular Biology, Wellman 11, Massachusetts General Hospital, Boston, MA 02114.** *Harvard University and the Massachusetts General Hospital are Equal Opportunity/Affirmative Action Employers.*

# Post Doctoral Fellowship

## in Plant Molecular Biology

**\$36,000 - \$39,000pa plus superannuation**

*The Goodman Fielder Wattie Fellowship at the  
Division of Plant Industry  
Canberra, ACT, Australia*

This position is a Post Doctoral Fellowship for up to 3 years funded by Goodman Fielder Wattie. The aim of the research is to genetically modify fatty acid composition of oilseeds to improve the nutritional and functional properties of vegetable oils. A primary objective is to develop vegetable oils that combine low levels of saturates with high levels of either monounsaturates or polyunsaturates.

Your job will focus on cloning and characterising the key desaturase genes controlling the relative proportions of saturated and unsaturated fatty acids in oilseeds. Subsequent manipulation of these genes will involve genetic transformation of important oilseed species with either the cloned genes or ribozyme/antisense molecules targeted against them.

Applicants should have a PhD or equivalent qualifications with demonstrated research achievements in plant molecular biology. Further information about the research project can be obtained from Dr Allan Green by phone on 616 246 5154 or by fax on 616 246 5255. The full selection criteria and duty statement can be obtained by phoning Lynette Webb on 616 246 5295.

Please send your application, quoting Ref No. PG 91045 to: **The Recruitment Office, CSIRO Division of Plant Industry, GPO Box 1600, Canberra City, ACT 2601, Australia** by December 14, 1991.



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## GLAXO INSTITUTE FOR MOLECULAR BIOLOGY

Research at the Glaxo Institute in Geneva is focused on discovering the molecular mechanisms of diseases of the CNS, allergies and inflammatory conditions. We have an outstanding opportunity for

### MOLECULAR NEUROBIOLOGISTS to identify and characterize novel receptors in th CNS

Two positions exist: one for a staff member and one for a postdoctoral fellow. Working in the fields of neuro-inflammation and neuro-degeneration, these scientists will isolate new receptor genes expressed in the brain and characterize them in collaboration with others groups using electrophysiological and morphological techniques that are already established in the Institute. The ideal candidates will have a PhD in a relevant field plus a track record proven by publications with post-doctoral experience required for the staff position.

The Institute provides a dynamic international research environment and actively encourages collaborative projects with academic groups as well as the publication and presentation of results at scientific meetings. The Glaxo Institute is part of the Glaxo group, one of the world's most successful healthcare companies which has an outstanding reputation for the quality of both its research and products.

We offer an excellent compensation and benefits package and significant opportunities for career development. Geneva, situated in a very attractive part of Europe, has many advantages as a place to live.

If you are interested in either of these positions, please send your curriculum vitae with a list of publications and the names of three referees to: Rita Gloor, Personnel Manager, Glaxo Institute for Molecular Biology, 14 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland.



## POSITIONS OPEN

### ECOSYSTEM ECOLOGIST

The Department of Biology, West Virginia University, invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level for an ecosystem ecologist to join our growing Environmental Plant Biology Group. Development of an externally funded, productive research program is expected. Ph.D. required. Postdoctoral experience preferred. Review of applications will begin on 6 January 1992 and continue until the position is filled. Send curriculum vitae, statement of research interests, and the names and addresses of three references to: **Dr. Keith Garbutt, Search Committee Chair, Department of Biology, West Virginia University, Morgantown, WV 26506-6057.** *West Virginia University is an Equal Opportunity/Affirmative Action Institution. Women and minorities are encouraged to apply.*

### MICROBIOLOGIST

#### UNIVERSITY OF TEXAS AT ARLINGTON

The Department of Biology invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level beginning September 1992. We seek a broadly trained microbiologist who uses modern molecular techniques to study the biology, ecology, or evolution of prokaryotes. Preferences will be given to those candidates whose research addresses organismal-level questions. The successful candidate will be expected to participate in both the undergraduate program and in a newly established Ph.D. Program in Quantitative Biology. The University of Texas at Arlington is a comprehensive university of 25,000 students located in the Dallas-Fort Worth metroplex. Review of applications will begin 15 December 1991. Applicants should submit curriculum vitae, selected reprints, a statement of research and teaching goals, and names and addresses of three references to: **Dr. E. D. Brodie, Jr., Chairman, Department of Biology, Box 19498, The University of Texas at Arlington, Arlington, TX 76019.**

*Equal Opportunity/Affirmative Action Employer.*

#### UNIVERSITY OF MANITOBA DEPARTMENT OF PHYSIOLOGY



#### MOLECULAR BIOLOGY IN CARDIOVASCULAR SCIENCES

The Department of Physiology, Faculty of Medicine, University of Manitoba, invites applications for a contingent faculty position at the level of **ASSISTANT PROFESSOR** in the Division of Cardiovascular Sciences. Applicants should have M.D. or Ph.D. degree in any of the medical sciences with 2 to 3 years of postdoctoral experience in molecular biology. Candidates are expected to establish independent research programs in the area of cardiovascular molecular biology and teach both medical and graduate students. *The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, aboriginal people and persons with disabilities. The University offers a smoke-free environment save for specially designated areas. In accordance with Canadian immigration, priority will be given to Canadian citizens and permanent residents.* Please send your résumé, statement of research goals and names of three referees by 31 December 1991 to: **Dr. N. S. Dhalla, Division of Cardiovascular Sciences, St. Boniface Research Centre, 351 Tache Avenue, Winnipeg, Manitoba, R2H 2A6 Canada.**

#### PHYSIOLOGISTS-MOLECULAR ASPECTS

The Department of Biological Sciences at Western Michigan University seeks applications for a tenure-track **ASSISTANT PROFESSOR** position for fall 1992, pending budgetary approval. Position requires a Ph.D. degree in biology, or evidence of imminent award, with expertise in the use of cellular or molecular methods to solve physiological problems associated with cellular, whole organisms or environmental issues. Candidate must demonstrate potential for teaching, scholarship and publication. Postdoctoral work in physiology is desirable. *Western Michigan University, a Carnegie Classification Doctoral I Institution, has embarked upon a vigorous Affirmative Action program and encourages applications from women and members of minority groups who are qualified for this position.* Send letter of application, curriculum vitae, academic transcripts and three letters of recommendation to: **Dr. Leonard Beuving, Search Committee Chair, Biological Sciences Department, Western Michigan University, Kalamazoo, MI 49008.** Review of applications will begin 16 December 1991 and continue until position is filled.

## POSITIONS OPEN

### MOLECULAR BIOLOGIST

The University of Rochester, Department of Dental Research, invites applications for the faculty position of **SCIENTIST (RESEARCH ASSISTANT PROFESSOR, nontenure track)**. Position available immediately. Research area to include the study of the molecular biology and the structure/function relationship of ion transport mechanisms in exocrine glands. A Ph.D. with extensive postdoctoral experience in eukaryotic recombinant DNA techniques is required. However, recent Ph.D.s with strong backgrounds will be considered. Salary commensurate with experience. Submit curriculum vitae and names of two references to: **Dr. James E. Melvin, University of Rochester Medical Center, 601 Elmwood Avenue, Box 611, Rochester, NY 14642.** *Affirmative Action/Equal Opportunity Employer.*

#### CARDIOVASCULAR MOLECULAR AND CELLULAR BIOLOGY DEPARTMENT OF SURGERY GEORGETOWN UNIVERSITY SCHOOL OF MEDICINE

Applications are invited for a newly established position at the level of **RESEARCH ASSISTANT PROFESSOR** to be held jointly in the Department of Biochemistry and Molecular Biology. Research will focus on the general area of myocardial and vascular wall pathobiology. The applicant will be expected to develop an active research program that contributes to departmental interests in ischemia/reperfusion injuries and cytokine-mediated myocardial dysfunction. The jointly held appointment will facilitate interaction with colleagues and access to facilities in the Department of Biochemistry and Molecular Biology. Particularly encouraged are applicants with postdoctoral experience in the physiology and molecular biology of: receptor-ligand interactions, signal transduction, inflammation and cytokine interactions, free radical production and quenching, and ion channels and exchangers. Salary, renovated laboratory space, and start-up support will be provided. Curriculum vitae, reprints of three publications, and three letters of reference should be submitted by 1 January 1992 to:

**Marc S. Visner, M.D.  
Department of Surgery  
Georgetown University Hospital  
3800 Reservoir Hospital  
Washington, DC 20007**

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

**MOLECULAR GENETICIST.** One-year sabbatical replacement in the Biology Department of Whitman College, August 1992 to June 1993. Ph.D. desired. **INSTRUCTOR OR ASSISTANT PROFESSOR** level. Teach molecular biology, genetics, introductory principles of biology (all with laboratories), and direct student research. Whitman College is a liberal arts college of 1,150 students committed to undergraduate teaching and research. Send curriculum vitae, three letters of recommendation, transcripts, and statement of teaching and research interests to: **Dr. Earl W. Fleck, Biology Department, Whitman College, Walla Walla, WA 99362; telephone: 509-527-5227, 5225.** *Affirmative Action, Equal Opportunity Employer.*

#### DEVELOPMENTAL BIOLOGIST/ DEVELOPMENTAL NEUROBIOLOGIST

Tenure-track **ASSISTANT OR ASSOCIATE PROFESSOR** position open in fall 1992, for a developmental biologist, preferably a developmental neurobiologist, working at the multicellular or systems level with interests in embryonic or post-embryonic development. Primary teaching responsibility will be one course a semester alternating among biology for nonmajors, introductory zoology, and a specialty course. Candidates must have Ph.D. with proven record of good teaching and research abilities (demonstrated by publications). Postdoctoral experience is preferred. Pending budgetary approval, screening will begin 15 January 1992 and continue until the position is filled. Send curriculum vitae, four letters of recommendation, representative reprints, summary of teaching experience and description of research interests to: **Dr. James N. Thompson, Jr., Chair, Department of Zoology, University of Oklahoma (OU), Norman, OK 73019.** *An Equal Opportunity Affirmative Action Employer. OU has a policy of being responsive to the needs of dual-career couples.*

## POSITIONS OPEN

### FACULTY POSITION

#### DEPARTMENT OF

#### MEDICAL BIOCHEMISTRY AND GENETICS

The Department of Medical Biochemistry and Genetics invites applications for a tenure-track **ASSISTANT 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. 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 POSITIONS NEUROSCIENCE AND ANATOMY

The Department of Neuroscience and Anatomy of The Pennsylvania State University College of Medicine, The Hershey Medical Center, has tenure-track **ASSISTANT PROFESSOR** positions available for the current and forthcoming academic years. Qualified individuals should have a Ph.D. or M.D. degree, postdoctoral training, and research interests in areas of cellular or molecular neurobiology. More experienced individuals may also be considered for **ASSOCIATE PROFESSOR** positions. Appointed faculty are expected to maintain an active research program and participate in departmental teaching. Interested persons should send curriculum vitae, a statement of research interests, and names of three referees to: **Robert J. Milner, Ph.D., Department of Neuroscience and Anatomy, The Milton S. Hershey Medical Center, P.O. Box 850, Hershey, PA 17033.** Deadline for applications is 1 February 1992. *Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

**RESEARCH SCIENTIST** is sought for a tenure-track position as **ASSISTANT OR ASSOCIATE PROFESSOR** in the Department of Surgery at the University of Medicine and Dentistry of New Jersey (UMDNJ) Robert Wood Johnson Medical School. A cell/molecular biologist with an interest in integrins, adhesion molecules and endothelial cell interactions is sought to be director of a fully-equipped laboratory which includes cell sorting flow cytometry. The Department of Surgery consists of more than 30 full-time faculty, of whom 8 are Ph.Ds. There is the likelihood of collaboration with basic scientists with specific interests in integrins and the extracellular matrix. Salary and benefits are competitive and the basic science resources in a 20 mile radius are outstanding. Qualified applicants should submit curriculum vitae to: **Ralph S. Greco, M.D., Professor and Chief, Division of General Surgery, UMDNJ-Robert Wood Johnson Medical School, CN 19, New Brunswick, NJ 08903-0019.** *The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.*



#### FACULTY POSITIONS

Applications are invited for two openings as **ASSISTANT, ASSOCIATE, or FULL PROFESSOR**: (1) General Science: A physical or biological scientist with a background and interest in history/philosophy of science to teach scientific thinking and to participate in an interdisciplinary seminar on great books for science and arts students. (2) Biology: Teach undergraduate courses in general biology, environmental biology, vertebrate zoology, systematics, and animal physiology. For both positions, teach in English, three courses per semester. Ph.D. required. Two-year appointments (renewable) begin September 1992. Rank, salary according to qualifications and experience. For expatriates, housing, round-trip air travel, plus schooling for two children included. Write with curriculum vitae to: **Dean George H. Gibson, The American University in Cairo, 866 United Nations Plaza, Suite 517, New York, NY 10017,** preferably before 15 January 1992.

## **Sr. Microbiologist/ Biochemist**

Merck & Co., Inc. has an immediate opening for a Senior Fermentation Microbiologist/Biochemist in the Technical Operations Department of their chemical manufacturing facility in Danville, PA. Named "America's Most Admired Company" by Fortune Magazine for the last five years, Merck & Co., Inc. is a world leader in the production of ethical pharmaceuticals for human and animal health. The successful candidate will be responsible for:

- Optimizing fermentation conditions in current and future processes
- Identifying and developing microorganisms and enzymes for new and existing bioprocesses
- Supervising and conducting experiments at the bench and in pilot scale laboratory fermenters
- Assisting in the resolution of manufacturing problems in factory areas

This position requires an MS/PhD in Microbiology or Biochemistry, or a related degree with 3-5 years of post-doctoral or related work experience. A strong background and thorough understanding of microbial physiology and biochemistry is required.

Demonstrated expertise in analytical methods and assay development using automated HPLC, HPIC, GC, and CZE equipment is highly desirable. Experience in industrial microbiology managing strain and medium development programs is preferred. Successful candidates must also possess good oral and written communications skills with demonstrated ability to work independently.

Our salaries, benefits, and growth potential are excellent. Our location offers an affordable lifestyle with many educational and recreational choices. A comprehensive relocation package is also offered for this position. For consideration, please send your resume with salary requirements and three references to: **Michael P. Kearns,**

**MERCK & CO., INC.**  
**Merck Manufacturing Division**  
**P.O. Box 600, Danville, PA 17821**

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National Institutes of Health  
National Institute of Dental Research

## **Chief Bone Research Branch**

The Intramural Research Program of the National Institute of Dental Research invites nominations and applications for the position of Laboratory Chief, Bone Research Branch.

The Chief, Bone Research Branch will be responsible for planning, directing and conducting research programs which use biological, genetic and molecular approaches to study: mineralization of cartilage, bone and teeth; the role of proteoglycans in connective tissue development and in extracellular matrix assembly; bone cell biology and bone matrix organization; nuclear magnetic resonance methods to determine 3 - dimensional structure. Appointee will have latitude in the recruitment of other senior scientists, post doctoral fellows and technicians.

Applicants should have a Doctoral degree with accomplishments in the area of interest to the laboratory and with demonstrated ability for administrative leadership. Position is available immediately. This is a Civil Service position, GM-15. Physicians and Dentists may be eligible for Physician's Comparability allowance. Alternatively, appointment in the Commissioned Corps of the U.S. Public Health Service may be appropriate. U.S. citizenship is required.

Applicants must submit an SF-171 (available in any Federal personnel office), curriculum vitae, brief statement of research directions and the names of three references. Documents must be submitted no later than **December 31, 1991** to:

**Ms. Faye M. Harbrant**  
**Personnel Management Specialist**  
**National Institute of Dental Research**  
**National Institutes of Health**  
**Building 31, Room 2C23**  
**9000 Rockville Pike**  
**Bethesda, MD 20892**



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## RESEARCH ASSOCIATE STEM CELL BIOLOGY

**Amgen** has distinguished itself as the industry leader in the development of human therapeutic products through application of biotechnology. As a result of our continuing commitment to the discovery of novel cellular growth factors, we are actively seeking a Research Associate to contribute to ongoing programs leading to the characterization of properties and mechanisms of action of known hematopoietic growth factors, as well as identification and characterization of new growth factors.

Qualified candidates must have a BS or MS in Cell Biology, Biochemistry or a related discipline and a minimum of 3 years' relevant experience in mammalian cell culture, *in vitro* and *in vivo* bioassays, and protein purification and characterization.

**Amgen** offers a stimulating and challenging research environment in which scientists are provided the resources and support necessary to achieve their full potential. Our compensation and benefits package reflects our commitment to attract and retain the best scientific talent available. If you have the necessary skills and would like to be a part of an organization that places a high priority on its human resources, please send a resume, in confidence, to:

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Recruitment, Dept. #621  
Amgen Center  
Thousand Oaks  
CA 91320-1789

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# AMGEN

# C O L B Y



**COLBY COLLEGE** invites applications for two tenure-track positions as Assistant Professors of Biology to begin September, 1992. Women candidates will be considered for a Clare Boothe Luce endowed chair, which provides dedicated annual research funds, and salaries for undergraduate research assistants. Candidates should have a Ph.D. and a strong commitment to undergraduate education. Teaching will include courses in the candidates' discipline, a course for non-biology majors in alternate years and team teaching in the introductory course in some years. An active research program, including supervision of undergraduate research, will be expected. Familiarity with liberal arts colleges, teaching experience, and/or postdoctoral training are desirable.

### *Animal Physiologist*

Applicants should have broad training in animal physiology. Courses taught will include comparative physiology. A strong interest in one or more of the following areas is preferred: invertebrate biology, functional anatomy, endocrinology, or evolutionary biology.

### *Plant Molecular Biologist*

Applicants are sought who have broad training in the botanical sciences and special interest and expertise in the molecular aspects of plant biology. Colby has an emerging, well-funded interdisciplinary program in cell and molecular biology/biochemistry. Courses taught will include molecular biology.

Please submit a letter of application, statement of teaching and research interests, curriculum vitae, reprints of publications, undergraduate and graduate transcripts, and three letters of recommendation to: **Professor David H. Firmage, Chair, Department of Biology, Colby College, Waterville, ME 04901.** Review of applications will begin December 16, 1991 and continue until the position is filled.

Colby College is an AA/EO employer and strongly encourages applications from women and minorities.

## POSITIONS OPEN

**ASSISTANT PROFESSOR, PLANT PHYSIOLOGIST/MOLECULAR BIOLOGIST**, tenure-track, beginning fall 1992, pending state funding. Ph.D. required. Periodically expected to teach plant physiology, molecular biology, botany and liberal studies biology. Expected to develop an independent research program. Salary competitive. Submit curriculum vitae, statement of teaching and research interests, and names, addresses and telephone numbers of three references to: **Associate Head, Department of Biology, James Madison University, Harrisonburg, VA 22807.** Position open until qualified applicant is found. Application review will begin 2 January 1992. *The University is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITION

The Section of Musculoskeletal Biology in the Department of Biomedical Engineering and Applied Therapeutics at the Cleveland Clinic Foundation is currently seeking two M.D. or Ph.D. faculty members at the **ASSISTANT/ASSOCIATE PROFESSOR** level working in molecular biology and cell biology, to pursue independent research. The section is currently involved in basic and clinical research related to musculoskeletal tissue formation and repair, including applications of tissue engineering for connective tissue repair. A background in bone or cartilage research is preferred, but not required. Send curriculum vitae, a short statement of research interests and the name of three references to: **Dr. George F. Muschler, Musculoskeletal Biology, Department of Biomedical Engineering and Applied Therapeutics (Wb-3), The Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195-5254.** *The Cleveland Clinic is an Equal Opportunity/Affirmative Action Employer.*

### ASSISTANT/ASSOCIATE PROFESSORS OF BIOLOGY

The Department of Biology, San Francisco State University (SFSU), invites applications for two tenure-track positions anticipated to start fall 1992. A Ph.D. is required and postdoctoral experience is desirable. We are particularly interested in candidates who are committed to achieve excellence in teaching, who have an established research record, and the potential to attract extramural funds for a research program that includes supervision of M.A. student research. The department has a faculty of 40 with active groups in ecology, botany, conservation, marine biology, microbiology, cell and molecular biology, neurobiology, and physiology.

**AQUATIC ECOSYSTEMS ECOLOGY.** We seek an aquatic ecosystems ecologist with expertise in quantitative modeling whose responsibilities will be to (1) offer upper division and graduate courses in limnology, quantitative biology, and ecosystems ecology; (2) participate in lower division courses on a rotational basis; and (3) establish a research program in aquatic ecosystems ecology.

**MICROBIOLOGY/VIROLOGY.** We seek a microbiologist whose primary responsibilities will be to (1) offer upper division and graduate courses in microbiology, virology, and/or medical microbiology; (2) participate in lower division courses on a rotational basis; and (3) establish a research program involving M.A. students in area of specialization.

Send curriculum vitae, statement of teaching interests and research goals, and three letters of reference by 15 January 1992 to:

**Dr. Gregory Antipa, Chair, Hiring Committee**  
Department of Biology  
San Francisco State University  
San Francisco, CA 94132

*Women and minority candidates are especially urged to apply. SFSU is an Equal Opportunity/Affirmative Action Employer.*

### FACULTY POSITIONS

The School of Biology at Georgia Institute of Technology invites applications for positions at **ASSISTANT OR ASSOCIATE PROFESSOR**. Successful applicants are expected to establish an active program of funded research and be committed to teaching. Areas of research interest include molecular genetics/biophysics relating to signal transduction or gene regulation, and microbial biotechnology. Curriculum vitae, research plans, and three letters of reference should be submitted by 10 January 1992 to: **Dr. Roger M. Wartell, Search Committee, School of Biology, Georgia Tech, Atlanta, GA 30332.** *Georgia Tech is an Equal Opportunity/Affirmative Action Employer.*

## POSITIONS OPEN

### UNIVERSITY OF YORK DEPARTMENT OF BIOLOGY PROFESSOR OF ECOLOGY

The Department of Biology intends to appoint a new professor to maintain and develop the high reputation of the university in ecology. The successful candidate will have an international reputation and an active research programme, and will provide leadership to the ecological side of the Department. We are keen to develop research in evolutionary ecology, but are also interested in strengthening existing groups in population, community and physiological ecology. The new professor may wish to interact with the School of Environmental Economics and Environmental Management.

Salary within the professional range (current minimum 28,742 per annum).

Informal enquiries are welcome to: **Dr. David White or Dr. Alastair Fitter (0904 432851).**

Ten copies of applications, including full curriculum vitae and the names of three referees, should be sent by 17 December 1991 to: **Personnel Office, University of York, Heslington, York, YO1 5DD, England**, from whom further details may be obtained. Please quote reference number 4/1035.

### FACULTY POSITION IN PHYSIOLOGY TULANE UNIVERSITY

Applications are invited for a tenure-track appointment of the rank of **ASSISTANT OR ASSOCIATE PROFESSOR**. Candidates should hold the Ph.D. or M.D. degree, have a record of excellence in research, and be committed to academic programs in medical and graduate education. Research areas marked for expansion include, but are not limited to, cardiovascular-renal, cellular/molecular, and epithelial transport physiology. The successful applicant will be expected to have an established research program (associate professor) or to develop an independent extramurally funded research program. Send a résumé, description of research program, reprints, and four letters of recommendation to: **Dr. L. Gabriel Navar, Chairman, Tulane University School of Medicine, Department of Physiology, SL-39, 1430 Tulane Avenue, New Orleans, LA 70112.** *Tulane University is an Affirmative Action/Equal Opportunity Employer.*

### ASSISTANT/ASSOCIATE PROFESSOR BRIGHAM AND WOMEN'S HOSPITAL AND HARVARD MEDICAL SCHOOL

The Gerontology Division of the Department of Medicine at Brigham and Women's Hospital and Harvard Medical School is seeking a scientist to establish a laboratory capable of studying basic aspects of bladder smooth muscle physiology and its relation to aging. The laboratory would complement existing strengths in lower urinary tract physiology, pathophysiology, and biomechanics, which focus on in vivo human and animal studies. The applicant should be familiar with molecular, biochemical, electrophysiologic, and calcium imaging techniques, in addition to more traditional physiologic techniques. Candidates should provide evidence of significant accomplishment and promise, and of ability to establish a nationally recognized independent research program. Ample support will be provided for start-up and early development. Candidates should possess Ph.D., M.D., or both degrees with suitable postdoctoral experience, and should be eligible for appointment at the Assistant/Associate Professor level at Harvard Medical School.

Please send curriculum vitae and 1-page summary of research interests to: **Dr. Neil M. Resnick, Chief of Geriatrics, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115.** *Harvard University and Brigham and Women's Hospital are Affirmative Action Employers.*

**ASSOCIATE PROFESSOR, ORAL BIOLOGY.** Research in area of bone/mineralized tissue biology. Cell, molecular or structural biology orientation. Must participate in Ph.D. training and develop independent program. Teaching to dental students and graduate students is required. Send résumé and names and addresses of three references to: **Dr. Arthur Veis, Division of Oral Biology, Northwestern University, 303 East Chicago Avenue, Chicago, IL 60611.** Deadline for application, 30 December 1991. *An Affirmative Action/Equal Opportunity Employer.*

The Institute for Naval Oceanography (INO) is located at the Stennis Space Center, near Bay St. Louis, Mississippi. It is managed by the University Corporation for Atmospheric Research (UCAR), a consortium of 59 North American universities. INO is sponsored by the Navy and is operated by UCAR under a cooperative agreement.

INO provides leadership in the research and development of ocean numerical models, in interfacing such models with atmospheric and acoustic models, and in developing means to assimilate remotely sensed and in-situ oceanic data for operational use.

### DIRECTOR, INSTITUTE FOR NAVAL OCEANOGRAPHY

The INO Director is the executive and scientific leader, reporting to the UCAR President. The Director's primary responsibility is to provide scientific direction and productivity of INO research programs, including the formation of plans, budgets and priorities, in keeping with established guidelines. He or she oversees all staff appointments, establishes a sound management structure and such procedures and advisory mechanisms as deemed appropriate.

The INO Director establishes and maintains a working system of communication, consultation and coordination with relevant agencies on INO matters. He or she also maintains working relations with the university research community and research-sponsoring agencies and is well informed on national ocean science policy affairs. Keeping abreast of research developments in ocean science and related disciplines and contributing to national and international scientific committees, professional societies, and the INO's scientific research program are also key responsibilities of the position. The INO Director supervises employees in ways consistent with UCAR policies and with its equal employment opportunity and affirmative action programs. The INO Director will also attend meetings of the UCAR Board of Trustees and sit on the UCAR Directors' Committee.

Requirements include a doctoral degree in oceanic, atmospheric or a related science, and international recognition as a scientific leader in areas of INO interest. He or she must have demonstrated the ability to successfully manage complex research activities.

Other requirements include: breadth of interest, vision and judgment; ability to motivate the INO staff; skill in determining and assessing priorities among research objectives; ability to work effectively with university researchers, governmental agencies and a broad range of peers in planning and leading scientific programs; skill in the art of scientific advocacy; and senior-level management experience. Strong interpersonal skills, good judgment and familiarity with the challenges of managing scientific and technical endeavors are essential.

The President of UCAR wishes to appoint the INO Director in the spring/summer of 1992. Nominations should be made as soon as possible and the applications should be received by **January 31, 1992**. Applications should include a letter of interest, curriculum vitae and list of publications. Please forward to: **J.R. Apel, INO Director Search Committee, c/o W. S. Shiver, University Corporation for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307-3000.**

### NAVIER-STOKES CHAIR IN NUMERICAL MODELING

This position will provide an opportunity for an experienced ocean, atmospheric, or acoustic modeler to conduct basic and/or applied research at the INO, where the long-range goal is to develop and demonstrate mesoscale eddy-resolving ocean prediction systems on a global basis. The INO program is focused on developing and demonstrating an end-to-end system for ocean predictions and acoustic implications.

The Navier-Stokes Chair will have access to some of the largest Navy supercomputing resources available. These resources include a CRAY Y-MP with 8 processors and 128MW memory; numerous peripheral computing systems; and extensive external communications networks with links to other supercomputer installations. The researcher will be provided access to the Maury Oceanographic Library, one of the finest libraries of its kind in the world.

Remuneration will be in accordance with UCAR compensation policy for senior-level scientists and will be highly competitive with analogous university appointments. An affiliation with a local university is a possibility. The comprehensive UCAR benefits package, including paid vacation and holidays, life and health insurance, and contributions to a retirement fund, will be included with the appointment. A liberal travel allowance will be provided for attendance at scientific meetings and conferences. The appointment will be for up to three years.

Qualified individuals are encouraged to apply by sending a resume, along with a statement of their research interests and experience to: **Dr. Richard Anthes, President, University Corporation for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307-3000.**

UCAR has a strong commitment to the principle of diversity in all areas. In that spirit, we are interested in receiving applications from a broad spectrum of people, including women, minorities, and disabled individuals.



**University Corporation for  
Atmospheric Research**

## POSITIONS OPEN

### FACULTY POSITIONS UMDNJ-NEW JERSEY MEDICAL SCHOOL

The Division of Injury Sciences, Department of Anatomy, Cell Biology and Injury Sciences of the UMDNJ-New Jersey Medical School seeks distinguished candidates for faculty appointments at the **ASSISTANT/ASSOCIATE OR FULL PROFESSOR** level. Candidates should have a doctoral degree and demonstrated academic productivity in areas of cell biology, biochemistry, physiology or immunology as related to studies of the host defense response to injury sepsis or shock. Résumés and additional information may be sent to: **Dr. John H. Siegel, Chairman, Anatomy, Cell Biology and Injury Sciences, 185 South Orange Avenue, Newark, NJ 07103; telephone: 201-456-4414 or FAX: 201-504-7489.** The UMDNJ is an Affirmative Action/Equal Employment Opportunity Employer, M/F/H/V, and a member of the University Health System of New Jersey.



### STRUCTURAL BIOLOGY MOLECULAR BIOPHYSICS WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

Applications are invited for two tenure-track **FACULTY POSITIONS** in the Department of Biochemistry and Molecular Biophysics at the level of **ASSISTANT PROFESSOR**, although candidates at the **ASSOCIATE** or **FULL PROFESSOR** level will also be considered for highly qualified individuals. Applicants must have a Ph.D. or equivalent degree and postdoctoral experience. We will consider individuals with demonstrated creativity and productivity and interests in: (1) macromolecular structural analysis by x-ray crystallographic methods, and (2) understanding fundamental biological processes at the molecular level, using biochemical and/or biophysical approaches. In addition to departmental affiliation, the positions include membership in the Division of Biological and Biomedical Sciences, which oversees a number of excellent multidisciplinary graduate programs. The Department of Biochemistry and Molecular Biophysics has recently added several faculty in the area of Molecular Biophysics with interests in the structure and functional energetics of proteins, nucleic acids and protein-nucleic acid systems. Interested candidates should send their curriculum vitae, a summary of research interests and future research plans and have three letters of reference sent by 31 December 1991 to: **Dr. Gary K. Ackers, Department of Biochemistry and Molecular Biophysics, 660 South Euclid Avenue, Box 8231, St. Louis, MO 63110.** Washington University is an Equal Opportunity/Affirmative Action Employer.

### FACULTY POSITION UNIVERSITY OF MIAMI SCHOOL OF MEDICINE

The Department of Molecular and Cellular Pharmacology invites applications from outstanding scientists to join our department. This tenure-track position can be at the **ASSISTANT, ASSOCIATE OR FULL PROFESSOR** level depending on experience and achievements. Our faculty include molecular biologists, electrophysiologists, and biochemists investigating ion channels, receptors, and second messenger systems in nerve and muscle. Outstanding candidates in these areas and other relevant fields are encouraged to apply. The successful applicant is expected to have achieved recognition in their field and/or to have demonstrated their ability to establish a strong, independent research program. Generous space and set-up funds are available with limited teaching responsibilities. In order to make the appointment as early as June 1992, we would like to receive applications by 15 December 1991.

Interested individuals should send curriculum vitae, a statement of research interests and future directions, and names and addresses of three references to:

**Dr. David J. Adams**  
Chairman, Faculty Search Committee  
Department of Molecular and Cellular Pharmacology  
University of Miami School of Medicine  
P.O. Box 016189  
Miami, FL 33101

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

## POSITIONS OPEN

### ASSISTANT PROFESSOR

To study mechanisms of neuropeptide-calmodulin interactions and antibody catalysis. Responsibilities include supervision and collaborative interaction with other fellows. Strong background in basic biochemical methods is desirable. Send curriculum vitae with names and addresses of three references to: **Dr. Sudhir Paul, Department of Anesthesia, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-4455.** Equal Opportunity/Affirmative Action Employer. Minorities and women are encouraged to apply.

### GRAYCE B. KERR CHAIR IN BIOCHEMISTRY

The Department of Chemistry and Biochemistry at the University of Oklahoma is seeking an outstanding individual to occupy the Grayce B. Kerr endowed chair at the **FULL OR ASSOCIATE PROFESSOR** level. Candidates must have an active, funded research program in biochemistry or structural biology, a strong record of research accomplishments, and a demonstrated commitment to teaching. *Minority and women candidates are strongly encouraged to apply.* Review of candidates will begin 15 December 1991, and will continue until an appointment is made. Applicants should submit complete curriculum vitae that includes a summary of research and teaching experience, and a description of ongoing and future research plans. Applicants should also have at least three letters of reference sent to: **Dr. Arthur E. Johnson, Chair, Search Committee, Department of Chemistry and Biochemistry, University of Oklahoma, Norman, OK 73019.** The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.

Lewis & Clark College invites applications and nominations for the **WILLIAM SWINDELLS, SR. PROFESSOR IN THE NATURAL SCIENCES** for appointments as Chair of the Biology Department. Candidates must be outstanding teachers, distinguished researchers with a record of extramural funding, committed to undergraduate research, and possess outstanding leadership qualities.

We have a strong preference for candidates who employ modern techniques to address problems in ecology, population biology, or evolution, although candidates in any area of biology will be considered.

Qualified candidates should submit a letter of application and supporting materials to: **Professor James A. Duncan, Chair of the Search Committee and Dean of Mathematics and Natural Sciences, Lewis & Clark College, Portland, OR 97219.** Every effort will be made to respect requests of confidentiality. Review of applications and nominations begins 20 January 1992; the search will remain open until the position is filled.

Lewis & Clark College is an Equal Opportunity Employer and encourages the application of women and minority candidates.

### CURATORIAL POSITION IN ORNITHOLOGY AMERICAN MUSEUM OF NATURAL HISTORY

The Department of Ornithology invites applications from ornithologists with Ph.D.'s for a tenure-track curatorial position. Research and training should involve evolution and systematics of birds and include work with museum specimens. The department maintains large worldwide collections of all avian taxa. The primary responsibility of the successful applicant will be to conduct an outstanding research program. Other responsibilities will include curation of the collection, assistance with the preparation of exhibits and with educational programs of the Museum, administration, and other departmental duties. Rank and salary shall be determined based upon qualifications and experience. Full museum benefits apply. Interested applicants must submit the following information by 1 February 1992: (1) curriculum vitae, (2) statement of long-term research objectives, (3) complete bibliography and sample publications, and (4) letters of recommendation from at least three professionals acquainted with the applicant's accomplishments. Submit to:

**Dr. François Vuilleumier**  
Chairman, Search Committee  
Department of Ornithology  
American Museum of Natural History  
Central Park West at 79th Street  
New York, NY 10024  
An Equal Opportunity Employer.

## POSITIONS OPEN

### CHAIRPERSON

### DEPARTMENT OF PHARMACOLOGY, TOXICOLOGY AND THERAPEUTICS

Applications and nominations are invited for the position of Chair of the Department of Pharmacology, Toxicology, and Therapeutics at the University of Kansas Medical Center. The successful candidate will have an M.D. or Ph.D. degree, or both, and will have an outstanding record of accomplishment in the areas of administration, teaching, and research. The chairperson will coordinate and be responsible for courses taught to medical, nursing, and graduate students. The chairperson will be expected to lead research programs in pharmacology and/or toxicology and to encourage interdisciplinary research with other departments or specialized centers.

Interested candidates for this position should submit curriculum vitae and the names and addresses of three references to:

**Dr. Daniel J. Stechschulte, M.D.**  
Chairman of the Search Committee  
c/o Department of Medicine  
The University of Kansas Medical Center  
39th and Rainbow Boulevard  
Kansas City, KS 66103

Applications will be accepted until the position is filled. The University of Kansas Medical Center is an Equal Opportunity/Affirmative Action Employer.

### ENDOWED CHAIR IN ANIMAL REPRODUCTION

Nominations and applications are invited for the Marion Dille and David George Jones tenured Chair in Animal Reproduction at the University of Pennsylvania School of Veterinary Medicine.

This professorship is intended to enhance research and educational activities in animal reproduction by the Section of Reproductive Studies, Department of Clinical Studies, New Bolton Center. The successful applicant is expected to have an academic background and experience for providing leadership in all academic endeavors of the Section. The incumbent will be expected to expand the existing research of the Section with innovative programs in an area relevant to reproduction biology of animals. An interest in the reproductive biology of wildlife will be considered.

Candidates should have an advanced, preferably Ph.D., degree and documented research productivity. A degree in veterinary medicine is highly desirable.

Interested individuals should send curriculum vitae, list of references, and summary of research interests to: **Dr. Charles E. Benson, Chairman, Department of Clinical Studies, New Bolton Center, School of Veterinary Medicine, University of Pennsylvania, 382 West Street Road, Kennett Square, PA 19348-1692.**

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

### OFFICE CHIEF CLINICAL ENVIRONMENTAL MICROBIOLOGY PUBLIC HEALTH LABORATORIES

The State Public Health Laboratories in Seattle, Washington are searching for an Office Chief for their Microbiology Laboratories. This person would be responsible for the supervision and administration of clinical and reference microbiology, virology-serology and environmental microbiology. Please telephone: 206-361-2815 for an employment package.

**ENTOMOLOGY CURATORIAL POSITION.** Responsibilities consist of collection-oriented research on systematics of a group of insects or arachnids, active participation in management of a major collection, development of external funding for research and collections, and participation in public program activities. Doctorate required. Special consideration given to specialists in orders other than Lepidoptera. **ASSISTANT, ASSOCIATE OF FULL CURATOR** level depending on qualifications. Send curriculum vitae, description of research interests, collection management and public program experience, grant/contract funding, names of three references, by 1 February 1992 to: **Dr. Charles Hogue, Entomology Section, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007; telephone 213-744-3363.** An Equal Opportunity Employer.



## POSTDOCTORAL SCIENTIST FOR RESEARCH ON LIPOSOMAL DRUG DELIVERY SYSTEMS

Sandoz Pharma Ltd. has an immediate opportunity for a postdoctoral scientist with a background in liposome research to join its Drug Delivery Systems department.

The appointment is for a period of two years.

The successful applicant will work within a multidisciplinary team studying liposomal carrier systems for water soluble compounds, including peptides. His/her work will involve formulation design and manufacture, as well as the analytical and biological characterization of these systems.

Applicants should be recently qualified PhDs with appropriate experience in liposome formulation and characterization and a good overall grasp of drug delivery concepts.

Applications, including a CV and copies of two testimonials, should be sent to:

Mr. R. Zbinden  
Personnel Department, Ref. 1492  
Sandoz Pharma Ltd.  
Ch-4002 Basle  
Switzerland



# SANDOZ

## SCIENTIST/ PROJECT LEADER

Baxter Diagnostics Inc., a worldwide leader in supplying innovative diagnostic reagents, currently has opportunities due to an expansion of our hemostasis R&D group.

Successful candidates will have a Ph.D. in biochemistry or relevant equivalent experience. Previous industrial R&D or postdoctoral studies involving coagulation, fibrinolysis, immunochemistry and platelet/monocyte biochemistry is a plus. Experience in protein purification, phospholipid biochemistry or immunodiagnostics is desirable. Preference will be given to individuals with demonstrated ability to effectively supervise and provide leadership for successful product development projects.

We offer an excellent scientific environment supported by a highly competitive salary and complete benefits package. Please send your resume in confidence to: Baxter Diagnostics Inc., Hemostasis R&D, Ad# 101, MS 387, P.O. Box 520672, Miami, FL 33152-0672. Equal Opportunity Employer. We Conduct Pre-Employment Drug Screening.

**Baxter Diagnostics Inc.**

# Baxter

U.S. DEPARTMENT OF ENERGY

## POSTGRADUATE RESEARCH PROGRAMS

Global Change	Engineering
Human Genome	Physical Sciences
Fossil Energy	Environmental Sciences
Fusion Energy	Life Sciences
Toxicology	Computer Sciences
Risk Analysis	Human Factors

- Research at national laboratories
- Stipends \$22,000 - \$48,000 depending on degree, program, research area
- Recent graduate degree
- U.S. citizens or PRAs eligible

Information and applications (please give research area/s):

**Postgraduate Research Programs**

Science/Engineering Education Division  
Oak Ridge Associated Universities  
P.O. Box 117  
Oak Ridge, TN 37831-0117  
(615) 576-3190

## POSITIONS OPEN

### GRADUATE DEAN UNIVERSITY OF ALABAMA AT BIRMINGHAM (UAB)

The Graduate Dean at UAB will play a supportive role in planning, coordinating, and promoting graduate programs of quality and excellence. The Dean will work closely with the offices of the two academic vice presidents (Health Affairs and Academic Affairs), other academic deans, departmental heads, and faculty to foster quality graduate programs that will achieve recognition at the national and international levels.

The Dean will provide intellectual leadership to facilitate scholarly and creative activities of faculty and graduate students; coordinate graduate programs relating to federal, state, business, and industry; work closely with state and federal sponsoring agencies when appropriate for graduate program support; provide leadership in the review and evaluation of graduate programs; expand multicultural programs and opportunities and work closely with all clienteles to facilitate high productivity and scholarly programs at the graduate level, many of which are interdisciplinary in nature.

The successful candidate should be nationally recognized as a scholar, serve as a role model for graduate students in developing their talents as scholars, possess a distinguished record of academic accomplishments, and qualify for a tenured appointment in an appropriate academic unit within the university.

Candidates should submit a letter of application and curriculum vitae. Screening of applicants will begin immediately and will continue until the position is filled. Applicants and nominations should be sent to:

Graduate Dean Search Committee  
University of Alabama at Birmingham  
UAB Station—102 MJH  
Birmingham, AL 35294-2010

**SCIENCE AND TECHNOLOGY MANAGEMENT.** The Arkansas Science and Technology Authority, a research and development entity, seeks a **VICE-PRESIDENT MANAGEMENT SERVICES.** Responsibilities include planning, evaluation, administrative support, and oversight of the communications program. M.S. in science or a technology-related discipline with 3 years' experience is required; Ph.D. preferred. Candidates must be self-motivated with excellent computer, analytical, and communication skills. Salary to \$36,000. Send résumé and three references by 16 December 1991 to: **ASTA Search Committee, 100 Main Street, Suite 450, Little Rock, AR 72201.** *The State of Arkansas is an Equal Opportunity Employer.*

## ATTENTION SCIENCE ADVERTISERS \$40 SPECIAL

Place your classified ad in any January 1992 or February 1992 issue of *SCIENCE* and we'll give you double exposure. We'll display the same position announcement at the **Employment Exchange** during the **AAAS Annual Meeting** for only \$40 more. That's less than the cost of one additional line.

Hurry—place your ads now! The **Employment Exchange** will take place at the **AAAS Annual Meeting, 7 to 10 February 1992**, at the Hyatt Regency Hotel in Chicago, Illinois. Thousands of scientists in various disciplines have been invited to participate. Act fast and you can reach this unique pool of candidates.

When you place your classified ad in *SCIENCE*, simply let us know that you want to take advantage of the \$40 Special and we'll do the rest.

For more information on how you can interview candidates on-site contact Jacquelyn Roberts at (202) 326-6737.

## POSITIONS OPEN

**DIRECTOR**, School of Human Resources and Family Studies, College of Agriculture, University of Illinois at Urbana-Champaign (UIUC).

The director establishes program priorities in consultation with the faculty, and provides strong leadership and support for the research, teaching, and extension programs within the school, and is the school's administrative representative within the college and at the campus level. Faculty in the school's three divisions (consumer sciences, foods and nutrition, human development and family studies) serve 600 undergraduate majors and 75 M.S. and Ph.D. students. Candidates should have a doctoral degree and have demonstrated excellence in research and scholarship, commensurate with rank of Professor at UIUC. Strong leadership ability, interpersonal skills, demonstrated administrative ability, commitment to the multidisciplinary fields within the school, understanding of and commitment to the land grant mission of the school and college, and demonstrated ability to generate resources from external sources are other desirable characteristics. Salary is negotiable. In order to assure full consideration, a letter of application, curriculum vitae, and names of three references must be received by 15 January 1992. Direct all correspondence to: **Professor George C. Fahey, Jr., Department of Animal Sciences, University of Illinois, 132 Animal Sciences Laboratory, 1207 West Gregory, Urbana, IL 61801; telephone: 217-333-2361.** *The University of Illinois is an Affirmative Action/Equal Opportunity Employer. Minorities are strongly encouraged to apply.*

**DIRECTOR RAPTOR RESEARCH AND TECHNICAL ASSISTANCE CENTER**, U.S. Bureau of Land Management (BLM), Boise, Idaho. Serves as leader of the BLM's National Raptor Research and Management Programs, oversees and advises research, and provides technical guidance and leadership to raptor professionals. Is adjunctive member of the graduate faculty at Boise State University. Salary: \$52,406 to \$68,129. Contact: **Personnel Office, BLM, Idaho State Office (953), 3380 Americana Terrace, Boise, ID 83706. Telephone: 208-384-3245.**

**LABORATORY DIRECTOR  
ENVIRONMENTAL MONITORING  
SYSTEMS LABORATORY  
OFFICE OF MODELING,  
MONITORING SYSTEMS AND  
QUALITY ASSURANCE  
LAS VEGAS, NEVADA  
ES 401/1301  
\$87,000 TO \$95,300**

The U.S. Environmental Protection Agency (EPA) is seeking highly qualified candidates for the position of Laboratory Director, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada (EMSL-LV), Office of Modeling, Monitoring Systems and Quality Assurance (OMMSQA). The EMSL-LV is a component of the Office of Research and Development (ORD) and is responsible for research and development supporting a major segment of the Agency's programs relating to human and ecosystem exposure to environmental pollutants. The Laboratory conducts research and development in the areas of analytical chemistry, immunochemistry, field monitoring methods and design, ecological status and trends, terrestrial ecology, integrated human exposure assessment, human biomarkers of exposure, remote sensing, geohydrology, and environmental radiation assessment.

Applicants for this Senior Executive Service (SES) position must have a bachelor's or higher degree in the biological or physical sciences, or a field relating to the work of the laboratory, and professional experience demonstrating leadership and technical competence in one of those fields. Applicants must also meet the technical and executive qualifications described in the vacancy announcement. For a copy of the vacancy announcement, call or write:

Chaunta Gladney  
Environmental Protection Agency  
Executive Resources and  
Special Programs Division  
Room M3910 (Mail Code: PM-224)  
401 M Street, S.W. (Waterside Mall)  
Washington, DC 20460  
Telephone: 202-260-3328

Applications must be postmarked by 1 December 1991. *EPA is an Equal Opportunity Employer.*

## POSITIONS OPEN

### DIRECTOR OF ELECTRON MICROSCOPY LABORATORY AND PROFESSOR OR ASSOCIATE PROFESSOR OF BIOLOGICAL SCIENCES SEARCH REOPENED

The Department of Biological Sciences at Clemson University in cooperation with the Greenville Hospital System invites applications from outstanding electron microscopists for the Directorship of an EM laboratory and a senior faculty appointment at the level of professor or associate professor in the Department of Biological Sciences.

The successful candidate will be expected to direct a university-wide multiuser EM Laboratory equipped with scanning and transmission microscopes used for biological and materials research and to conduct an independent, extramurally funded research program in cell ultrastructure, developmental biology, or reproductive biology.

This is a unique opportunity to join a rapidly expanding department dedicated to achieving excellence in an integrated approach to ecosystems, organisms, cells, and molecules. A commitment has been made to provide substantial space and funds for the EM laboratory and the director's research laboratory. Applicants should send curriculum vitae, representative publications, a statement of research interest, and the names and telephone numbers of three references to: **Nancy C. Davies, Search Committee Coordinator, Department of Biological Sciences, Clemson University, Clemson, SC 29634.** All materials should be received by 15 January 1992 in order to assure consideration.

*Clemson University, the land-grant institution of South Carolina, is an Affirmative Action/Equal Opportunity Employer.*

### POSITIONS FOR VETERINARIANS DEPARTMENT OF COMPARATIVE MEDICINE STANFORD UNIVERSITY MEDICAL SCHOOL

The Department of Comparative Medicine, composed of the Division of Laboratory Animal Medicine and the Division of Comparative Pathology has recently been established in the Medical School at Stanford University. The following positions are currently available: **DIAGNOSTIC LABORATORY DIRECTOR, CLINICAL DIRECTOR—RODENT SPECIES, AND CLINICAL DIRECTOR—NONRODENT SPECIES.** Tenure-track, nontenure track, and staff positions are available depending on the interests and qualifications of the applicants. Preference for faculty appointments will be given to individuals with a Ph.D. degree and Board certification in addition to the D.V.M. or V.M.D. degree. Interest in research, demonstrated by publications in peer reviewed journals, is required. Modern, well equipped laboratory space and seed money will be provided to assist moving or initiating new research programs. Two diplomates of the American College of Laboratory Animal Medicine are already members of the department and we have part-time employees that are diplomates of the American Colleges of Veterinary Pathology, Internal Medicine, and Surgery. We would like to recruit additional individuals with Board certification, or eligibility, in laboratory animal medicine or in complementary veterinary specialties; especially the American Colleges of Veterinary Anesthesiologists, clinical pathology, internal medicine, emergency and clinical care, microbiologists, pathologists, or surgeons. *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.* Interested candidates should send a letter with a description of their career goals, research interests, a copy of their curriculum vitae and a list of five references to: **Thomas E. Hamm, Jr., D.V.M., Ph.D., Chairman, Department of Comparative Medicine, Mail Code 5410, Stanford University Medical Center, Stanford, CA 94305.** Applications will be reviewed upon receipt and searches will continue until all positions have been filled.

Full-time, **TENURE-TRACK POSITION** with developing and expanding undergraduate Environmental Sciences Program; to teach existing courses, develop an environmental sciences curriculum and research program; Ph.D. in environmental science or related discipline; research interests to complement existing science faculty. Send letter and names of three references to: **Thomas J. Murphy, Depaul University, Environmental Sciences Program, 25 East Jackson Boulevard, Chicago, IL 60604** by 15 January 1992. *Equal Opportunity Employer M/F.*

## **Request for Consultants to Serve as NIH/ADAMHA Peer Reviewers**

The National Institutes of Health (NIH) and the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) are in the process of establishing a new consultant file of peer reviewers. These reviewers will be selected from a national pool of scientists who are engaged in basic or applied research. Data from qualified respondents will be entered into a new computerized NIH/ADAMHA database. This unique database will be used as one source from which candidates for membership on NIH/ADAMHA committees and for other advisory activities are drawn. Consultant scientists act in an advisory capacity to assist NIH/ADAMHA in the evaluation of research projects.

All qualified scientists are requested to participate.

Qualified women and minority scientists are encouraged to apply.

All scientists who are interested in participating should respond by letter requesting a copy of the NIH/ADAMHA Consultant File Information Form. Since the new file will be established based solely on positive responses, your response is needed even if you are already a consultant or are a member of a Reviewer's Reserve. This file is independent of other consultant files. Your request should be sent to:

**NIH/ADAMHA Consultant File  
7101 Wisconsin Avenue,  
Suite 1125, Box 30  
Bethesda, MD 20814**

## **ANNOUNCEMENT**

### **1992 ZIMMERMAN CONFERENCE: PROGRESS IN VASCULAR BIOLOGY, HEMOSTASIS AND THROMBOSIS**

**SPONSORED BY  
THE SCRIPPS RESEARCH INSTITUTE  
AND  
RHÔNE-POULENC RORER**

**THURSDAY - SATURDAY  
FEBRUARY 27-29, 1992  
SHERATON GRANDE TORREY PINES HOTEL  
LA JOLLA, CALIFORNIA, USA**

#### **PROGRAM SESSIONS**

##### **Plenary Lectures by:**

V. Dzau, J. Hirsh, L. McIntire, V. Fuster

##### **Topics:**

PLATELETS AS TARGETS OF ANTITHROMBOTIC THERAPY  
FIBRINOLYSIS  
GENETICS OF THROMBOSIS-HEMOSTASIS  
COAGULATION AND COAGULATION INHIBITORS  
ENDOTHELIUM AND MATRIX  
EVALUATION OF ANTITHROMBOTIC THERAPY

##### **Conference Directors:**

R. Kahn, Z. Ruggeri, A. Schreiber

##### **Conference Speakers:**

F. Bachmann, J.P. Cazenave, J.H. Chesebro,  
D. Collen, B.S. Coller, E. Dejana, T.S. Edgington,  
C. Fulcher, V. Fuster, M.A. Gimbrone, M.H. Ginsberg,  
J.H. Griffin, H.C. Hemker, J. Hirsh, Y. Ikeda,  
D. Lane, P. Levine, D.J. Loskutoff, P.M. Mannucci,  
L. McIntire, J.L. Moake, H. Pannekoek, B. Pitt,  
E.F. Plow, H.R. Roberts, R.D. Rosenberg,  
Z.M. Ruggeri, E. Ruoslahti, M. Samama,  
R. Scarborough, W. Schramm, A. Schreiber,  
J.J. Sixma, D.M. Stern, K. Titani, J.L. Ware

#### **CALL FOR ABSTRACTS**

Interested investigators may submit a 250 word abstract for inclusion at Poster Sessions to be held in conjunction with the **1992 Zimmerman Conference**. Abstracts will be selected on scientific merit.

**The deadline for abstract submission is  
December 15, 1991.**

An abstract form and additional conference information may be obtained by contacting:

Susan J. Buntjer, C.M.P., Department of Academic Affairs,  
The Scripps Research Institute, 10666 North Torrey  
Pines Road, La Jolla, California 92037 U.S.A.

**Telephone: (619) 554-8556  
FAX Number: (619) 554-6310**

# Bristol-Myers Squibb Pharmaceutical Research Institute Department of Molecular Biology

The Bristol-Myers Squibb Pharmaceutical Research Institute is the R&D Division of Bristol-Myers Squibb, a worldwide leader in the discovery and development of pharmaceuticals.

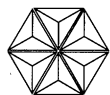
## Tissue Culture

Qualified candidates will possess a BS and/or MS degree with extensive experience in tissue culture techniques and in the overall managing of a tissue culture unit. The successful candidate must be highly dedicated with a strong commitment to tissue culture. He/she will be a part of a very competitive 15-member basic research unit involved in studies aimed at understanding the mechanism of action of various types of oncogenes such as growth factor receptors and tyrosine protein kinases. Previous experience in embryonic stem cells and/or neuronal cell culture techniques will be considered an asset. Please reply to **Dept. 260A-BM**.

## Transgenic Mouse Unit

Qualified candidates will possess a PhD and/or MD degree with extensive experience in transgenic mice technology to direct our Transgenic Mouse Unit. The successful incumbent will be in charge of training and supervising technical staff to support ongoing basic research programs on oncogenes transcription factors and growth factor receptors. The position is also endowed with additional technical staff, brand-new laboratory space and resources to support the candidate's own research program. The extent of these resources will be in accordance with the candidate's experience and research credentials. The investigator will have access to an excellent state-of-the-art animal facility which includes a pathogen-free barrier area with capacity for 3,000 boxes. Please reply to **Dept. 260B-BM**.

Bristol-Myers Squibb offers the advantage of sustained career growth, highly competitive salaries, extensive benefits and professional support in pursuing excellence. Please forward your resume (including Dept. #) to: **Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources Department, P.O. Box 4000, Princeton, NJ 08543-4000**. Equal Opportunity Employer, M/F/D/V.



**Bristol-Myers Squibb Company**

## POSITIONS OPEN

**BIOLOGY COORDINATOR.** The Zoology Department at Oklahoma State University anticipates hiring a tenure-track **FACULTY MEMBER** to provide creative leadership for our general education course in biology. The successful candidate will teach one section each semester, coordinate the laboratory and honors sections and generate external funding for innovative instructional developments. Ph.D. and teaching experience required. Contact: **Dr. Jerry Wilhm, Department of Zoology, Oklahoma State University, Stillwater, OK 74078; telephone: 405-744-5555** for further information. To apply submit a letter describing teaching philosophy and professional interests, résumé, and transcripts. Request three individuals to send letters of reference by 1 February 1992.

## RESEARCH FACULTY POSITION TASTE/OLFACTION

Individuals who utilize molecular neurobiological/neurophysiological technique in the study of taste or olfaction are invited to apply to the Pennington Biomedical Research Center (PBRC). Generous facilities to house and equip the research program are available along with opportunities for research collaboration with faculty within the center and at Louisiana State University (LSU). Applicants should submit curriculum vitae, statement of research interests and names and addresses of three references by 30 December 1991, to: **Taste/Olfaction Scientist, Human Resource Management, Pennington Biomedical Research Center, 6400 Perkins Road, Baton Rouge, LA 70808-4124**. *LSU/PBRC is an Equal Employment Opportunity/Affirmative Action Employer.*

**FACULTY POSITIONS, SEXUALLY TRANSMITTED DISEASES (STDs).** The Department of Microbiology, The University of Texas Health Science Center at San Antonio (UTHSCSA), seeks to hire tenure-track faculty members (junior-to-senior appointments) with interests in the molecular pathogenesis and immunology of STDs. Agents of particular interest are papilloma virus and chlamydia, although individuals with strong records of research achievement in other STDs are encouraged to apply. Successful candidates are expected to develop/maintain innovative research programs and to participate in departmental teaching activities. This is an exceptional opportunity to join our expanding department committed to excellence in research and teaching and located in a desirable academic-geographic setting. Applicants should mail curriculum vitae, a statement of current and future research goals, and arrange to send three letters of reference by 31 January 1992 to: **Dr. Joel B. Baseman, Professor and Chairman, Department of Microbiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7758**. *UTHSCSA is an Equal Opportunity, Affirmative Action Employer.*

## FACULTY POSITION

Department Ob/Gyn, Medical College of Virginia (MCV), Virginia Commonwealth University (VCU), invites applications for reproductive biologist to participate in developing clinical and basic science applications utilizing micromanipulation techniques for pre-embryo genetic analysis, transgenic animal modeling and clinical reproductive technologies. The search favors individuals with research experience in oocyte/pre-embryo micromanipulation and recombinant DNA technologies. Opportunity exists for a joint appointment in a basic science department. Rank and salary are negotiable; start-up funds available. Submit curriculum vitae and addresses of three references by 31 January 1992 to: **Leo J. Dunn, M.D., Ob/Gyn, MCV, Box 34, Richmond, VA 23298**.

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

**POSTDOCTORAL POSITION** available, beginning 1 January 1992, in an NIH-funded multidisciplinary Training Program in Parasitology/Vector Biology, to conduct research on the genetic basis of vector competence of *Aedes albopictus* populations to dengue virus. Candidates must be U.S. citizens or permanent residents. Women and minorities are encouraged to apply. Send résumé and three references to: **Dr. K. S. Rai, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN 46556**. *An Equal Opportunity/Affirmative Action Employer.*

## PROFESSOR OF CELLULAR AND MOLECULAR PHYSIOLOGY/ DEPT. OF SURGERY

### Harvard Medical School/The Children's Hospital



Harvard Medical School and The Children's Hospital are searching for a Professor of Cellular and Molecular Physiology in the Department of Surgery. The candidate should have a primary interest in the broad areas of endothelial cell biology, metasta-

tasis, and the role of the vascular system in the mechanisms of site-specific metastasis. The candidate should have experience in and would continue to supervise the research of graduate students and postdoctoral fellows in their own laboratory, and at The Children's Hospital, have the opportunity to work with both medical students and surgical residents participating in a broad collaborative program on angiogenesis. The candidate will participate in the teaching of Human Physiology to first-year medical students in the New Pathway curriculum.

Applicants are invited to submit a CV to **Daniel A. Goodenough, PhD., Takeda Professor of Anatomy & Cellular Biology, Chairperson, Search Committee, Harvard Medical School, 25 Shattuck Street, Boston, MA 02115**. Harvard Medical School and The Children's Hospital are Affirmative Action/Equal Opportunity Employers. Women and minorities are encouraged to apply.

## POSITIONS OPEN

### TENURE-TRACK FACULTY POSITION BIOTECHNOLOGY AND BIOCHEMICAL ENGINEERING PROGRAM THAYER SCHOOL OF ENGINEERING DARTMOUTH COLLEGE

The Thayer School of Engineering, Dartmouth College, is committed to building an outstanding Program in Biotechnology and Biochemical Engineering. The interdisciplinary character of the engineering school provides unusual support for activities in the biotechnology area, which is enhanced by collaborations with the medical school and the departments of biology and chemistry.

A candidate is sought to join a group of three faculty with primary interests in biochemical engineering. We seek an individual with interests and skills that foster intellectual pioneering in both research and teaching. Research interests are desired that integrate engineering and life science perspectives in a way that allows engineers to play a central role in research-driven innovation and/or elucidation of widely applicable fundamentals. Our group has a common interest in biocatalytic systems, emphasizing the production/transformation side of biochemical engineering. Candidates are desired having expertise that supports this theme, with an intracellular perspective particularly desired. Application areas that relate to biomedical or environmental engineering are of special interest as Thayer has strength in these areas. Both junior and senior candidates are encouraged to apply.

A cover letter, curriculum vitae, and the names of three references should be sent to: **Dr. Lee Lynd, Biotechnology and Biochemical Engineering Program, Thayer School of Engineering, Dartmouth College, Hanover, NH 03755; telephone: 603-646-2231.** Review of applications will begin in January 1992; interested candidates planning to attend the fall meeting of the AIChE are encouraged to contact us in time to arrange a meeting. *Dartmouth College is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and members of minority groups.*

The Department of Cell Biology and Division of Physiology at Duke University Medical Center is seeking **FACULTY WITH AN ACTIVE INTEREST IN INTEGRATIVE BIOLOGY AND PHYSIOLOGY.** No particular system has been selected, rather we are seeking someone with a demonstrated ability to answer important questions involving the biophysical and molecular bases of physiological functions. Such advances may have been made using either cell/molecular biology techniques or the more classical physiological approaches. All levels of appointment will be considered, although there is a preference for junior appointments. Applicants should send curriculum vitae, statement of research interests, and three letters of reference to: **Dr. Michael P. Sheetz, Chairman, Department of Cell Biology, Duke University Medical Center, Box 3709, Durham, NC 27710.**

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

### POSTDOCTORAL POSITION

A vacancy exists to join an active and international research team in neurobiology. The major goal of the laboratory is to achieve an understanding of exocytosis and membrane recycling in nerve terminals at the molecular level. Candidates should have a broad background in protein biochemistry, preferably techniques related to protein structure (HPLC, microsequencing) or membrane biophysics. However, applications from expert molecular biologists will also be considered.

Applications should include curriculum vitae, a brief summary of the professional expertise with special reference to methodical skills, and the name of two professional references, and should be sent to: **Reinhard Jahn, Ph.D., Boyer Center for Molecular Medicine, Yale University Medical School, P.O. Box 9812, New Haven, CT 06536-0812.** *An Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** available immediately to study the structure and function of voltage-gated sodium channels. Project involves application of molecular biological, biochemical, and biophysical methods to the analysis of mutant and chimeric channels. Candidates with relevant experience and interest should submit curriculum vitae and letters of reference to: **Dr. R. Barchi, Institute of Neurological Sciences, University of Pennsylvania, Philadelphia, PA 19104-6074.** *Affirmative Action/Equal Opportunity Employer.*

## Norwalk Hospital/ Yale University RESEARCH IMMUNOLOGIST, Ph.D.

The Department of Pathology at Norwalk Hospital, an affiliate of the Yale University School of Medicine, is seeking an Immunologist for the newly created position of Director of Research. Candidates must have a Ph.D. degree in Immunology with at least three years of experience in clinically oriented research in Immunology or Immunodiagnosis. Experience in molecular techniques is desired but not mandatory. The successful candidate must furnish evidence of research productivity. The position carries no service duties. The incumbent will organize and conduct a research program in Immunology with major emphasis on teaching Fellows in Immunopathology under the direction of the Program Director. Norwalk Hospital offers a professional environment, competitive salary, and an excellent benefits package. We invite you to submit a resume to: **G. Reynoso, M.D., Chairman, Pathology Department OR Manager of Employment, Human Resources Department, Norwalk Hospital, Maple Street, Norwalk, CT 06856.** We are an equal opportunity employer m/f/h.

## Norwalk Hospital The Center for Advanced Medicine

### PROFESSOR OF PATHOPHYSIOLOGY, Medical Faculty, University of Basel 4056 Basel, Switzerland

Applications are invited for the position of Professor of Pathophysiology which will be vacant as of **May 1, 1992.** The successful candidate will be responsible for instruction and exams for medical and dental students. The Professor will also be

### HEAD OF THE RESEARCH DEPARTMENT OF THE KANTONSSPITAL, BASEL.

This position entails leadership of the administration and scientific coordination of the research center, which comprises various medical, clinical and basic research groups, including a group led by the successful candidate.

Candidates with outstanding research credentials should also be experienced in teaching, administration and academic leadership. A requirement is that candidates should be able to teach in German.

Candidates with a medical degree and appropriate qualifications should send particulars including copies of three recent publications before **December 1, 1991** to the

*Dean's Office, Medical Faculty of the University of Basel, Hebelstr. 25, CH-4031 Basel, Switzerland.*

For further information candidates may telephone or write to the president of the search committee: Prof. Ch. Moroni (tel. 061/267 32 66), or the Medical Director of the Kantonsspital, Prof. H.-P. Rohr (tel. 061/265 25 25).

The University of Basel, Medical School is an equal opportunity employer and welcomes applications from women and minorities.



## POSITIONS OPEN

### UNITED MEDICAL AND DENTAL SCHOOLS DEPARTMENT OF IMMUNOLOGY ST. THOMAS' CAMPUS (LONDON, UNITED KINGDOM) POSTDOCTORAL IMMUNOLOGIST (GRADE II)

Applications are invited for a full-time scientific appointment within the Ocular Immunology Research Group of the Rayne Institute at St. Thomas'. The post is funded by the Guide Dogs for the Blind Association and is available from January 1992 for 3 years in the first instance. The research area concerns the immunopathology of autoimmune retinal disease and the group is seeking a scientist with published postdoctoral experience in molecular and cellular immunology. Starting salary £21,115 to £22,908 (approximately, including London Weighting) according to experience, with annual increments on the nonclinical Grade II scales. Informal enquiries to Dr. Eva Kasp at St. Thomas' from whom a job description may be obtained (071-928 9292 Ext. 3184/3392). Applications to the Secretary, Department of Immunology, UMDS, St. Thomas' Hospital, London SE1 7EH (071-928 9292 Ext. 3136; FAX: 071-928 1637) to include curriculum vitae and names of three academic referees.

**POSTDOCTORAL POSITIONS** available in the areas of molecular biology and genetics. Applicants should send curriculum vitae, references and a brief description of research interests to: **The Postdoctoral Program, Department of Molecular Biology, Lewis Thomas Laboratory, Princeton University, Princeton, NJ 08544-1014.**

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

### POSTDOCTORAL POSITION: MOLECULAR PHARMACOLOGY AND MOLECULAR ENDOCRINOLOGY

Dana-Farber Cancer Institute, Harvard Medical School. We are seeking to fill **POSTDOCTORAL RESEARCH** positions in the Division of Cancer Pharmacology in the following areas: (1) hormonal regulation of P450 gene expression; and (2) molecular mechanisms of anti-cancer drug activation and acquired drug resistance. Strong basic research experience in molecular biology, biochemistry and/or pharmacology highly desirable. Joint appointment in the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. Flexible start date. *Under represented minority candidates are specifically encouraged to apply.* Send curriculum vitae with brief summary of research experience, copies of select publications and names of three references to: **Dr. David J. Waxman, JF-525, Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney Street, Boston, MA 02115. Affirmative Action/Equal Opportunity Employer.**

### PREDOCTORAL INTERDISCIPLINARY PROGRAM CELL STRUCTURE AND FUNCTION

The University of Florida has initiated a new program providing well-qualified graduate students with a broad spectrum of research opportunities in cell structure and function tailored to the specific needs of each student. Faculty interests are diverse and include developmental and regulatory biology, intracellular targeting, cytoskeleton signal transduction, immunobiology, cancer biology, visual biochemistry, and the mechanism of viral infection. The student will receive a Ph.D. degree jointly through a basic sciences department and the Interdisciplinary Program. Competitive stipends are offered by the program. For further information contact: **Dr. Carl Feldherr, Department of Anatomy and Cell Biology, College of Medicine, University of Florida, Gainesville, FL 32610-0235.**

**POSTDOCTORAL POSITION.** Available immediately in a laboratory investigating the role of vascularization in the development of the growth plate. Experience with tissue culture, molecular biology and matrix protein techniques is desirable. Send curriculum vitae and names of three references to: **Dr. Robert Miller, Section of Musculoskeletal Biology, Department of Biomedical Engineering and Applied Therapeutics, Cleveland Clinic Foundation (Wb-3), 9500 Euclid Avenue, Cleveland, OH 44195-5254. The Cleveland Clinic is an Equal Opportunity/Affirmative Action Employer.**

## POSITIONS OPEN

**POSTDOCTORAL POSITION** available immediately for Ph.D. with experience in molecular biology or biochemistry to work on regulation of proto-oncogene and lymphokine mRNA stability. Send curriculum vitae and three references with telephone numbers to: **Dr. Gary Brewer, Department of Microbiology and Immunology, Bowman Gray School of Medicine of Wake Forest University, Medical Center Boulevard, Winston-Salem, NC 27157-1064. Wake Forest University is an Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITION BROWN UNIVERSITY DIVISION OF BIOLOGY AND MEDICINE

Position available for individual interested in areas of protein structure-function, gene structure and regulation, protein-nucleic acid interactions, or molecular mechanisms of recombination. Previous experience with (or desire to learn) protein chemistry, nucleic acid biochemistry, DNA cloning, genetics or in vitro systems.

Please send résumé with desired starting date and list of three references to: **Arthur Landy, Brown University, Box G-J307, Providence, RI 02912.**

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

### POSTDOCTORAL POSITION

Available immediately to determine drug metabolizing genotypes associated with increased lung cancer risk in ethnic population. Project will also investigate possible associated alterations in oncogenes and tumor suppressor genes. Candidates should have a M.S. degree (Ph.D. preferred) and experience in molecular biology, particularly RFLP and PCR analyses, and recombinant DNA. Send curriculum vitae and three references with telephone numbers to: **Dr. Alan Lau, Molecular Oncology, Cancer Research Center of Hawaii, University of Hawaii, 1236 Lauhala Street, Honolulu, HI 96813. Inquiries: 808-586-2959. Closing date: 31 January 1992 or until position is filled. An Equal Opportunity/Affirmative Action Employer.**

**JOINT GRADUATE PROGRAM IN TOXICOLOGY,** Rutgers, The State University of New Jersey and the University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School. We are engaged in a national search for scholars who wish to earn the M.S. and/or Ph.D. in toxicology. Our internationally recognized faculty will provide an opportunity for you to study and to do research in carcinogenesis, mutagenesis, teratogenesis, toxicology of solvents and metals, biochemical mechanisms of toxicity, environmental toxicology, toxicology of the nervous system, the immune system, liver, bone marrow and skin, metabolism of chemicals and the application of molecular biological techniques to toxicology. We strive to couple the results of basic toxicological research with modern approaches to risk assessment. The Program is based in the new Environmental and Occupational Health Sciences Institute, which is devoted to studies covering a broad range of environmental issues. Students are supported by our NIEHS training grant, industrially supported fellowships, and graduate teaching assistantships. For complete information please write to: **Dr. Robert Snyder, Director, Joint Graduate Program in Toxicology, Environmental and Occupational Health Sciences Institute, 681 Frelinghuysen Road, P.O. Box 1179, Piscataway, NJ 08855-1179, or telephone: 908-932-0213.**

### FREE PRODUCT INFORMATION SERVICE

Send a letter stating the specifics about your new laboratory and *Science* will put you in touch with the vendors whose products you will need.

Write to:

**Science New Lab Service Department  
1333 H Street, NW  
Washington, DC 20005**

## POSITIONS OPEN

**POSTDOCTORAL POSITION IN EUKARYOTIC DNA REPLICATION AND ITS CONTROL.** A position is available to study initiation and regulation of eukaryotic DNA replication using viral and cellular DNA replication systems. Previous experience in DNA replication is highly desirable but not essential. Experience in protein purification, recombinant DNA technology or baculovirus expression of proteins is required. Candidates genuinely interested in DNA replication and its control should apply with complete curriculum vitae, research interest, and three letters of reference to: **Dr. Sumitra Deb, Department of Microbiology, University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, TX 78284-7758.**

**POSTDOCTORAL POSITION.** Available immediately to study posttranslational processing of praxelaxin. Experience with protease purification or cell culture is required. Send curriculum vitae and names and telephone numbers of three references to: **Dr. Simon Kwok, Department of Biochemistry and Molecular Biology, University of Kansas Medical Center, Kansas City, KS 66160-7421. Affirmative Action/Equal Opportunity Employer.**

**POSTDOCTORAL POSITION.** Available to study the biochemical and molecular aspects of peptide hormone action and structure-function of membrane receptors. Strong background in one or more of the following areas: protein chemistry, molecular cloning and gene expression, is highly desirable. Send curriculum vitae and three references to: **Dr. Kailash N. Pandey, Department of Biochemistry and Molecular Biology, Medical College of Georgia School of Medicine, Augusta, GA 30912-2100. Telephone: 404-721-7651. An Equal Opportunity/Affirmative Action Employer.**

### POSTDOCTORAL POSITION AVIAN IMMUNOLOGY

The University of Minnesota College of Veterinary Medicine is currently seeking applicants for a postdoctoral position available 15 February 1992. This position will involve research on modulation of the avian immune system. Specific research plans will be formulated with input from the successful candidate and would reflect the interests and training of the candidate. Although the incumbent will conduct independent research, he/she will be a member of a team actively engaged in avian infectious disease and immunology research.

The qualified candidate will hold a Ph.D. in microbiology, immunology or a related field. The outstanding candidate will hold both a D.V.M. (or a foreign equivalent) and a Ph.D. The position is a renewable, 12-month appointment with an annual starting salary of \$25,000 plus benefits.

A letter of application, curriculum vitae and names, addresses and telephone numbers of three references should be sent to: **Dr. J. M. Sharma, University of Minnesota, College of Veterinary Medicine, 1971 Commonwealth Avenue, 258 Veterinary Science Building, St. Paul, MN 55108. Applications will be accepted through 30 December 1991.**

*The University of Minnesota is an Equal Opportunity Employer.*

**POSTDOCTORAL POSITION** in chemical carcinogenesis to develop immunologic techniques for quantitation of carcinogen exposure. Development of monoclonal antibodies and immunohistochemical detection of DNA adducts.

Send curriculum vitae and names of three references to: **Dr. Regina Santella, Columbia School of Public Health, 650 West 168th Street, New York, NY 10032. Equal Opportunity/Affirmative Action Employer.**

**POSTDOCTORAL FELLOWSHIP.** Available immediately to study the expression and regulation of gene(s) that encode for plasma membrane-resident glucocorticoid receptor [*Science* 236, 456 (1987); *Steroids* 56, 402 *ibid.*, p. 411 (1991)]. Knowledge of molecular biology and protein chemistry is necessary. This position is initially for 2 years, but can be extended for another 2-year term. The salary will be between \$25,000 to \$27,000, depending upon training and experience. Send curriculum vitae to: **Dr. Bahiru Gametchu, MACC Fund Research Center, Department of Pediatrics, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226.**

*Equal Opportunity/Affirmative Action Employer, M/F/H.*

# MOLECULAR MEDICINE TRAINING PROGRAM

The National Institute of Diabetes and Digestive and Kidney Diseases at the National Institutes of Health has established a novel program for training physicians in advanced basic molecular biology and genetics and their applications to human disease. The three year program combines basic laboratory research in molecular biology and genetics with the option of clinical training in molecular biology and genetics with the option of clinical training in several clinical

subspecialties. Research training takes place in the laboratories of the NIDDK intramural program. These laboratories are part of the main NIH intramural campus located in Bethesda, Maryland, a 20 minute ride from Washington, D.C. The intramural program of the NIH offers an outstanding and world-renown research environment.

Clinical training leading to board certification is available in the following participating

subspecialties: Endocrinology, Genetics, Gastroenterology, and Hematology. First year salary is \$38,500; second year is \$40,500; third year is \$42,500.

For additional information, please send your curriculum vitae and a list of three references to:

**Allen M. Spiegel, M.D., Director,  
Division of Intramural Research**

PHN: 301-496-4128  
FAX: 301-496-9943

## National Institute of Diabetes and Digestive and Kidney Diseases

National Institutes of Health, Building 10, Room 9N222, 9000 Rockville Pike, Bethesda, MD 20892

NIH is an Equal Opportunity Employer



Wayne State University

### FACULTY POSITIONS

The Department of Biological Sciences has begun a major development effort, including the recent occupancy of a new 7-story Biological Sciences Building and the recruitment of a significant number of new faculty over the next 4 years. New initiatives include a graduate *Molecular Biotechnology Program* and a *Howard Hughes Undergraduate Education Initiative in Cell and Molecular Biology*.

We invite applications for three tenure-track faculty positions at the Assistant or Associate Professor level in the following broad areas:

#### MOLECULAR GENETICS MOLECULAR CELL BIOLOGY NEUROBIOLOGY

Applicants should have a doctoral degree and suitable postdoctoral experience. Successful candidates will be expected to teach at the undergraduate and graduate levels and to establish extramurally-funded research programs. **WOMEN AND MINORITY CANDIDATES ARE ESPECIALLY ENCOURAGED TO APPLY.** Review of candidates will begin **1 December 1991** and continue until suitable candidates have been identified. Send curriculum vitae, including a one-page statement of research interests, and the names of three references to:

**Dr. P. Dennis Smith, Chairman  
Faculty Search Committees  
Department of Biological Sciences  
Wayne State University  
Detroit, MI 48202**

*Wayne State University is an Equal Opportunity/  
Affirmative Action Employer*

### RESEARCH OPPORTUNITIES AT THE W. ALTON JONES CELL SCIENCE CENTER

**THE W. ALTON JONES CELL SCIENCE CENTER** is located in the heart of the Adirondack State Park, Lake Placid, NY. The Center is equipped with state-of-the-art equipment (amino acid analyzer, amino acid and DNA sequencers, peptide and DNA synthesizers and various other analytical instruments) for studies in cell and developmental biology. Salaries and benefits are competitive. Send curriculum vitae, names and telephone numbers of three references and summary of research interests to: **Ms. Andrea Terwilliger, W.A.J.C.S.C., 10 Old Barn Rd., Lake Placid, NY 12946. The Cell Science Center is an Equal Opportunity/Affirmative Action Employer.**

**SENIOR SCIENTIST.** Applicants should have completed postdoctoral training and be capable of establishing an independent research program supported by extramural funding, although sufficient seed money will be available for establishing a laboratory. Investigators with interest in the general theme of molecular control of cell growth and differentiation are encouraged to apply.

#### GRADUATE PROGRAM, POSTDOCTORAL AND VISITING SCIENTISTS.

The Center participates in a graduate program with Clarkson University, Potsdam, NY and the University of Vermont, Burlington, VT. Course work is taken at the University and research work is conducted at the Center. This program is open to excellent candidates who have completed their undergraduate degree. **STUDENTS, POSTDOCS AND VISITING SCIENTISTS** participate in projects within laboratories of senior scientists including:

**GORDON H. SATO**, Director: Cellular endocrinology physiology. Manzanar Project-Aquaculture system for food production in coastal-desert areas.

**JOHN W. CRABB**: Protein chemistry, molecular biology of visual cycle proteins.

**JUN HAYASHI**: Developmental immunobiology of thymocytes and thymic epithelial cells.

**SUSAN JAKEN**: Regulation and activation of protein kinase C isozymes.

**W.L. McKEEHAN**: Growth factors/receptors in blood vessels, liver and prostate.

**GINETTE SERRERO**: Molecular biology and hormonal control of adipose cell differentiation.

**JAMES L. STEVENS**: Cellular and biochemical toxicology and carcinogenesis.

**DANIEL J. SUSSMAN**: Regulation of gene expression in mammary tumorigenesis and mouse development.



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**Molecular Biology:** MS or BS scientists with experience in molecular biology as well as mammalian cell culture. Join projects to design viral gene delivery vehicles. Experience with *in vivo* assay systems or virology is desirable.

**Bone Metabolism:** Ph.D. scientists with experience in bone biology, **lead a drug discovery team**. MS or BS scientists, identify active substances from natural products and elucidate their mechanisms of action.

**Immunology:** MS or BS scientists with experience with mammalian cell culture, especially with human lymphocytes, identify and characterize putative drugs that act on the immune system.

Please send full C.V. to:  
Human Resources, Pharmagenesis  
3183 Porter Drive, Palo Alto, CA 94304

## FACULTY POSITIONS IN BIOCHEMISTRY

### St. Jude Children's Research Hospital

St. Jude Children's Research Hospital, a private research institute, is engaged in a major expansion of its facilities and scientific activities. A new research building opened in August, 1991 which provides 240,000 square feet of new laboratory space to house the institute's basic science programs. As part of this expansion, new faculty positions are now available in the Department of Biochemistry. Although preference will be given to applicants who have recently completed postdoctoral training and are seeking positions at the level of Assistant Member, more senior investigators with appropriate research interests and qualifications will be considered for positions of higher faculty rank. Candidates with programs focusing on the regulation of cell growth, differentiation and transformation, the biochemistry and molecular biology of signal transduction, and mechanisms of gene regulation are particularly encouraged to apply. Opportunities exist for collaborative interactions with ongoing basic research programs in Virology and Molecular Biology, Immunology, Tumor Cell Biology, and Pharmacology, as well as with clinical investigators in Hematology/Oncology and Infectious Diseases. In addition to new facilities and excellent start-up funds, salaries are nationally competitive and include a generous benefits package. A strong institutional commitment to its faculty ensures stability in program development and continuity of research activities.

Applicants should submit a curriculum vitae, a letter summarizing their research accomplishments and goals, and the names of three references to:

**Dr. James N. Ihle**  
Chairman, Department of Biochemistry  
St. Jude Children's Research Hospital  
332 N. Lauderdale  
Memphis, TN 38105 USA

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## POSTDOCTORAL FELLOWSHIPS MICROBIAL EVOLUTION

### MOLECULAR EVOLUTION MICROBIAL GENETICS PROTEIN STRUCTURE- FUNCTION POPULATION BIOLOGY

The Center for Microbial Ecology at Michigan State University is seeking **postdoctoral scientists** with experience in the study of molecular evolution, microbial genetics, protein structure-function relationships, or population biology to conduct research as a part of an multidisciplinary team focused on the evolution of catabolic pathways for the metabolism of environmental pollutants and the distribution and diversity of these pathways among microorganisms. The Microbial Evolution Project is a collaborative effort with Nagaoka University and The RIKEN Institute in Japan. Of the eight postdoctoral scientists employed to work on this project, half will work in Japan. Those in Japan will be paid a cost-of-living adjustment, travel expenses and a housing allowance. These positions are available immediately and periodically throughout the five year project.

To apply, send a letter describing your scientific interests, a curriculum vitae and names of three references to: **Dr. Larry Forney, Center for Microbial Ecology, Plant and Soil Sciences Building, Michigan State University, East Lansing, Michigan, 48824-1325.**

*MSU is an equal opportunity employer.*

## MOLECULAR BIOLOGIST

A position is available in the Virus & Cell Biology Department at the Merck Sharp & Dohme Research Laboratories in West Point, Pennsylvania. The successful candidate will join a team of investigators involved in the characterization of molecular targets for the development of antiviral agents.

This position requires a B.S./M.S. or the equivalent in molecular biology or a related discipline. Additional requirements include 3-5 years pertinent research experience in molecular biology, recombinant DNA cloning, sequencing and PCR and RNA isolation and analysis techniques. A background in virology is preferred.

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

Please send curriculum vitae with references, transcripts and cover letter to: **Personnel Manager, Ad #D-43, Research Personnel, WP42-2 Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.**

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Join our multidisciplinary drug discovery team involved in cardiovascular research. Interacting with cell biologists and medicinal chemists, you'll be responsible for the purification and characterization of native and recombinant proteins, enzymes and receptors of potential pharmaceutical interest. Your background in protein chemistry should include knowledge of standard chromatographic, spectroscopic and analytical methods; experience with glycoproteins is a definite advantage.

To reward your commitment, we offer a growing company environment with a highly attractive salary and a full complement of benefits. For consideration, please send your resume to: **Berlex, Human Resources, 213 E. Grand Avenue, South San Francisco, CA 94080. We are an equal opportunity employer.**

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## SCIENTIFIC ASSOCIATES PROTEIN DATA BANK

Brookhaven National Laboratory presently has two openings within the Protein Data Bank (PDB) project for scientific associates to carry out data analysis and verification. The PDB, operated within Brookhaven's Chemistry Department, is the internationally recognized computer database for structures of biological macromolecules.

Requirements include a Ph.D. or equivalent experience, a strong background in crystallography and good writing and communication skills. The chosen candidates will be responsible for the creation of new structure entries from data deposited with the PDB. High performance graphics workstations will be utilized to accomplish essential data analysis and verification functions. The work will involve extensive interaction with data depositors.

Brookhaven offers a stimulating work environment and excellent benefits. If you would like to be considered for one of these positions, please forward your curriculum vitae, along with the names of three references and referring to position LF0838, by December 15, 1991 to: Lisa Ficara, Brookhaven National Laboratory, Personnel Division, Bldg. 185, Upton, NY 11973. Equal Opportunity Employer M/F/H/V.



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## SAINT MICHAEL'S COLLEGE

### ASSISTANT PROFESSOR BIOLOGY DEPARTMENT

Applications are invited for a tenure track position for a Microbial geneticist. The twelve hour per semester teaching load includes a fall Microbiology course with lab, a spring Genetics course with lab, as well as non-major courses, lectures and labs in General Biology. Responsibilities include maintenance of an ongoing research program as well as supervision of undergraduate research projects. Applicant must possess a Ph.D. Undergraduate teaching experience is desirable. Please send curriculum vitae, statements of teaching goals and objectives, research interests and needs, a brief outline for the Microbiology and Genetics courses as well as three letters of reference to the Human Resources Office, Saint Michael's College, Winooski Park, Colchester, VT 05439. Position begins September 1992. Review of applications will begin November 1, 1991.

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## NYU Medical Center

### Associate Research Scientist

We have a Post Doctoral position available for Spring of 1992 in the lab of Dr. Claudio Basilio, Department of Microbiology. Areas of research presently being investigated are as follows:

- The mechanism of transformation of the K-FGF/*hst* oncogene and its oncogenic potential *in vivo*.
- The interaction of K-FGF and other members of the FGF family of growth factors with their receptors.
- The regulation of expression of K-FGF and its role in development.
- Cloning and characterization of genes involved in cell cycle progression in animal cells.
- The regulation of expression of the Asparagine Synthetase gene by amino acid starvation, and the mechanism(s) by which amino acid deprivation leads to G1 arrest.

A background in Molecular Biology, Genetics, Biochemistry or Cell Biology is required. Salary is open.

If you're interested in investigating a great opportunity, send C.V. and names of references to Ms. Singh, Human Resources Dept., NYU Medical Center, 550 First Ave., New York, NY 10016. EOE, M/F.

## POSITIONS OPEN

**NEUROIMMUNOLOGY.** Fellowship focused on the immunology of interferons and their activities in multiple sclerosis. University of Maryland School of Medicine, Baltimore. Requires Ph.D. or M.D. with laboratory research experience. Send curriculum vitae to: Kenneth Johnson, M.D., Chairman, Department of Neurology, UMH, N4W46, 22 South Greene Street, Baltimore, MD 21201.

### AMERICAN MUSEUM OF NATURAL HISTORY FELLOWSHIPS AND GRANTS

**FELLOWSHIPS.** Research/Museum Fellowships are available to postdoctoral researchers and established scholars starting in summer and fall 1992. The fellowships support independent research in association with the resident staff. Areas include vertebrate and invertebrate zoology, paleozoology, anthropology, mineral sciences, and the field of museum education as it relates to natural history museums or planetariums. This year, an additional fellowship in marine zoology and/or paleontology is available and will be funded by the Lerner-Gray Fund for Marine Research. Applications are also encouraged for a grant-supported fellowship restricted to projects dealing with insect or arachnid biodiversity in southern South America. All fellowship applications, including Chapman (ornithology) and Lerner-Gray, should be postmarked by 15 January 1992.

**GRANTS.** Research grants are available to advanced predoctoral candidates and recent postdoctoral researchers in the field of zoology and paleontology. Awards average \$700. Postmark dates vary for each grant program:

- Frank M. Chapman (ornithology)—15 January 1992.
- Theodore Roosevelt (North American fauna)—15 February 1992.
- Lerner-Gray (marine zoology)—15 March 1992.

Request information booklet and application forms from: The Office of Grants and Fellowships, American Museum of Natural History, Department H, Central Park West at 79th Street, New York, NY 10024.

### POSTDOCTORAL FELLOWSHIPS IN DEVELOPMENTAL BIOLOGY

Fellowships in developmental biology are available in the Center for Light Microscope Imaging and Biotechnology, an NSF Science and Technology Center. The center supports research in cell and developmental biology and the development of new technology that extends the usefulness of light microscope imaging in biological research. Research opportunities exist in three areas: (1) Cell movements and cell interactions in the sea urchin embryo (C. Etensohn); (2) *In vivo* analysis of *Drosophila* development using 3-D, time-lapse fluorescence microscopy (J. Minden); and (3) Axon growth and neural development in the *Drosophila* visual system (J. Pollock). Candidates should send curriculum vitae, three letters of recommendation, and a statement of research interests to: Dr. D. Lansing Taylor, Department of Biological Sciences and Center for Light Microscope Imaging and Biotechnology, Carnegie Mellon University, 4400 5th Avenue, Pittsburgh, PA 15213.

### TRAINING IN VIRAL MOLECULAR BIOLOGY AND IMMUNOLOGY

St. Jude Children's Research Hospital, a premiere center for basic biomedical research in catastrophic diseases of children, invites applications for National Research Service Award Fellowships. Fellowships are available to recent Ph.D. or M.D./Ph.D. graduates who are U.S. citizens or permanent residents and wish to gain training and experience in molecular virology, Chairman, Dr. Robert G. Webster; immunology, Chairman, Dr. Peter Doherty; and infectious diseases, Chairman, Dr. Walter Hughes. These fellowships are awarded for up to 3 years and are based on merit, recommendations and promise of a productive career in basic research. Two positions are immediately available and two others 1 September 1992. Interested candidates should send curriculum vitae and the names of three references to: Robert G. Webster, Ph.D., Chairman, Department of Virology and Molecular Biology, St. Jude Children's Research Hospital, P.O. Box 318, Memphis, TN 38101-0318, telephone: 901-522-0400; FAX: 901-523-2622.

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## POSITIONS OPEN

### POSTDOCTORAL FELLOWSHIPS IN GAMETE AND EMBRYO BIOLOGY AT THE UNIVERSITY OF WISCONSIN, MADISON

Postdoctoral fellowships for research training on the cell and molecular biology of gametes, fertilization and early development are available at the University of Wisconsin, Madison, under the terms of an NIH training grant. Training faculty and research topics are:

- Gerald Schatten: fertilization.
- Barry Bavister: in vitro fertilization and early development.
- Gary Borisy: mitosis.
- James Ferrell: cell cycle regulation.
- Neal First: maternal/embryonic transitions.
- John Hearn: implantation.
- Henry Lardy: sperm activity.

Applications (U.S. citizens or permanent residents) should include curriculum vitae, three letters of recommendation, reprints or preprints, and a 2- to 3-page research proposal, and sent to:

**Dr. Gerald Schatten**  
Gamete and Embryo Biology Training Program  
University of Wisconsin  
1117 West Johnson Street  
Madison, WI 53706

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**POSTDOCTORAL FELLOW/RESEARCH ASSOCIATE.** Emory University. A position is open to participate in ongoing studies of molecular regulation of insulin-like growth factors and their binding proteins. Applicants should have experience with cell culture, subcloning, transient transfection, DNase I footprinting, and other molecular biology techniques. Please send curriculum vitae and names and addresses of three references to: Lawrence S. Phillips, M.D., Director, Division of Endocrinology and Metabolism, Emory University School of Medicine, 69 Butler Street S.E., Atlanta, GA 30303. *An Equal Opportunity Employer.*

**POSTDOCTORAL/ASSOCIATE RESEARCH SCIENTISTS IN MOLECULAR BASIS OF CARCINOGENESIS.** Positions available to study: (1) Carcinogen-viral interactions in cell transformation/oncogenesis; (2) Molecular basis of progression of the transformed, tumorigenic and metastatic phenotype; and (3) Induction of terminal differentiation in cancer cells. Candidates with experience in gene-cloning technologies encouraged to apply. Send curriculum vitae and the names of three references to: Dr. P. B. Fisher, Departments of Pathology and Urology, Columbia University, College of Physicians and Surgeons, 630 West 168th Street, New York, NY 10032. FAX: 212-305-5498. *Equal Opportunity Employer.*

**POSTDOCTORAL RESEARCH ASSOCIATE.** Research involves analysis of the mammalian endocytic system using somatic cell genetics and quantitative fluorescent methods, especially fluorescence-activated cell sorting (FACS). Experience in cell and molecular biology (especially expression cloning) or FACS desirable. Available immediately. Send curriculum vitae and three references to: Dr. Robert F. Murphy, Department of Biological Sciences, Carnegie Mellon University, 4400 Fifth Avenue, Pittsburgh, PA 15213.

**RESEARCH ASSOCIATE** in tumor immunology using murine model systems with emphasis on immune regulation influenced by vitamin A derivatives and antibodies. Accurate recording of results, writing and publishing results in appropriate scientific journals in collaboration with colleagues and senior scientists. M.D. or Ph.D. in immunology required with 2 years of experience in tumor immunology. Forty hours per week, 8:00 a.m. to 5:00 p.m. Salary: \$31,787 per year. Contact: Sandra T. Stames, Alabama State Employment Service, 3440 Third Avenue South, Birmingham, AL 35222. Re: Job Order #AL0626926.

### RESEARCH ASSOCIATE POSITIONS

Research Associate Positions available 1 October 1991 for recent graduates with Ph.D. in the areas of neuropharmacology, synthetic medicinal chemistry or pharmaceuticals. Send curriculum vitae and names of three references to: Karam F. A. Soliman, Ph.D., College of Pharmacy and Pharmaceutical Sciences, Florida A&M University, Tallahassee, FL 32307.



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For consideration, please send your resume to: Bio-Rad Laboratories, ECS Division, 3726 E. Miraloma Ave., Dept. 508, Anaheim, CA 92806. EOE M/F/H/V.

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This position is responsible for the hands-on management of Research and Development projects, including personnel management, planning, budgeting, and implementation, with strong participation in project teams. Qualifications include a Ph.D. or equivalent in a biological science, and a minimum of ten years in immunodiagnostic R&D, to include three years in a managerial role. Experience in new technology development is highly desirable.

### Senior Scientists

The successful candidate will possess a Ph.D. or equivalent in Biochemistry, Immunology, Microbiology or a related discipline, and at least three years' research experience, preferably in the immunodiagnostics industry. Experience in the investigation of *Borrelia burgdorferi*, Occult Blood, or *Helicobacter pylori* is desirable. Responsibilities include the development of immunoassays for commercial diagnostic products.

Pacific Biotech offers career opportunities stemming from expansion, as well as competitive compensation and benefits. Please forward your c.v. to: Pacific Biotech, Inc., Human Resources, 9050 Camino Santa Fe, San Diego, CA 92121. We support diversity in our workforce/EOE.

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Merck Sharp and Dohme Research Laboratories, a worldwide leader in the development of pharmaceutical products, has an excellent career opportunity for a Ph.D. level Biochemist in the Diabetes Research Program. The research focuses on the mechanisms of insulin resistance in NIDDM, in addition to the development of hypoglycemic agents.

We are seeking a highly motivated individual with a Ph.D. in Biochemistry or the equivalent with at least two years of postdoctoral experience and experience in the mechanisms of receptor signalling and intracellular signal transduction. Experience with whole animal models and relevant cell culture systems will be helpful. Excellent verbal and written communication skills are necessary.

Merck Sharp and Dohme Research Laboratories is located in Rahway, New Jersey approximately 25 miles from New York City. Our salaries, benefits and growth potential are excellent. For consideration, send your resume with the names of three references to **Human Resources Manager, Merck & Co., Inc., P.O. Box 2000, Ad#98, Rahway, New Jersey 07065, RY80-A3.**

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## COLLEGE of AGRICULTURAL and ENVIRONMENTAL SCIENCES

University of California, Davis

Inquiries are invited from qualified applicants for faculty positions (tenure track) available in these areas.

**Assistant Pomologist in Cooperative Extension/Agricultural Experiment Station.** Carry out a program of extension and applied research in postharvest physiology and pathology of fruits. Apply to Dr. Adel Kader, Department of Pomology by December 31, 1991.

**Assistant/Associate/Full Professor, Cropping Systems Agronomist.** Responsible for research on cropping systems, direct new long term research facility, teach upper division courses. Apply to Dr. Montague Demment, Department of Agronomy and Range Science (916-752-7757) by January 15, 1992.

**Assistant/Associate/Full Professor, Sensory Science.** Teach sensory science, direct graduate students, develop research program in sensory science. Apply to Dr. Norman Haard, Department of Food Science and Technology (FAX 916-752-4759) by January 15, 1992.

**Assistant/Associate Cooperative Extension Specialist.** Extension (75%) and research (25%) in animal waste facilities, management, and environmental control. Apply to Dr. J. W. Oltjen, Department of Animal Science by March 1, 1992.

These positions are to be filled at the Assistant Professor 11-month salary level (unless other rank is indicated above). The positions have responsibilities for teaching, advising and research (in the Agricultural Experiment Station). Candidates must have a Ph.D. in an appropriate field and teaching and research experience. Applicants should submit resume, transcripts (if within five years of graduation), statement of research and teaching experience, list and reprints of publications, and the names and addresses of at least three persons familiar with the applicant's qualifications to individual and department as noted for position (department name), University of California, Davis, CA 95616. Please indicate the position(s) in which you are interested. The completed application must be received by date indicated for each position. **The University of California is an Affirmative Action/Equal Opportunity Employer.**



**University of Massachusetts—Amherst  
Neuroscience and Behavior Program  
Assistant Professor**

**Molecular Aspects of Neural Development**

The Neuroscience and Behavior Program (NSB) seeks a tenure track Assistant Professor for the 1992-93 academic year. The successful candidate will use molecular genetic approaches to examine the development of the nervous system. Investigators using any of a variety of model systems such as *Drosophila*, *C. elegans*, or *in vitro* systems will be considered.

The NSB Program is a multi-departmental Ph.D. granting unit that consists of 24 faculty. The successful candidate will be an Assistant Professor in the Zoology Department and will be expected to establish an active, externally funded research program. Duties will include teaching in the Zoology program and in the NSB graduate Program. A Ph.D. degree and postdoctoral experience are required. The salary will be commensurate with experience. Liberal space and start up funds are available.

Send vita and a summary of research interests to:

Dr. R. K. Murphey, Director  
Neuroscience and Behavior Program  
Morrill Science Center (Zoology)  
University of Massachusetts  
Amherst, MA 01003

Have three letters of recommendation forwarded to the same address by Jan. 4, 1992.

The search will close Jan. 4, 1992 or as soon thereafter as a suitable candidate is found. The University is an Affirmative Action/Equal Opportunity employer.



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**Biochemical Engineering - 2 positions**

- You will assist in the development of mammalian cell culture processes suitable for scale-up in a commercial scale cGMP environment. Qualified individuals will have a BS in Biochemical/Chemical Engineering with additional training or strong emphasis in Biology. Candidates should also possess 3-4 years' industrial experience with an emphasis on animal cell culture. Experience with cell culture bioreactor design/operation as well as media development experience is strongly preferred.
- In this position, you will be primarily involved in recovery and purification of rDNA-derived protein products from both bacterial and mammalian cell cultures. This work includes planning, performing and interpreting the results of experiments directed at establishing equipment design criteria and operating parameters important for process scale-up. Requirements include a BS in Chemical or Biochemical Engineering with 1-3 years' process development work in the biotech or pharmaceutical industry. Experience/understanding of general engineering principles, good mechanical aptitude, computer literacy and basic lab skills are essentials. Experience with crossflow filtration and/or chromatography operations advantageous.

**Protein Chemistry**

Our Process Development department currently seeks a Protein Chemist with specialized analytical biochemistry experience to translate research projects into commercializable products. Additional experience with protein formulation and optimization of lyophilization cycles is highly desirable. The successful candidate will be an independent laboratory worker with excellent experimental and communication skills. This position requires a minimum of a BA/BS in Chemistry or Biochemistry and 3-5 years' directly relevant experience.

Our compensation and benefits package is one of the best in the industry, and is designed to attract and retain the finest talent available.

**To apply for these immediate openings, send your resume to Biogen, Inc., Ref. SMPA1206, 14 Cambridge Center, Cambridge, MA 02142. Biogen is an Equal Opportunity Employer.**

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# Postdoctoral Scientists

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### Hybridoma Group

As part of this group, you will assist in establishing molecular biology approaches for characterizing the epitope mapping and antibody production. Of particular interest, is the structure/function of the protooncogene receptor p185HER2, which is overexpressed in several aggressive adenocarcinomas. Requires a highly motivated individual with a PhD or equivalent in the area of receptor biology or immunoglobulin gene molecular biology. Dept. YS/BF.

### Cell Biology

Conducting independent research on the **integrin family of cell adhesion receptors**, you will join a multidisciplinary team whose goal is to discover integrin antagonists. Studies involving characterization of novel receptors and their functions, as well as the molecular and cellular basis for ligand/receptor interactions are being pursued. Qualified candidates must have a PhD with experience in one of the following areas: biochemistry, molecular and/or cell biology. Candidates with an interest in bone biology are particularly encouraged to apply. Dept. YS/SB.

### MAC Immunochemistry

Within this group, you will study antigen processing and the potential immunogenicity of recombinant protein pharmaceuticals. Collaborating with several departments at Genentech and in academia, you will develop methods of identifying and purifying the peptides generated by *in vitro* and *in vivo* protein-antigen processing systems. Qualified candidates must have a PhD in Immunology, Biochemistry or a related area with basic protein chemistry skills (SDS-PAGE, HPLC and standard chromatographic techniques). Dept. YS/AC.

### MAC Biological Chemistry

As part of a group studying the biology of IGF - Binding Proteins, you will participate in studies directed at understanding the biochemical mechanism of the interaction between the insulin-like growth factors and Binding Proteins and the role of phosphorylation in this activity. This requires a PhD in Cell Biology or Biochemistry. Dept. YS/VM

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## POSITIONS OPEN

**RESEARCH ASSOCIATE** to conduct theoretical studies of mechanisms and stereochemistries of organic and enzymatic reactions, using ab initio quantum mechanics, molecular mechanics, and molecular dynamics methods, to design new and more efficient catalysts, to understand the catalysis and stereospecificity of NAD<sup>+</sup>/NADH dehydrogenases, to design anti-cancer drug bleomycin analogs; assist in writing research proposals for funding and in supervising research program. Requirements: Ph.D. in chemistry; 1 year in the job offered or 1 year of postdoctoral research experience in modeling of organic and biological reactions. Job location/interview: Los Angeles, California. Salary: \$34,300 annually. Send this ad and résumé to: **Job #JJ23352, P.O. Box 9560, Sacramento, CA 95823-0560**, no later than 7 December 1991.

**ASSOCIATE RESEARCH SCIENTIST OR POSTDOCTORAL ASSOCIATE** position is available at the Yale Liver Center for an individual with training in molecular biology. Work involves expression cloning of membrane transport proteins. Send curriculum vitae and three letters of reference by 22 December 1991 to: **James L. Boyer, M.D., Professor of Medicine, Yale University School of Medicine, Department of Medicine, Section of Digestive Diseases, P.O. Box 3333, New Haven, CT 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ASSOCIATE/PROJECT COORDINATOR POSITION** in animal reproduction-endocrinology. M.S. degree in physiology, endocrinology, or related area with training and experience in computer analyses/statistics. Starting salary: \$25,020 plus fringe benefits. Curriculum vitae, copy of transcripts, and names/telephone numbers of three references to: **Dr. G. L. Williams, Animal Reproduction Laboratory, Texas A&M University Agricultural Research Station, HCR-2, Box 43-C, Beeville, TX 78102.**

**RESEARCH ASSOCIATE** to design, perform, evaluate and supervise independent research dealing with mouse lung endothelial cells and mechanisms for their antitumor properties as well as experiments on macrophage-mediated tumor cell lysis and the mechanisms thereof. Teach clinical fellows and graduate students immunological techniques to evaluate host defense against cancer. Required to conduct animal experimental research work. M.D. or Ph.D. (or equivalent) in immunology; 2 years of research training in cellular immunology-macrophage biology, cancer metastasis, biochemistry and molecular biology; and 1 year of experience in related field using biochemical, cellular and molecular techniques. Salary: \$26,000 annual/40 plus hours per week. Apply at the **Texas Employment Commission, Houston, Texas**, or send résumé to **Texas Employment Commission, TEC Building, Austin, TX 78778, J. O. #6521451. Ad paid by an Equal Employment Opportunity Employer.**

Medical college is seeking a **RESEARCH ASSOCIATE** to perform independent research in the field of molecular biology on glycoprotein gene, utilizing such research techniques as isolation, extraction and purification of DNA (DNA vectors, fragment DNA and genomic DNA) and mRNA; DNA molecular cloning (restriction enzyme cut, ligation and transformation); cDNA synthesis; recombinant DNA; Southern and Northern blotting; DNA hybridization; polymerase chain reaction; DNA sequencing; gel electrophoresis; preparation of radiolabeled DNA probes; screening expression library, cell culture, and DNA analysis software. Applicant must be able to utilize such equipment as: DNA thermocycler, Elutrap, Elutip, LKB Macrophen, Ultracentrifuge, Macintosh computer. Other duties include preparing results of research for publication in scholarly journals, and supervising and training junior researchers.

Requirements for this position include: an M.D. or a Ph.D. degree in molecular biology, at least 2 years of postdoctoral research in molecular biology, and a record of previous scholarly publications in the areas of: malaria parasite culture, molecular biology of malaria parasite, and/or interaction of malaria parasite and red blood cell.

Salary: 24,000 dollars per year, with 40-hour week. All qualified candidates are invited to submit résumés to:

**Mike Daniel**

**Job Service Program and Technical Support  
Tennessee Department of Employment Security  
Nashville, TN 37245-1200  
Attention: Job Order #TN1235928**

## POSITIONS OPEN

**NEUROENDOCRINOLOGY RESEARCH ASSOCIATE.** The Department of Pediatrics at Baystate Medical Center/Western Campus of Tufts School of Medicine seeks a junior faculty candidate with experience in neuroendocrine research to join an existing laboratory with the goal of expanding our research capability. Ongoing studies focus on hormonal regulation of the hypothalamic-pituitary component of the rat growth hormone axis. A Ph.D. in neuroscience/neuroendocrinology required with postdoctoral experience preferred. Initial role would be as associate/collaborator with little or no teaching responsibility but room for professional growth. Preference given to applications received by 15 December 1991. Send curriculum vitae and cover letter to: **Paul M. Martha, Jr., M.D., Department of Pediatrics, Baystate Medical Center, 759 Chestnut Street, Springfield, MA 01199.**

**RESEARCH ASSOCIATE.** With a strong background in protein biochemistry or molecular biology to participate in research on oxygen-regulated gene expression. Excellent facilities and long-term support for interaction with established investigators. Send curriculum vitae and names of three references to: **Donald Massaro, M.D., Georgetown University, Division of Pulmonary Research, Lung Biology Laboratories, Preclinical Science Building, Room GM-12, Washington, DC 20007. Georgetown University is an Equal Opportunity/Affirmative Action Employer.**

**RESEARCH ASSOCIATE/RESEARCH SCIENTIST.** Position available immediately for studying metabolism of chemical carcinogens and carcinogen DNA adduct formation in mammalian and fish systems. Ph.D. in biochemistry, bioorganic chemistry, biochemical toxicology, pharmacology, or related field required. Experience in metabolite isolation by HPLC and structural identification preferable. The position provides an opportunity for developing a program of candidate's interest. Please send résumé and names of three references to: **Dr. H. Sikka, Director, Division of Environmental Toxicology and Chemistry, Center for Environmental Research, State University of New York College at Buffalo, 1300 Elmwood Avenue, Buffalo, NY 14222. Telephone: 716-878-5422. FAX: 716-878-5400.**

Experienced researcher needed for the position of **ASSISTANT RESEARCH PHARMACOLOGIST** (Step I) in the Department of Oral and Maxillofacial Surgery, for the study of central and peripheral mechanisms active in producing pain and hyperalgesia and the study of mechanisms of analgesia. Job duties include analgesimetric testing, assay for eicosanoids, purines, opioids, catecholamines and indolamines using HPLC with EC, UV and radioactivity detection, statistical analysis of pharmacological data, management of Apple and IBM computer systems and primary supervision of a biochemistry core laboratory. Training and experience must include a Ph.D. in pharmacology plus a minimum of 3 years of pharmacology postdoctoral experience including 3 years of experience in the study of pain mechanisms with experience collaborating with clinical researchers. Must have prior experience with analgesimetric techniques and with the biochemistry of eicosanoids, purines, opioids, catecholamines and indolamines, including 3 years of experience with HPLC using EC, UV and radioactivity detection. Must have statistical expertise in the analysis of pharmacological data and 3 years of experience with management of Apple and IBM computer systems. Some prior experience setting up and supervising a biochemistry core laboratory. Salary range \$41,600 to \$52,900. Candidates should send curriculum vitae, a statement of research interests, and the names of three references by 6 January 1992 to: **Jon D. Levine, M.D., Ph.D., Associate Professor, Department of Oral and Maxillofacial Surgery, 521 Parnassus Avenue, Box 0440, San Francisco, CA 94143. The University of California is an Equal Opportunity Employer.**

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## POSITIONS OPEN

**ASSISTANT RESEARCH PHYSIOLOGIST.** Ph.D. in physiology or related field required. Experience in respiratory and cardiovascular structure and function measurements related to exercise in horses and greyhounds (i.e., quantitative lung morphometry, pulmonary vascular pressures and flows, oxygen consumption, gas exchange kinetics, and acid base balance). Salary and rank related to established UCSD salary schedules. Apply by 13 December 1991 to: **Dr. John West, Department of Medicine, 0623A, University of California, San Diego (UCSD), La Jolla, CA 92093-0623. UCSD is an Affirmative Action/Equal Opportunity Employer.**

### ASSISTANT RESEARCH SCIENTIST

Assistant research scientist to conduct research into the nociceptive mechanisms of esophageal and cardiac pain. This work will involve anatomical, pharmacological, behavioral and electrophysiological analyses. Candidates must have a demonstrated proficiency in anatomical techniques (including light, scanning and transmission electron microscopy); pharmacological and behavioral analyses of drug actions; and experience and knowledge of the mechanisms of visceral sensation as evidenced by peer-reviewed publications. The candidate must have a Ph.D. and at least 3 years of postdoctoral experience. Forty hours per week; salary: \$38,431 per year. *Must have proof of legal authority to work in the United States.* Apply or send curriculum vitae and list of publications to: **Job Service of Iowa, P.O. Box 2390 (1810 Lower Muscatine Road), Iowa City, IA 52244. Refer to: Job Order IA 1100054. The employer is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply. This advertisement is paid by the employer.**

**DEVELOPMENT STAFF MEMBER.** Performs process and property characterization and optimization of alloy thin films by sputtering deposition and electroplating for head manufacturing. Above includes: (1) Maximization of device and yield performance; (2) Manufacturability issues; (3) Implementation of statistical process controls; (4) Process optimization for permalloy and other Ni-base alloy thin films; and (5) Process controls for thin film characteristics. Also performs process and property characterization and optimization of ceramic processing for substrate materials. Requirements: Ph.D. in materials science; demonstrated expertise with permalloy and Ni alloy thin films and ceramics, as evidenced by research, dissertation and/or publications in the following areas: (1) Interrelationship of processes, including electroplating, magnetron sputter deposition, and vacuum magnetic annealing; structure characteristics, including composition, crystallography and texture, grain and surface morphology, interface, ordered superlattice, stress state and phase transition; and properties of alloy thin films, including passivation and pitting corrosion, mechanical tensile, electrical, and magnetic BH-loop and high frequency permeability; of the above mentioned films; (2) Structure characterization: TEM, XRD, EPMA, STM, SEM, DSC; (3) Tooling and equipment setup for vacuum annealing, electrochemical corrosion—DAS and thin film cell, and high frequency permeability; and (4) Ceramic processing, including: powder preparation, coprecipitation, slurry, blending and aging, calcining, vibrational milling, ceramic body pressing and sintering; and effect of shape, size and size distribution of partial and agglomerate on sinterability. Forty hours per week; \$52,000 per year. Job and interview site: San Jose, California. Send this ad and your résumé to: **Job #LQ-6378, P.O. Box 9560, Sacramento, CA 95823-0560** not later than 7 December 1991. *Equal Opportunity Employer.*

### IMMUNOLOGISTS

The University of Washington seeks highly qualified applicants for appointments in the Department of Immunology. Applicants must have demonstrated their ability to establish strong independent research programs in immunobiology. The Department of Immunology offers superb new laboratory space with access to flow cytometry, biopolymer synthesis, and transgenic animal facilities. Send curriculum vitae, a brief description of proposed research, and three letters of recommendation (by 1 January 1992) to: **R. M. Perlmutter, M.D., Ph.D., Chairman, Department of Immunology, SL-05, University of Washington, Seattle, WA 98195.** Refer to our ad in the 25 October 1991 issue for further details.

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UNIVERSITY OF CALIFORNIA,  
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**THE STEPHEN W. KUFFLER  
PROFESSOR OF BIOLOGY**



The Department of Biology is seeking applications and nominations for the Stephen W. Kuffler Endowed Professorship in Biology. The candidate must be an outstanding scientist and a recognized leader in the field of neuroscience, with proven ability as a scholar and teacher. Research may center on any area of the field. The chair is endowed by a generous gift in honor of the late Stephen W. Kuffler and is to be held for the academic tenure of the occupant.

Steve Kuffler contributed to the early development of neurobiology in La Jolla, where a robust environment has now created a large group of neuroscientists. The candidate will occupy laboratories in a new building and should enjoy interactions with colleagues both in the Department of Biology and throughout the community.

**Applications should be submitted prior to December 30, 1991. Curriculum vitae and bibliography should be sent to Dr. Nicholas C. Spitzer, Chair of the Search Committee, Department of Biology 0322, University of California at San Diego, La Jolla, CA 92093.**

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## MICROBIOLOGIST

The Department of Biology at the University of Northern Iowa invites applications from individuals with the Ph.D. degree for a tenure-track assistant professor position effective August 1992. The individual will teach general microbiology, microbiology for students in the allied health programs, and may participate in the University General Education program. The specific area of research in microbiology is open. However, research interest in questions of basic biology that complement the interests and strengths of the department are preferred. The research should invite participation by graduate (M.A.) and undergraduate (B.A. and B.S.) students. Post-doctoral teaching and/or research experience is preferred. Salary is competitive and commensurate with experience and qualifications. Applicants should submit a curriculum vitae, transcripts, statement of interests and goals in both teaching and research, relevant reprints, and three letters of recommendation. For full consideration application materials should be postmarked no later than January 3, 1992. Send application and supporting materials to:

**Dr. Alan R. Orr  
Professor and Chair Search Committee  
Department of Biology  
University of Northern Iowa  
Cedar Falls, IA 50614-0421  
(Fax No.: 319-273-2893)**

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Daniel Stein, Physics, University of Arizona

### U.S. Applicants: Further information from:

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1660 Old Pecos Trail, Suite A  
Santa Fe, NM 87501  
505-989-7372; fax 505-982-0565  
email: summerschool@sfi.santafe.edu.

**Foreign Applicants:** Provide a current resumé (including bibliography) along with a statement of your current research interests and comments about why you want to attend the 1992 Summer School. Please have two scientists who know your work write letters recommending you for this program. Send material to above address. Please include your fax number and/or email address.

**Application Deadline:** FEBRUARY 1, 1992.

Dean, G.W.C. Whiting School of Engineering  
The Johns Hopkins University  
Baltimore, Maryland

The Johns Hopkins University is seeking applications and nominations for the position of Dean of the G.W.C. Whiting School of Engineering. The School has a full-time faculty of 90, an undergraduate student population of 760, a graduate student population of 385, and a large part-time Masters degree program with 285 part-time faculty and 2500 part-time students. The School covers a wide range of fields and specialties in the following departments as well as in several interdepartmental degree programs.

Biomedical Engineering  
Chemical Engineering  
Civil Engineering  
Computer Science  
Electrical & Computer Engineering

Geography & Environmental Engineering  
Materials Science & Engineering  
Mathematical Sciences  
Mechanical Engineering

The Dean has responsibility for and authority over the School's programs and budget within the context of a highly decentralized university. The University seeks an individual of distinguished accomplishment to work with the faculty and the university in leading a School with a tradition of excellence in research, teaching, and service. Candidates should have demonstrated leadership skills in administration, fund raising and strategic planning as well as the ability to work constructively and creatively in collaborative relationships with the School of Arts and Sciences, School of Medicine, and the Applied Physics Laboratory.

Nominations and applications should be sent to:

**Dr. Joseph Cooper, Provost  
Chair, Search Committee, Engineering  
The Johns Hopkins University  
34th and Charles Streets  
Garland Hall 265  
Baltimore, MD 21218**

The Search Committee will begin reviewing nominations and applications on 15 November 1991. The university expects to fill this position before July 1992.

*The Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*



## POSITIONS OPEN

**COMPUTER MANAGER, SEISMIC DATA PROCESSING.** Operations including: application of DISCO and ITA software; hardware maintenance and troubleshooting; evaluating purchasing; training students. Requires M.S. in geophysics. Salary: \$25,000 per year; 8:00 a.m. to 5:00 p.m., Monday to Friday, 40 hours per week. Send résumé to: **Job Order #FL 0516207, Job Service of Florida, 701 Southwest 27th Avenue—Room 15, Miami, FL 33135.**

### EPIDEMIOLOGIST/BIOSTATISTICIAN

The Department of Veterans Affairs, Environmental Epidemiology Service, is seeking candidates for a health statistician or epidemiologist position at GS 12 or 13 levels. Qualifications include a doctorate degree in epidemiology, biostatistics or related field. Submit completed SF-171 and curriculum vitae to: **Mr. Avery Jackson, Personnel Service, VA Medical Center, 50 Irving Street, N.W., Washington, DC 20422** or telephone: **202-745-8195. Equal Opportunity Employer.**

**ENVIRONMENTAL SCIENTIST.** Barnard College Department of Environmental Science seeks applicants with teaching and research interests in earth sciences, chemistry or biology to lead the department. Rank open. Successful applicant expected to develop a research program at Barnard in association with cognate departments, with Columbia's Lamont-Dougherty Geological Observatory, or with other nearby institutions. Send curriculum vitae, statement of teaching and research interests, and three letters of recommendation by 15 January 1992 to: **Dean Robert McCaughey, Barnard College, Columbia University, 3009 Broadway, New York, NY 10027-6598. Affirmative Action/Equal Opportunity Employer.**

### NEUROPHYSIOLOGIST/ NEUROPHARMACOLOGIST

Electrophysiologist experienced in extracellular/intracellular, in vivo/in vitro methods to study cellular and molecular basis of central regulation of blood pressure. Strong background in pharmacology required. Please send curriculum vitae and bibliography to: **D. J. Reis/K. Koenig, Division of Neurobiology, Cornell University Medical College, 411 East 69th Street—KB410, New York, NY 10021. Equal Opportunity Employer/Affirmative Action, M/F/H/V.**

**PROJECT BIOLOGIST:** 2-year position starting January 1992. To design and conduct riparian studies related to flow fluctuations on the Snake River in southwestern Idaho. Minimum requirements are M.Sc. in ecological field; strong quantitative, analytical and communication skills. Must be familiar with western riparian systems, work independently with leadership abilities. Salary of \$29,000 and full benefits. Send cover letter, curriculum vitae, and list of references (three) by January 1992 to: **Allan Ansell, Idaho Power Co., Environmental Affairs, Box 70, Boise, ID 83707.**

**STAFF SCIENTIST.** Involved in the application of energetic ion beams to materials analysis and modification, and in the development of new instrumentation to advance the technique and to optimize the performance of the MeV ion accelerator facility. Specific duties include: (1) provide a complete professional interpretive analytical service using primarily ion beam techniques and collaborate in appropriate research projects regarding materials characterization; (2) Plan and carry out maintenance, repair, upgrading and development of state-of-the-art equipment for accelerator and instrumentation; (3) Provide professional ion implantation service and conduct independent studies regarding materials modification by ion beams. Requirements: Ph.D. in materials science with specialization in ion beam techniques and 1 year in job offered or 1 year of research experience related to the above. Requires demonstrated expertise in all the above areas. Must include: Physically operating, maintaining, repairing and upgrading MeV electrostatic particle accelerators and ion implantation facilities; Ion beam analysis of materials including data acquisition, data reduction and quantitative interpretation; Radiation safety and handling radioactive materials; Vacuum deposition of thin films and UHV technology. Requires publication record demonstrating relevant research in materials modification by ion beams. Forty hours per week; \$56,000 per year. Send this ad and your résumé to: **Job #LQ 6379, P.O. Box 9560, Sacramento, CA 95823-0560** not later than 7 December 1991. *Equal Opportunity Employer.*

## POSITIONS OPEN

**TRANSPLANT IMMUNOLOGIST.** Full-time faculty position at the University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma for an M.D./D.O. or Ph.D. pathologist with training in HLA and paternity testing, to become Director of the Clinical HLA/Tissue Transplant Laboratory. The position requires participation in teaching of medical and undergraduate students and residents, and development of an independent research program. Send curriculum vitae with names and telephone numbers of three references to: **Ronald L. Gillum, M.D., Chair, Search Committee, Attention: C. Ronck, Department of Pathology, BMSB 451, P.O. Box 26901, Oklahoma City, OK 73190. The University of Oklahoma is an Affirmative Action/Equal Opportunity Employer.**

**ASSISTANT/ASSOCIATE SCIENTIST-BIOCHEMIST OR CELLULAR BIOLOGIST.** The Division of Biomedical Marine Research at Harbor Branch Oceanographic Institution (HBOI) is seeking an individual at the Assistant or Associate Scientist level to participate in a multidisciplinary team involved in the discovery of biologically active compounds derived from marine sources. The individual will participate in the design and implementation of receptor and/or enzyme-based assays for the purposes of screening, bioassay-guided isolation, and mechanism-of-action studies of marine-derived compounds. The individual will also be expected to compete for extramural grant and contract support, and to establish a research program which complements current efforts in the areas of immunology (selective modulation of T-cell activation), tumor biology (signal transduction, selective cytotoxicity), and/or microbiology (opportunistic infections). The successful candidate must have a Ph.D. with strong communication and organizational skills. The **ASSISTANT SCIENTIST** must have a minimum of 1 year of postdoctoral experience; the **ASSOCIATE SCIENTIST** must have several years of research experience beyond the postdoctoral level and a solid record of publications; the proven ability to obtain extramural funds is preferred. Salary is commensurate with experience and qualifications. Send curriculum vitae to: **Personnel Services, HBOI, Ft. Pierce, FL 34946. Equal Employment Opportunity/Affirmative Action Program.**

The Department of Immunology and Infectious Diseases at a research institute **SEEKS A M.D. OR M.D./Ph.D. WITH CLINICAL TRAINING IN INFECTIOUS DISEASES** and expertise in cellular immunology research. Candidate should be capable of establishing an active, independent research program in both basic and clinical science which would be a component of a larger unit in the area of host resistance to infection. Demonstrable experience in a variety of techniques and broad spectrum of skills is required, including lymphocyte proliferation assay, cell-mediated cytotoxicity assay, T cell cloning, monoclonal antibody production, FACS analysis, enzyme immunoassay, handling of infectious organisms and animal work. Salary: \$35,000 per annum. Job site: Palo Alto, California. Send curriculum vitae, statement of research interests, and three letters of recommendation to: **Dr. J. S. Remington, Chairman, Department of Immunology and Infectious Diseases, Research Institute, Palo Alto Medical Foundation, 860 Bryant Street, Palo Alto, CA 94301, no later than 6 December 1991.**

## ANNOUNCEMENTS

### THE DEPARTMENT OF OPHTHALMOLOGY AND VISUAL SCIENCES OF THE UNIVERSITY OF ILLINOIS AT CHICAGO COLLEGE OF MEDICINE

is pleased to announce the establishment of the Charles I. Young/Lions of Illinois **PROFESSOR OF OCULAR RESEARCH.** We seek the nominations of established, funded investigators in cell biology, molecular biology, immunology and neurobiology who currently are or would be willing to devote significant research efforts to the visual system, eye or its adnexa.

Please submit nominations to: **John W. Chandler, M.D., Professor and Head, Department of Ophthalmology and Visual Sciences, University of Illinois at Chicago (UIC), 1855 West Taylor Street, Chicago, IL 60612. The UIC is an Affirmative Action/Equal Opportunity Employer.**

## POSITIONS OPEN

**RADIOCHEMIST/STAFF SCIENTIST** to head the radiochemistry group, Research Medicine/Radiation Biophysics Division, Lawrence Berkeley Laboratory. In consultation with scientific staff, responsible for development of programmatic goals and directions, and for supervision of scientific and technical staff to ensure that these goals are met. Projects include development of new radiotracers for emission tomography (PET and SPECT) applications to study a variety of biological problems; production of radiotracers for ongoing clinical research programs; and management of a medical cyclotron facility for production of positron-emitting nuclides. Responsible for assuring compliance with environmental, health, and safety regulations concerning the use of chemicals and radionuclides. Ph.D. in radiochemistry or related field. Requires substantial years postdoctoral training or experience in radiochemistry and nuclear instrumentation; a thorough knowledge of organic, synthetic, and radiolabeling techniques; supervisory and administrative experience; ability to work as part of a multidisciplinary scientific team. Send résumé and names/addresses of three references to: **A/6931, Dr. Thomas F. Budinger, Lawrence Berkeley Laboratory, c/o Employment Office, MS 90-1042, Berkeley, CA 94720. Equal Opportunity Employer.**

**RESEARCH SCIENTIST (CHEMISTRY).** Research, develop and test new inhibitors for use in the prevention of scale formation in cooling towers for heat exchanges. Investigate environmental impact and insure compliance with EPA regulations. Review inhibitors corrosion in relation to resistance, types of water, temperature, industrial applications and kinetic crystallization. Forty hours per week. Ph.D. in physical chemistry. One year of experience in job offered or 1 year of research in kinetics of crystallization. Salary: \$43,000 per year. Submit résumé or curriculum vitae to the **Philadelphia Job Bank, 444 North 3rd Street—3rd Floor, Philadelphia, PA 19123. Reference job order #4430365. Ad paid by an Equal Opportunity Employer.**

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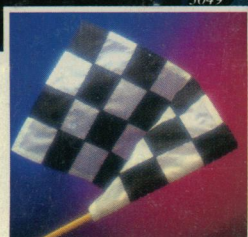
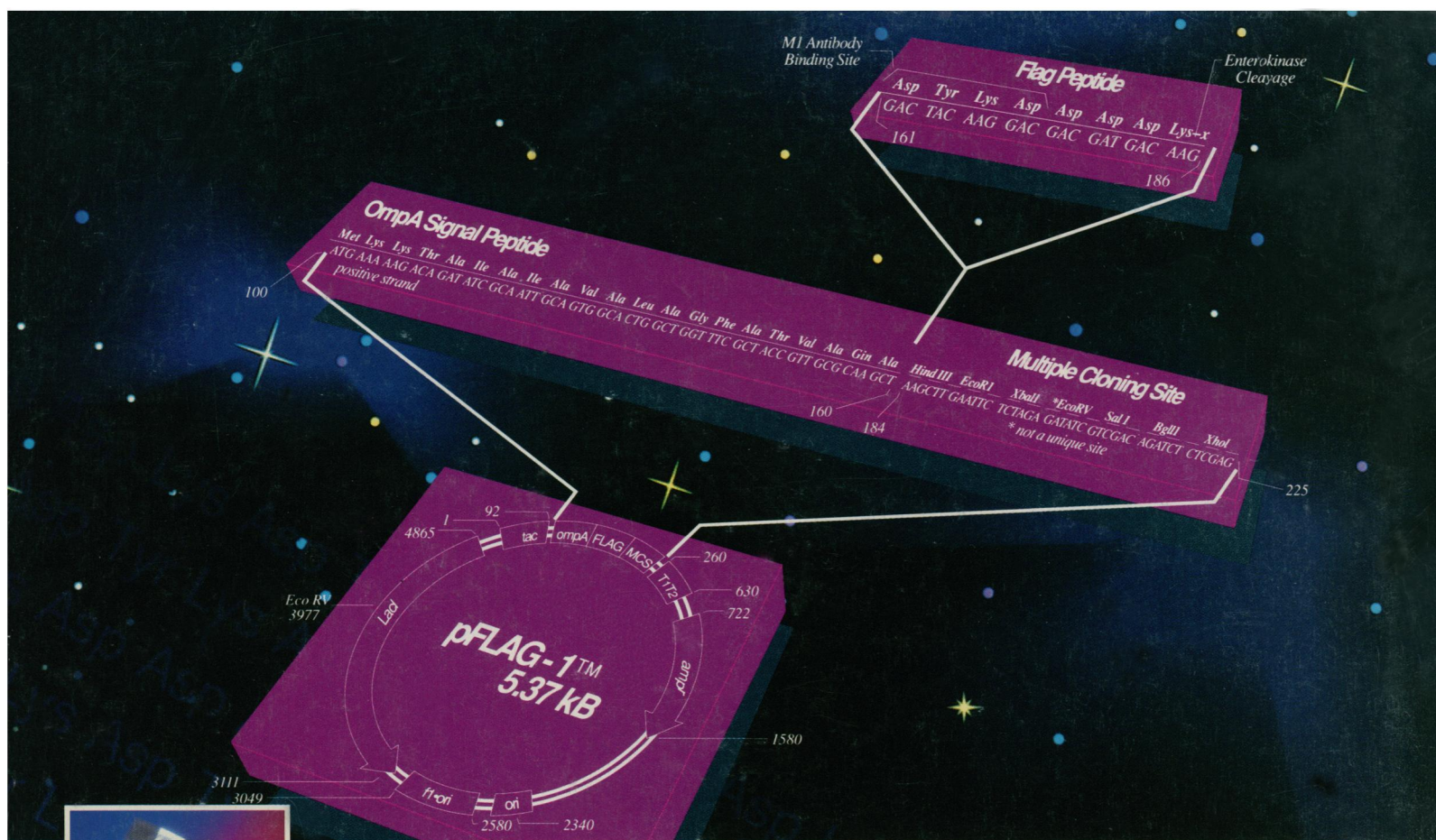


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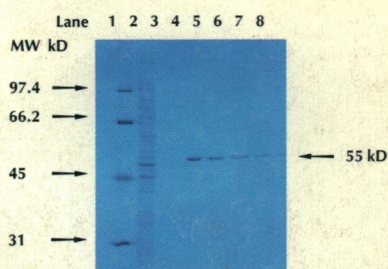
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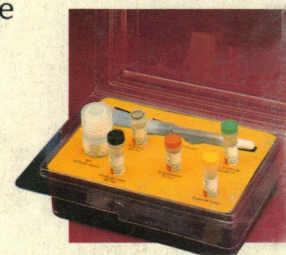
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