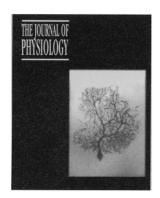
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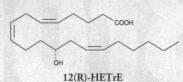
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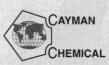


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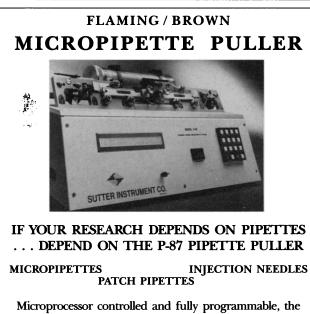
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- 1. Yamamoto, S. et al. Biochim. Biophys. Acta. 1210, 217-225 (1994).
- Schwartzman, M.L. *et al. in* Eicosanoids & Other Bioactive Lipids in Cancer, Inflammation & Radiation Injury. Abstract #99 (1993).

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#### Literature

Solutions to Filtration and Water Purification is a brochure on a series of type I water purification systems. Solution Consultants. Circle 148.

The World's Finest and Most Versatile Instrument for Determining Absolute Molecular Weights & Sizes describes a research grade multi-angle light scattering detector with digital signal processing electronics. It can be coupled to any gel permeation, size exclusion, or gel filtration liquid chromatograph or used off-line in a batch or micro-batch mode for measuring polymers directly, without resorting to the inherent inaccuracies of column calibration or reference standards. Wyatt Technology. Circle 149.

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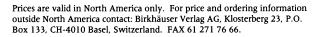
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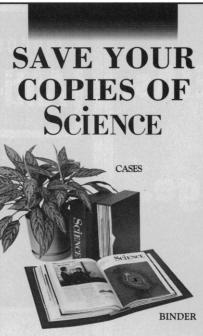


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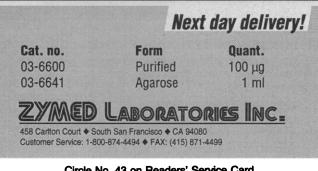
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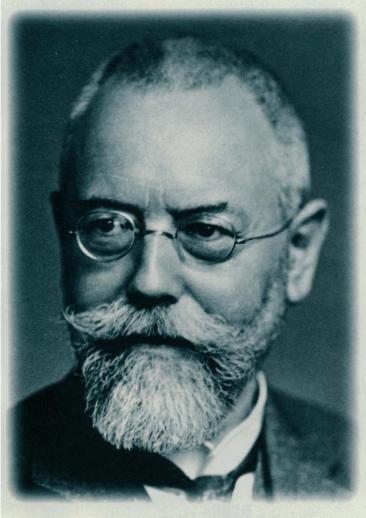
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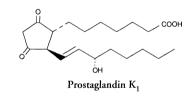
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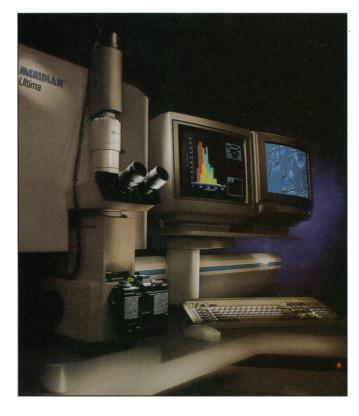


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The Ultima's dual AOMs and 66 MHz Pentium-based computer system enable users to switch between UV and visible excitation lines in as little as 4 µsec. Its on-axis StageScan<sup>™</sup> mode offers superior resolution, while its DualScan<sup>™</sup> mode provides fast data collection. The Ultima can be used for a variety of confocal applications:

- the release and tracking of caged compounds;
- the generation of point, line, 2-D, and 3-D confocal images;
- the simultaneous excitation and detection of UV and visible fluorochromes;
- the imaging and quantitation of calcium (or other ions) or pH over time or through X, Y, or Z planes; and
- the scanning of areas as large as 5.3 cm x 8.8 cm, and the generation of images of up to 1,536 x 1,536 pixels.

It also can be used for non-confocal studies involving adherent cell sorting, fluorescence redistribution after photobleaching (FRAP), and cell-cell communication. All three excitation lines are computerregulated, and all procedures for system alignment and calibration are computer-assisted.

The best keeps getting better. For more information, or to schedule a demonstration of the Ultima, contact the Meridian Instruments office nearest you.



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# Science

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#### **POSITIONS OPEN**

ASSISTANT PROFESSOR, tenure-track position available at University of South Florida (USF), Department of Medical Microbiology and Immunology, College of Medicine. Successful candidate will teach M.D. and Ph.D. students, develop new academic courses, and establish externally funded biomedical research program. Applicants must have laboratory research experience in molecular immunology and/or host defense. A Ph.D. or M.D. degree, two years of postdoctoral experience, and a notable publication/grant record are required. USF provides start-up funds, state-funded salary support, fringe benefits, and modern, expanding research facilities. Send by June 2, 1994, current curriculum vitae, research interest, names of three references to: Dr. Thomas Klein, USF, MDC Box 10, Tampa, FL 33612. For disability accommodations contact Thomas Klein at (813) 974-3281 a minimum of five working days in advance. Equal Opportunity/Equal Access/Affirmative Action Employer.

#### FACULTY POSITION IN PHYSIOLOGY

The Department of Physiology at the University of North Dakota School of Medicine invites applications for a tenure-track position at the **ASSISTANT PRO-FESSOR** level. We seek candidates utilizing cellular and molecular technologies to study physiologic events ranging from subcellular to integrative processes. The successful candidate will be expected to contribute one semester per year to the department teaching responsibility in medical neurosciences and/or physiology, and to participate in the graduate program, which offers both the M.S. and Ph.D. degrees. Candidates must have a Ph.D., M.D., or equivalent degree and a minimum of two years of postdoctoral experience. Applications (no later that September 1, 1994) including curriculum vitae, description of research interests with plans for future research, and names of three references should be sent to: **Dr. Ann Bode, Chair, Physiology Search Committee, UND School of Medicine, Box 9001, Grand Forks, <b>ND 58202.** The University of North Dakota is an Affir*mative Action/Equal Opportunity Employer. Minorities and women are particularly encouraged to apply.* 

#### BIOPHYSICS FACULTY POSITION Northeastern University

Applications are invited for a faculty position in biophysics in the physics department at Northeastern University. Candidates must have a Ph.D. in Physics and research experience in the areas of laser Raman spectroscopy and infrared dichroism of protein single crystals. Preference will be given to individuals who also have independent teaching experience at the University level. The appointment begins September 15, 1994. Interested persons should submit a letter of application and curriculum vitae and arrange to have three letters of reference sent to: Chair, Biophysics Search Committee, Physics Department, Northeastern University, 360 Huntington Avenue, Boston, MA 02215. Northeastern University is an Equal Opportunity/Affirmative Action Employer.

#### SMITH COLLEGE DEPARTMENT OF BIOLOGICAL SCIENCES ASSISTANT PROFESSOR ANIMAL/CELL PHYSIOLOGY

The Smith College Department of Biological Sciences invites applications for a two-year, full-time, non-tenure-track appointment in Animal/Cell Physiology starting September 1, 1994. We seek a physiologist with expertise in reproductive, endocrine, systems or integrative physiology to teach a one-semester, intermediate-level lecture and laboratory course in comparative animal physiology and an advanced-level course in the applicant's speciality. Candidates should have a Ph.D., a commitment to undergraduate teaching and a research program with projects suitable for undergraduates. Preference will be given to persons with teaching and/or postdoctoral experience. Salary is commensurate with experience. Curriculum vitae, statement of teaching and research interests and experience, and three letters of recommendation should be sent to: **Professor E. Tyrrell, Chair, Department of Biologe, Northampton, MA 01063**. Preference will be given to applications received before May 31, 1994. *Smith College*, *is an Affirmative Action/Equal Opportunity Institution. Minorities and women are encouraged to apply*.

#### **POSITIONS OPEN**

The George Washingtor University Medical Center invites applications for a faculty position at the ASSISTANT PROFESSOR level. Applicants will possess a Ph.D. degree and have a proven track record of academic performance. The individual will direct research efforts as part of a research-clinical team in the study of the cellular basis of shock. Strong expertise is expected in cellular biochemistry/physiology with a specific focus on elucidating basic injury mechanisms in disease pathogenesis. Current areas of interest include the role of divalent cations and oxidative/reductive stress as mediators of cellular dysfunction.

Start-up funds and ample laboratory space will be provided. The anticipated start date is August 1, 1994. Interested candidates should forward curriculum vitae and names and addresses of three references to: Dr. Michael Salem, Director of Research, Department of Surgery, George Washington University Medical Center, 2150 Pennsylvania Avenue, N.W., Washington, DC 20037. George Washington University is an Equal Opportunity/Affirmative Action Employer.

#### FACULTY POSITION—NEUROSCIENCES FACULTY OF MEDICINE School of Rehabilitation Sciences The University of British Columbia (UBC)

The School of Rehabilitation Sciences offers baccalaureate degrees in Occupational Therapy and Physical Therapy, and a Master's degree in Rehabilitation Sciences. Applications are invited for a tenure-track position at the rank of ASSISTANT or ASSOCIATE PRO-FESSOR, depending on qualifications and experience, with primary teaching responsibility for neuroanatomy and neurophysiology for undergraduate students. This appointment may include associate status in the Department of Anatomy for suitably qualified candidates. Candidates must have a doctoral degree, be enthusias-

Candidates must have a doctoral degree, be enthusiastic teachers, and demonstrate potential to develop a rigorous research program related to rehabilitation sciences. Current faculty research interests support the three areas of concentration in the graduate program: Chronic Illness and Disability, Cardiopulmonary and Motor Performance and Neuromotor and Neurological Conditions. Salary will be commensurate with qualifications and experience and is subject to final budgetary approval. The anticipated start date is January 1 or July 1, 1995. The deadline for applications is September 1, 1994.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. UBC welcomes all qualified applicants, especially women, aboriginal people, visible minorities and persons with disabilities.

Applications, including curriculum vitae, selected reprints, a statement of research interests and the names of three referees should be sent to: Catherine Backman, Acting Director, The University of British Columbia, School of Rehabilitation Sciences, T325-2211 Wesbrook Mall, Vancouver, B.C., CANADA V6T 2B5. Telephone: (604) 822-7414. FAX: (604) 822-7624.

#### TENURE-TRACK POSITION IN PHYSIOLOGY

The Department of Physiology, West Virginia University, invites applications for a tenure-track faculty position at the ASSISTANT PROFESSOR level from candidates with a Ph.D. or M.D. degree and at least 3 years of postdoctoral experience. We are seeking applications from individuals working in the area of Neural Control of Smooth Muscle function at the cellular and molecular level. Special consideration will be given to individuals with expertise in electrophysiology, including patch clamp, measurement of intracellular substituents using chromophores, cloning and molecular characterization of cell proteins. Teaching opportunities include graduate, undergraduate and professional programs in a comprehensive health sciences center including colleges of Medicine, Dentistry, Nursing, Pharmacy and programs in health-related professions. Applicants should send curriculum vitae, a brief statement of research interests, and three letters of recommendation to: Dr. David L. Kreulen, Van Liere Professor and Chair, Department of Physiology, Box 9229, West Virginia University, Morgantown, WV 26506. First consideration will be given to completed applications received before June 1, 1994.

West Virginia University is an Affirmative Action/Equal Opportunity Employer.

# **CANCER VACCINES 1994**

An International Symposium Sponsored by the Cancer Research Institute October 3-5, 1994 Macklowe Conference Center, New York City

MEETING CHAIRMAN: Lloyd J. Old, Ludwig Institute for Cancer Research, New York, NY

#### DEFINITION AND STRUCTURAL ANALYSIS OF TUMOR ANTIGENS

Co-Chairmen: Walter **Bodmer**, Imperial Cancer Research Fund, London, England; Jean-Charles **Cerottini**, Ludwig Institute for Cancer Research, Lausanne, Switzerland; Speakers: Thierry **Boon**, Ludwig Institute for Cancer Research, Brussels, Belgium; Martin **Cheever**, University of Washington, Seattle, WA; Olivera **Finn**, University of Pittsburgh, Pittsburgh, PA; Donald **Hunt**, University of Virginia, Charlottesville, VA; Cornelis **Melief**, University Hospital, Leiden, The Netherlands; Hans-Georg **Rammensee**, Deutsches Krebsforschungszentrum, Heidelberg, Germany; Pramod **Srivastava**, Fordham University, Bronx, NY; Perspective: Alain **Townsend**, University of Oxford, Oxford, England

#### MECHANISMS OF TUMOR DESTRUCTION AND ESCAPE

Co-Chairmen: Giorgio **Parmiani**, National Tumor Institute, Milan, Italy; Hans **Schreiber**, University of Chicago, Chicago, IL; Speakers: James **Allison**, University of California, Berkeley, CA; Maurice **Gately**, Hoffmann-La Roche Inc., Nutley, NJ; Augusto **Ochoa**, National Cancer Institute, Bethesda, MD; Nicholas **Restifo**, National Cancer Institute, Bethesda, MD; Robert **Schreiber**, Washington University, St. Louis, MO; Perspective: George **Klein**, Karolinska Institute, Stockholm, Sweden

#### STRATEGIES FOR THE DEVELOPMENT OF CANCER VACCINES

Co-Chairmen: Donald Morton, John Wayne Cancer Institute, Santa Monica, CA: Herbert Oettgen, Memorial Sloan-Kettering Cancer Center, New York, NY; Speakers: Howard Grey, Cytel, San Diego, CA; Philip Greenberg, University of Washington, Seattle, WA; Philip Livingston, Memorial Sloan-Kettering Cancer Center, New York, NY; Richard Mulligan, Whitehead Institute for Biomedical Research, Cambridge, MA; Drew Pardoll, Johns Hopkins University, Baltimore, MD; Steven Rosenberg, National Cancer Institute, Bethesda, MD; Perspective: Alan Houghton, Memorial Sloan-Kettering Cancer Center, New York, NY



For more information, please contact: Ms. Lynne Harmer Cancer Research Institute 681 Fifth Avenue New York, NY 10022 212-688-7515 Fax: 212-832-9376



#### The Gladstone Institute of Cardiovascular Disease, University of California, San Francisco

Postdoctoral positions available in the labs of:

Israel F. Charo, M.D., Ph.D.: Research on the role of monocyte/macrophages in early atherosclerosis. Current projects are focused on the recently cloned receptor for monocyte chemoattractant protein 1 (MCP-1) and related receptors in the rapidly emerging family of cytokines known as the chemokines. Methodology includes expression of receptors in Xenopus oocytes and mammalian cells to examine signaling pathways and ligand binding domains, as well as the development of transgenic mice. Experience in molecular biology, signal transduction, or transgenic mice is desirable.

<u>Robert E. Pitas, Ph.D.</u>: Study the molecular and cellular biology of novel lipoprotein receptors important in atherogenesis. Work will include cloning of receptors, their expression *in vitro*, and studies of receptor specificity. Transgenic models will be used to examine the importance of the receptors in normal physiology and atherogenesis.

Karl H. Weisgraber, Ph.D.: Studies on the effect of overexpression of human genes on lipoprotein metabolism in transgenic mice.

<u>Stephen G. Young, M.D.</u>: Research on the structure and function of apolipoprotein B (apo B). Characterization of recently developed transgenic mice expressing large amounts of human apo B, generation of mice with targeted mutations in the apo B gene, and investigation of the molecular mechanism of hypobetalipoproteinemia. Experience with transgenic mice and/or molecular biology techniques is desirable.

Candidates should possess an M.D. or Ph.D. in molecular biology or biochemistry. Competitive salary and benefits. Send C.V. and names of three references to: Postdoctoral Recruitment; Gladstone Institute of Cardiovascular Disease, UCSF; P.O. Box 419100; SF, CA 94141-9100. AA/ EOE.

## 8th ANNUAL CABM SYMPOSIUM TRANSCRIPTIONAL CONTROL OF GROWTH AND DEVELOPMENT

October 27 and 28, 1994

Nominations sought for 1994 Paul Janssen Prize Lectureship. The Lectureship is awarded semi-annually for significant advances in molecular biology research. This year the award will be made to a leader in the field of transcriptional regulation and gene expression. The awardee will be selected by an expert panel from nominations received by July 1, 1994. Send a brief description of the nominee's research accomplishments to Aaron J. Shatkin, Director of CABM, 679 Hoes Lane, Piscataway, NJ 08854. For further information call Linda VanDerveer at (908)235-5309.



Center for Advanced Biotechnology and Medicine 8 Piscataway, NJ 08854



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### DIRECTOR Dental Research Center

The New Jersey Dental School of the University of Medicine and Dentistry of New Jersey seeks candidates for the Directorship of its Dental Research Center (DRC). The DRC is an independent academic unit within the Dental School and maintains dedicated modern research facilities and resources.

Candidates should hold the Ph.D. and/or clinical degree and have a distinguished academic record of excellence in research. In addition, the successful candidate will have demonstrated senior leadership skills in managing a research group of diverse biomedical investigators. Evidence of substantial past and current extramural research funding is desired. It is anticipated that the new Director will recruit other investigators with well defined areas of research pertinent to the mission and goals of a progressive dental school. Faculty-level appointments in appropriate academic departments will be made. In addition, the Director and his/her staff will be expected to participate in all aspects of the educational and research programs of the Dental School. Substantial opportunity exists for academic cross appointments in appropriate departments of the New Jersey Medical School or the Graduate School of Biomedical Sciences. Title, rank and salary dependent upon previous experience.

Interested candidates should submit a letter of interest and curriculum vitae to: Dr. Frank A. Catalanotto, Chair - Dental Research Center Search Committee, UMDNJ - New Jersey Dental School, 110 Bergen Street, Newark, New Jersey 07103-2400. UMDNJ is an Affirmative Action/Equal Opportunity Employer, m/f/d/v, and a member of the University Health System of New Jersey.



# The Neurosciences Institute

#### 💳 La Jolla, California =

THE NEUROSCIENCES INSTITUTE (NSI) IS AN INDEPENDENT not-for-profit organization at the forefront of research on the brain. The NSI, located on the campus of The Scripps Research Institute in La Jolla, is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

#### *EXPERIMENTAL NEUROBIOLOGY* =

PPLICATIONS ARE INVITED FOR POSITIONS AS SENIOR Fellow and Junior Fellow in Experimental Neurobiology. The NSI is beginning a research program in experimental neurobiology designed to increase understanding of brain processes at several organizational levels from the molecular to the cognitive. After completion of new NSI laboratory facilities in the autumn of 1994, research will be carried out in such areas as molecular biology, cellular neurobiology, pharmacology, neuroanatomy, functional brain imaging, and psychophysics. Fellows in Experimental Neurobiology will be expected to take advantage of opportunities for scientific exchanges with Fellows in Theoretical Neurobiology.

Applicants should be at the assistant professor (Senior Fellow) or postdoctoral (Junior Fellow) level and should have backgrounds in experimental neurobiology. Senior Fellows will be provided with adequate financial support to equip laboratories and maintain ongoing independent research programs. Starting dates for these positions will be autumn 1994 or thereafter.

#### — Theoretical Neurobiology =

PPLICATIONS ARE INVITED FOR POSITIONS AS INSTITUTE Fellow in Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Advanced supercomputer facilities are available. Institute Fellows will have daily opportunities to interact with Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral or assistant professor level with strong backgrounds in experimental or theoretical neuroscience or related fields. Experience in computer modeling is especially welcome. Positions are now available.

LL FELLOWS WILL RECEIVE STIPENDS APPROPRIATE TO their qualifications and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: Dr. Gerald M. Edelman, Director, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, California 92037.

#### The Kingston Regional Cancer Centre, Queen's University, Kingston, Ontario



The Ontario Cancer Treatment and Research Foundation (OCTRF), through its regional centres, provides a wide system of cancer prevention, treatment, research and education. The Kingston Regional Cancer Centre in conjunction with Queen's University is seeking a

# **Career Scientist**

Applications are invited from individuals with research interests in the area of radiobiology, particularly with respect to radiation resistance. Preference will be given to applicants with strong backgrounds in molecular and cellular biology and pharmacology. Minimum requirements for the position area Ph.D. and /or M.D. degree and 3 years of postdoctoral research experience.

The successful candidate will join a well established interdisciplinary basic research group at Queen's University involved in molecular and cellular studies on mechanisms of drug resistance, differentiation and transformation and tumor progression. Excellent laboratory facilities are available in the Health Sciences building of Queen's University as well as the opportunity to interact with radiation oncologists and physicists at Kingston Regional Cancer Centre. Support and establishment funds will be provided by the Ontario Cancer Treatment and Research Foundation.

Send curriculum vitae, statement of research interests, representative publications and names of three referees, to: Dr. Roger G. Deeley, Director, Cancer Research Laboratories, Kingston Regional Cancer Centre & Queen's University, Kingston, Ontario, Canada K7L 3N6.

Hamilton Kingston London Ottawa Sudburv Thunder Bay Toronto Windsor

Closing date for applications: June 30th, 1994.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an employment equity programme, welcomes diversity in the workplace and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities and visible minorities.

THE ONTARIO CANCER TREATMENT AND RESEARCH FOUNDATION

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Neurocrine Biosciences, Inc., is a recently established biopharmaceutical company dedicated to the discovery and development of therapeutic agents that target signaling molecules shared by the nervous, endocrine and immune systems. Based on the recent understanding of the role of these extracellular factors and their receptors in disease processes. Neurocrine is using an interdisciplinary approach, focusing our R & D efforts to develop novel molecules for the treatment of central nervous system and autoimmune diseases such as anxiety, depression, Alzheimer's disease, AIDS dementia, multiple sclerosis and rheumatoid arthritis.

We currently seek to fill Principal Investigator (with at least 3 years' post-Ph.D. experience), Research Scientist/Associate/Assistant (Ph,D./MS/BS) and Postdoctoral positions in the following areas:

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- MOLECULAR BIOLOGY MEDICINAL CHEMISTRY
- . PEPTIDE CHEMISTRY

We offer a competitive benefits package and the opportunity to realize professional and personal goals. Qualified candidates who wish to share our focus in producing a new generation of biopharmaceuticals should send curriculum vitae to Neurocrine Biosciences, Inc., 3050 Science Park Road, San Diego, CA

92121 or Fax 619/658-7602. Equal Opportunity Employer.

EUROCRINE

BIOSCIENCES, INC.





MARION MERRELL DOW
Strasbourg R&D Center

# Head of CNS Pharmacological Sciences

Marion Merrell Dow is focusing its CNS research efforts on neurodegenerative and psychiatric disorders in its Research Center in Strasbourg, France. We are looking for the Director of Pharmacological Sciences to lead a large international group of highly competent and experienced scientists.

This senior level position requires demonstrated success in neuroscience research related to drug discovery. We are looking for an expert in CNS pharmacology with a significant publication record and proven experience with classical as well as cutting edge pharmacological techniques relevant to research in neurodegenerative and psychiatric disorders. Experience in running a successful research department, preferably in the pharmaceutical industry, is essential. Excellent leadership and communication skills are critical to succeed in this highly challenging position.

Our Center is located in Strasbourg, a particularly inviting place to live. We offer a very attractive compensation package with benefits associated with a large company.

MEDIA SYSTEM

Please send your CV and names of 3 referees to M-J. Bildstein, Human Resources Department, Marion Merrell Dow Research Institute, 16 rue d'Ankara, 67080 Strasbourg Cedex, France.

### **RESEARCH SCIENTISTS**

The Peter MacCallum Cancer Institute, located in Melbourne Australia, has positions available for Research Scientists who are interested in carrying out full-time independent research in one of the following areas:

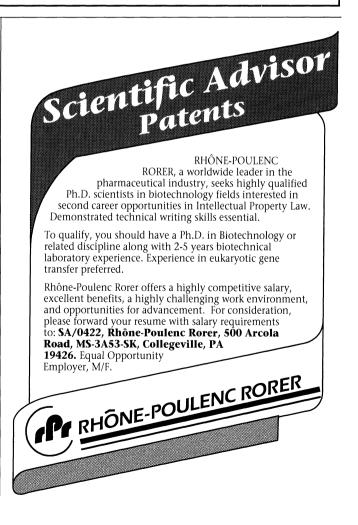
- the molecular basis of tumour progression and metastasis
- gene therapy
- · molecular markers for early detection of tumours
- · genetics of human malignancies
- signal transduction/developmental haematology

The Research Division of Peter MacCallum Cancer Institute currently has about 15 independent investigators and a scientific staff of about 75. The work of the Division is supported by a mixture of core funds and individual grants. A new Director of Research (Dr Joseph Sambrook) has recently been appointed and the Division will soon move into a new, well-equipped building near the centre of Melbourne.

Requirements for the positions include a doctoral degree, postdoctoral training in a relevant area and demonstrated outstanding research in molecular biology, genetics or cell biology.

Applications, to arrive by June 1 1994, should include a cover letter and complete curriculum vitae, as well as the names, addresses, telephone and fax numbers of four people who are willing to provide letters of support. Applications should be addressed to: Dr Joseph Sambrook.

Peter MacCallum Cancer Institute 481 Lt. Lonsdale St., Melbourne, Vic. 3000. Australia Telephone: (code 61 3) 641 5463, Fax: (code 61 3) 670 3357.



#### **POSITIONS OPEN**

### FACULTY POSITION MACROPHYTE ECOLOGY

The Rosenstiel School of Marine and Atmospheric Science invites applications for a tenure-track position at the ASSISTANT to FULL PROFESSOR level in the area of marine or estuarine macrophyte ecology and/or physiology. Preference given to candidates with both experimental and community modeling skills, experience in warm temperate or tropical ecosystems, demonstrated ability in research, and strong interest in teaching. Re-sponsibilities include establishing a strong, externally funded research program, preferably focused on ecosys-tems of South Florida/Caribbean, directing graduate students, and teaching introductory and advanced grad-uate courses. Applicants should forward curriculum viuate courses. Applicants should forward curriculum vi-tae, statement of research and teaching interests, and names of references to: Macrophyte Search Com-mittee, Division of Marine Biology and Fisheries, RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149–1098, by 30 May 1994. The University of Miami is an Equal Opportunity/ Afirmative Action Employer, and is a smoke/drug-free unrefulse.

workplace.

#### TENURE-TRACK POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY WRIGHT STATE UNIVERSITY

The Department of Microbiology and Immunology at Wright State University invites applications for two 12-month, tenure-track faculty positions at the ASSIST-ANT and/or ASSOCIATE PROFESSOR level with appointments in both the School of Medicine and the College of Science and Mathematics. Applicants should have a doctorate from an accredited institution with training in Virology, Immunology or a related field, especially in the areas of molecular virology, molecular immunology, viral pathogenesis or immunochemistry, and two or more years of related postdoctoral experience. Successful applicants will develop an independent, extramurally funded research program and will participate in the undergraduate, graduate and professional teaching programs. Current extramural funding is required for appointment at the associate professor level.

Applicants should submit curriculum vitae, names of three references and a description of research interests and funding to: Dr. Pamela S. Fink, Search Commit-tee Chair, Department of Microbiology and Immu-nology, Wright State University, Dayton, OH 45435.

Review of applications will begin 15 June 1994 and will continue until positions are filled. Candidates from groups underrepresented in science are encouraged to apply. Wright State University is an Affirmative Action/Equal Opportunity Employer.

#### DISTINGUISHED PROFESSORSHIP BREAST CANCER RESEARCH

The Massey Cancer Center at the Medical College of Virginia, Virginia Commonwealth University (VCU), has established the Jeanette and Eric Lipman Distinguished Professorship in Medical Oncology, a compo-nent of the Eminent Scholars program of the Common-wealth of Virginia. Candidates are sought with a background in molecular biology with research interests focused on breast cancer and a substantive track record of productivity and peer-reviewed funding. The Massey Cancer Center has been an NCI-designat-

of molecular genetics, immunology, carcinogenesis, neuro-oncology, developmental therapeutics and struc-tural biology. There are well-established shared resources that support basic investigation. Contact: I. David Goldman, M.D., Director, Mas-

sey Cancer Center, Medical College of Virginia, Vir-ginia Commonwealth University, MCV Box 230, Richmond, VA 23298–0230. VCU is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL FELLOW WANTED: Ph.D. in Cell Biology, Biochemistry or Immunology to join a funded research program in human autoantibodies. The work involves protein purification, Western blots, cell culture techniques, molecular biology, epitope mapping and antibody characterization. Send curriculum vitae to: Dr. Naomi F. Rothfield, Chief, Division of Rheumatic Diseases, University of Connecticut Health Center, 263 Farmington Avenue, Farmington, CT 06030-1310.

#### **POSITIONS OPEN**

#### MOLECULAR GENETICIST

MOLECULAR GENETICIST: Faculty position in Department of Medicine available for Ph.D. Molecular Geneticist with experience in positional cloning. Aca-demic rank commensurate with professional standing. Contact: Steven J. Scheinman, M.D., Chief, Nephrology Section, SUNY Health Science Center, 750 East Adams Street, Syracuse, NY 13210. Equal Opportunity Employer/Affirmative Action.

BIOCHEMISTRY DEPARTMENT seeks Ph.D. with productive postdoctoral experience able to establish independent research program complementing existing departmental programs in the structure and function of blood and tal programs in the structure and function of blood and matrix macromolecules (e.g., fibronectin, a<sub>2</sub>-Macroglobulin, fibulin, decorin) and their receptors. Possible areas of interest include lipoprotein, lipid metabolism, receptor-mediated en-docytosis, protein trafficking, and reconstitution of purified receptors in lipid vesicles. Candidates must have the potential to attract outside funding after 2 to 3 years. Submit curric-ulum vitae, a description of research plans, and names of three references by June 1, 1994, to: Biochemistry Search Committee, HOLLAND LABORATORY, American Red Cross, 15601 Crabbs Branch Way, Rockville, MD 20855. Equal Opportunity Employer M/F/D/V.

#### POSTDOCTORAL POSITION

This position is available to study the cytoskeletal/ membrane complex of red blood cells as related to the pumped transport of Na, K and Ca and a membrane compartmented form of ATP. In addition to identifying the cytoskeletal components that define the compart the cytoskeletal components that define the compart-ment, evaluation of the functional parameters associated with Na/K and Ca transport and the ATP pool is also planned. Please send curriculum vitae and names of three references prior to May 15, 1994, to: Joseph F. Hoff-man, Department of Cellular & Molecular Physiolo-gy, Yale University School of Medicine, 333 Cedar Street, New Haven, CT 06520. An Equal Opportunity/ Affirmative Action Employer Affirmative Action Employer.

## POSTDOCTORAL POSITION CELL BIOLOGY

A position is available to study the association between apoptosis and nuclear structure within cells of differing radiosensitivity. Human cell culture will be used in addition to flow cytometry and molecular biology techniques. Interaction with clinical staff will be encouraged. Applicants with relevant experience are invited to submit complete curriculum vitae with the names of three references to: Dr. Andrew T. M. Vaughan, Ph.D., Loyola-Hines Department of Radiotherapy, 2160 South First Avenue, Maywood, IL 60153. Telephone: (708) **216-2178.** Loyola University Chicago is an Equal Oppor-tunity/Affirmative Action Educator and Employer.

#### **ELECTROPHYSIOLOGY** MOLECULAR BIOLOGY

TWO POSTDOCTORAL POSITIONS are available in research on the mechanisms of drug actions on ion channels using channel clones and heterologous expression systems. One position requires extensive back-ground in biophysics and experience in electrophysiological techniques. The other requires strong background in molecular biology. For the second position, additional experience in immunotechniques is highly preferred. experience in immunotechniques is highly preferred. Applicants should send a letter stating research interests and experience, copies of publications (if available), curriculum vitae, names and telephone numbers of three references to: Dr. Gea-Ny Tseng, Department of Phar-macology, Columbia University, 630 West 168th Street, New York, NY 10032; FAX: (212) 305-8780. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITIONS available beginning July 1994 to study the role of sphingolipids in cell cycle regulation and the pharmacology of newly devel-oped inhibitors of glycosphingolipid synthesis. Candi-dates should have a Ph.D. with a strong background in cell biology or biochemistry. Send curriculum vitae and the names of references to: Dr. James Shayman, Department of Internal Medicine, University of Michi-gan, Box 0676, 1560 Medical Center Drive, Ann Arbor, MI 48109. FAX: 313-763-0982. Equal Opportunity Employer.

#### **POSITIONS OPEN**

#### POSTDOCTORAL POSITIONS IMMUNOLOGY, DEVELOPMENTAL BIOLOGY AND GENE EXPRESSION

Applications are invited for qualified persons to engage research directed towards either of two areas: Regulation of T cell receptor mRNA expression. in (2) Regulation and function of homeobox transcription factors during development and oncogenesis. Please send curriculum vitae, statement of research interests and the names of three references to: Dr. Miles Wilkinson, M.D. Anderson Cancer Center, Department of Im-munology—178, 1515 Holcombe Boulevard, Hous-ton, TX 77030. An Equal Opportunity/Affirmative Action Employer. Smoke-free environment.

#### BIOCHEMISTRY AND MOLECULAR BIOLOGY OF HOST DEFENSE SYSTEMS UNIVERSITY OF CALIFORNIA, IRVINE (UCI)

Four POSTDOCTORAL POSITIONS and a FAC-**POSITION** are available in the UCI Department of Pathology for studies on cell-mediated and humoral host defense systems. This ongoing research program seeks to characterize the molecular basis of innate immunity provided by natural antibiotic peptides (e.g., indolicidin, defensins and  $\beta$ -defensins) produced by leukocytes and epithelial cells. Unique research opportunities are available for postdoctoral applicants with experience in (1) production and characterization of peptide libraries, (2) heterologous expression of bioactive molecules in bacteria and yeast, (3) biophysical characterization of peptide-bilayer interactions, (4) production of liposomal formulations of bioactive peptides/proteins, (5) tissue culture models of cellular injury, and (6) regulation of eukaryotic gene expression.

Applicants for the Faculty Research Position should have at least 5 years of postdoctoral experience, a strong background in biochemistry and molecular biology, and demonstrated ability to direct and coordinate activities of more junior researchers. Send curriculum vitae, research experience and interests, and names of three references to: Dr. Michael E. Selsted, Department of Pathology, College of Medicine, University of California, Irvine, CA 92717–4800. The University of California is an Equal Opportunity Employer.

POSTDOCTORAL POSITION is available for research in studying the effects of cytokines and growth factors on inducible nitric oxide synthase transcription and expression in intestinal epithelium. Strong backand expression in intestinal epithelium. Strong back-ground in molecular biology is essential. Salary commen-surate with experience. Position begins July 1, 1994, at Children's Hospital Research Foundation, University of Cincinnati College of Medicine. Contact: Andrew L. Salzman, M.D. at (617) 278-7117. FAX: (617) 278-7756. Equal Opportunity Employer.

**POSTDOCTORAL POSITION: CELL AND MOLECULAR BIOLOGY.** We are seeking to fill openings at the Postdoctoral Research Associate level in the Division of Cell and Molecular Biology at Boston The Division of Cell and Molecular Biology at Boston University to study the hormonal regulation of liver P450 gene expression. Strong research experience in molecular biology, cell biology or biochemical pharma-cology highly desirable. Flexible start date. *Minority* candidates are encouraged to apply. Send curriculum vitae with brief summary of research experience, copies of ellect publications and pames of three foregreences to. **Dr** select publications and names of three references to: Dr. David J. Waxman, Professor of Cell and Molecular Biology, Department of Biology, Boston University, 5 Cummington Street, Boston, MA 02215.

THE SCRIPPS RESEARCH INSTITUTE (TSRI) POSITIONS IN RECEPTOR BIOCHEM-ISTRY AND SIGNAL TRANSDUCTION. Applica-tions are invited for POSTDOCTORAL FELLOW or tions are invited for POSTDOCTORAL FELLÓW or JUNIOR FACULITY positions in the DEPART-MENT OF IMMUNOLOGY to study endotoxin/ membrane receptor interactions in leukocytes and other cells. See Curr. Opin. Immun. 6:125, 1994, PNAS 90:2744, 1993, and PNAS 90:9930, 1993. Positions available immediately. Send curriculum vitae and refer-ences to: Richard J. Ulevitch, Ph.D. or Peter S. Tobias, Ph.D., IMM-12, TSRI, 10666 North Torrey Pines Road, La Jolla, CA 92037. (FAX: 619-554-3289.) TSRI is an Equal Opportunity/Affirmative Action Employer. Employer.

#### **POSITIONS OPEN**

### ASSOCIATE/POSTDOCTORAL FELLOW, NEUROBIOLOGY

Postdoctoral position available in cellular neurobiology/neuroanatomy to study the distribution of glutamate and/or dopamine receptors at the cellular and synaptic level in primate cerebral cortex. The candidate should have a Ph.D. in neurobiology or cell biology and a strong interest in cortical organization and/or neurodegenera-tive disorders. Experience with intracellular labelling, electron microscopy, and double labelling immunocyto chemical procedures is highly desirable. Please send curriculum vitae, names of references, and statement of research interests and capabilities to: Dr. John H. Mor-rison, Professor and Co-Director, Fischberg Research Center for Neurobiology, Box 1065, Mount Sinai School of Medicine, One Gustave L. Levy Place, New York, NY 10020 York, NY 10029-6574. An Equal Opportunity Employer.

POSTDOCTORAL FELLOW: Cell Biology/Cellular Biophysics. Two positions available immediately. To study Biophysics. Two positions available immediately. To study architecture, dynamics, and regulation of cytoskeleton in living cells. Ph.D. required. Experience in cell culture, protein biochemistry, digital fluorescence microscopy, FRAP desired. Send curriculum vitae and names of three references to: Dr. Kate Luby-Phelps, Department of Physiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235–9040. FAX: (214) 648-8685. An Equal Oppor-tunity/Afrimative Action Employer. tunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP to start immediately for Ph.D. Molecular Biologist with experience in standard molecular biology techniques such as prokary-otic/eukaryotic expression library, transfection, sequenc-ing, PCR, and RFLP. Large, multidisciplinary laborato-ry with competitive salary and benefits. Apply to: D. J. Baylink, M.D., VA Medical Center (151), 11201 Benton Street, Loma Linda, CA 92357.

#### POSTDOCTORAL RESEARCH FELLOW HARVARD MEDICAL SCHOOL BETH ISRAEL HOSPITAL

MOLECULAR BIOLOGY AND FUNCTIONS OF EOSINOPHILS. Postdoctoral position available in molecular and cell biology/biochemistry to analyze struc-ture-function relationships for granule proteins/enzymes of human eosinophils, specifically studying their func-tions as cellular toxins in tissue damage, inflammation and the pathogenesis of allergic diseases. Experience in closure and avaression purification and characterization cloning, and expression, purification and characterization of recombinant proteins and immunobiology desirable. Send curriculum vitae and 2 to 3 reprints to: Steven J. Ackerman, Ph.D., Department of Medicine, RE219, Beth Israel Hospital, 330 Brookline Avenue, Boston, MA 02215 and have three letters of reference sent by FAX to 617-735-3299.

#### RESEARCH ASSOCIATE

Postdoctoral position available immediately! Study molecular mechanisms of intestinal apolipoprotein ex-pression and lipoprotein biogenesis with NIH-funded investigation. Experience in cell culture and molecular biology essential.

Send curriculum vitae and references to: Arkansas Children's Hospital, Attention: Dr. Dennis Black c/o Catherine Mulford, 800 Marshall Street, Little Rock, AR 72202-3591 or FAX: (501) 320-3499. Equal Opportunity Employer.

#### TECHNICAL SUPPORT SCIENTIST

Ventana Medical Systems, a leader in automated immunohistochemistry, is looking for a talented individual to support our rapidly growing customer base. Individual will be involved in customer training, tech-

nical support at key customer sites, and scientific trouble

The ideal candidate will have 5 years of practical immunohistochemistry staining experience, an advanced degree in life sciences, and will have 2 plus years of experience in molecular biology. This position will be located in Tucson, Arizona.

Compensation will be commensurate with level of experience. For consideration please send your résumé in confidence to: Russ Wedemeyer, Ventana Medical Systems, 3865 North Business Center Drive, Tucson, AZ 85705. FAX: 602-887-2155. Ventana Medical Systems is an Equal Opportunity Employer.

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Ottawa, Ontario

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Your PhD in Neurophysiology or a related field must be supported by extensive experience in neurophysiology, neuropharmacology, and molecular neurobiology at the cellular and whole animal levels. An enhanced reliability check will be required.

The salary being offered will be commensurate with your qualifications

To explore this opportunity, send your resume before May 20, 1994, indicating reference number BS-94-07, to: Odette Bourgeois, Human Resources Assistant, 100 Sussex Drive, Room 1010, Ottawa, Ontario K1A OR6. Fax: (613) 998-7956

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# UNIVERSITY OF TENNESSEE MEDICAL CENTER Assistant Professor Cell and Molecular Pathology Department of Pathology A tenure track faculty position is available for a young investigator interested in developing a young investigation interested in developing an independent research program to interface with ongoing research in the department including studies in cell differentiation and including studies in cell differentiation and proliferation, cytokines, extracellular matrix factors, cell surface receptors, signal transduction, transacting factors and gene regulation relating to the following diseases: cancer and leukemia, cirrhosis and neurological diseases. Candidates holding MD and/or PhD degrees who want to apply for this position should submit their curriculum vitae, a statement of their interests and future soals and statement of their interests and future goals and three letters of recommendation. Preference in the selection process will be given to those candidates with the highest potential to acquire extramutates with the nighest potential to acquire extramutal grant support, with experience in teaching experimental pathology to medical and graduate students or with the potential to perform some clinical service. The Department of Pathology at the University of Tennessee currently employs greater than 35 full time and 55 full time and currently employs greater than 35 full time and 35 affiliated faculty members and has active graduate and residency programs. The department is continuing to grow and develop and will occupy a new building with all new research laboratories within two years. Competitive salary, space and startup funds are available. Applications for this position will be evaluated by a search committee beginning June, 1994 and will continue until the position is filled. Please send letters of applications and other supporting information to: Robert E. is filled. Please send letters of applications and other supporting information to: Robert E. Scott, MD; Dept. of Pathology, University of Tennessee Medical Center, 800 Madison Avenue, Memphis, TN 38163. "The University of Tennessee is an equal employment opportunity/Affirmative Action/Title IX/Section 504/ADA Employer".

#### **KEAN COLLEGE OF NEW JERSEY** SCHOOL OF NATURAL SCIENCES, **NURSING AND** MATHEMATICS

Department of Biological Sciences/ Organismic Biology. Assistant Professor, tenure-track, effective 9/1/94. Teach undergraduate human anatomy and physiology, vertebrate and invertebrate biology, other courses according to qualifications. Ph.D. required; previous teaching experience desirable. APPLICATION: Candidacy review begins on or about March 30, 1994 and continues until appointment is made. Send letter of interest; current resume; names, addresses and telephone numbers of three references who can comment on candidate's professional qualifications. Apply to Dr. Raghunath Virkar, Chair, Department of Biological Sciences, Kean College of New Jersey, Morris Avenue, Union, New Jersey 07083. SALARY: Competitive and commensurate with qualifications and experience. BEN-EFITS: Comprehensive benefits program included. KEAN COLLEGE IS AN EEO/AA INSTITUTION.

# PHARMACOLOGIST

Zeneca Pharmaceuticals Group (formerly ICI Pharmaceuticals Group), dedicated to the challenge of discovering and developing important new therapeutic agents, has an opening in the CNS Pharmacology Group at our suburban Wilmington, Delaware location.

We seek a Pharmacologist to conduct whole cell patch clamp experiments to determine the potency and blocking mechanisms of selected company compounds opposite receptor-operated calcium channels that exist in various neuronal and non-neuronal cell types. Simultaneous intracellular calcium measurements will also be implemented in some protocols. Incumbent will also contribute to data reduction, analyses archiving, and reporting of results in internal company reports and refereed research papers.

BS or MS degree and at least three years' lab experience in electrophysiology. cell biology and/or receptor pharmacology required. A theoretical orientation toward membrane biophysics, and practical experience with patch clamp techniques especially desirable. Experience in making intracellular calcium measurements with dyes such as fura-2 would be useful, as well as familiarity with computer spreadsheet, graphics, and word processing software.

We offer competitive compensation, comprehensive flexible benefits, a unique investment plan, and the opportunity for growth with one of the world's leading pharmaceutical research organizations.

If you are interested in joining a team of scientists from a broad range of disciplines in an industrial pharmaceutical research environment, please submit resume to: Tom Kirchgasser, Human Resources Dept., Zeneca Pharmaceuticals Group, 1800 Concord Pike, Wilmington, DE 19897. An Equal Opportunity Employer M/F.



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Director of Project Management-An exciting opportunity currently exists for a high energy individual to provide leadership for our Project Management function. You will manage resources and drive the activities necessary to achieve program research, new product development, market support and maintenance objectives to support Allergan's worldwide strategic market, marketing and sales needs.

To qualify, you will need a Pharm D or MBA with 7-10 years development experience and 3+ years project management experience. We are seeking a leader who is a good communicator, a developer of people and a decision maker who has managed projects to NDAs and PMAs. Experience with regulated products in a pharmaceutical or health care company is desired. The ability to interpret data and manage within a matrix organization is required.

**Project Manager-**You will produce quality project development plans that fully address strategic, technical and commercial issues. Involves extensive interface with all levels of management in R&D, Marketing, Legal, Business Development, Sales and Operations

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To qualify, you will need a minimum 6 years of college education in pharmaceutical science, biological science, chemistry, medicine and business or comparable experience in a pharmaceutical drug research environment. You must be able to motivate/develop an innovative technical team and manage projects in a timely, cost effective fashion. Strong analytical and communication skills are essential. We offer a generous compensation and benefits package. For consideration, please send your resume to: Allergan, Corporate Human Resources, Dept. JS-3548-SC, 2525 Dupont Drive, Irvine, CA 92715. An Equal Opportunity Employer.

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#### ASSISTANT PROFESSOR MEDICAL PHYSICS

The Division of Radiation Oncology is pleased to offer a position in Medical Physics for a tenure-track position at the level of Assistant Professor in the Arthur G. James Cancer Hospital and Research Institute at the Ohio State University Medical Center. The minimum requirements for the position is a Ph.D. in Medical Physics and at least 1 year experience in an active clinical medical physics environment. Knowledge of computer programming and Board eligibility are a plus. We expect to fill the position by June 1, 1994. Applicants for this position should direct inquiries to: Reinhard A. Gahbauer, M.D., Professor & Director Division of Radiation Oncology, Arthur G. James Cancer Hospital and Research Institute, The Ohio State University Medical Center, 300 West Tenth Avenue, Columbus, Ohio 43210 (614) 293-8415.

#### **RADIATION ONCOLOGIST**

The Division of Radiation Oncology has an opening for a Radiation Oncologist to join an expanding practice in the Arthur G. James cer Hospital and Research Institute at the Ohio State University Medical Center. Experience or interest in intraoperative radiation therapy, brachytherapy, or pediatric radiation oncology is desirable. Academic appointments are at the instructor, assistant professor, or associate professor rank and are based on individual qualifications and experience. Applicants for this position should direct inquiries to: Reinhard A. Gahbauer, M.D., Professor & Director Division of Radiation Oncology, Arthur G. James Cancer Hospital and Research Institute, The Ohio State University Medical Center, 300 West Tenth Avenue, Columbus, Ohio 43210 (614) 293-8415.

### Research Scientist

San Diego-based Houghten Pharmaceuticals, Inc., is a growing, privately-owned biopharmaceutical company pursuing the discovery, development and manufacture of drug therapies for a variety of inflammatory and infectious diseases.

This position will support formulations/ pre-formulations within the preclinical development area. Hands-on experience in innovative drug delivery approaches with particular emphasis on peptides needed. The ideal candidate will have a PhD in Pharmaceutics or Pharmacology with 2-5 years' experience with analytical techniques such as HPLC, ELISA, RIA, etc. and stability protocols from both the scientific and regulatory perspectives. Industrial experience a plus. Computer literacy and good oral and written communication skills required.

Highly competitive salary and benefits package including relocation assistance. stock options and 401(k) plan. Send C.V.

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# FROM NEUROSCIENCE TO NEUROPHARMACEUTICALS

*SIBIA* is continuing to expand its interdisciplinary research and development on therapeutics for diseases of the central nervous system. We have established an impressive record in the development of innovative technologies integral to the biopharmaceutical industry. Currently, we are seeking the following talented candidates to join our team in the following areas.

#### PRECLINICAL DEVELOPMENT MANAGER

Requires a Ph.D./DVM or equivalent with at least 10 years' experience in toxicology and ADME in the Pharmaceutical industry or with the FDA. Position will plan and coordinate extramural preclinical development studies of SIBIA compounds. Other responsibilities will include site inspections, protocol assessment and planning, contract negotiations, and quality control. Knowledge of GLP related to toxicology and ADME also desired.

#### **RESEARCH SCIENTISTS**

#### PSYCHOPHARMACOLOGY

Ph.D. level applicants with more than 5 years' postdoctoral experience in operant behavior, nociception and neurodegenerative research are invited to respond. Selected candidates will implement models of substance abuse, drug discrimination, nociception, and other relevant models as necessary, including study of designated compounds in these models.

#### CELL BIOLOGY

Requires a Ph.D. with a minimum of 3 years' postdoctoral experience in the characterization of recombinant receptors or ion channels which demonstrate stable expression in mammalian cells. Experience should include a particular emphasis on signal transduction and second messenger systems, including measurement of intracellular calcium using fluorescent techniques

#### **MOLECULAR BIOLOGY**

The Ph.D. we seek will have at least 3 years' postdoctoral experience in recombinant expression of receptors or ion channels in mammalian cells with specific emphasis on stable expression of multimeric ion channels.

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# BS/MS <u>Molecular Biologists</u>

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As part of our continuing expansion in molecular biology, Pfizer has a number of new positions available for BS/MS level scientists. We seek highly motivated individuals who will be able to apply molecular approaches to ongoing drug discovery efforts in a variety of disease areas. Candidates should have broad experience in molecular biology. Experience with cDNA synthesis, library construction/screening, polymerase chain reaction, protein expression, protein purification, or mammalian cell culture would be helpful. Knowledge of a particular disease area is useful but not required. Applicants for positions in the areas of protein purification, protein structure, peptide synthesis, fermentation, cancer, and neurosciences are being sought immediately.

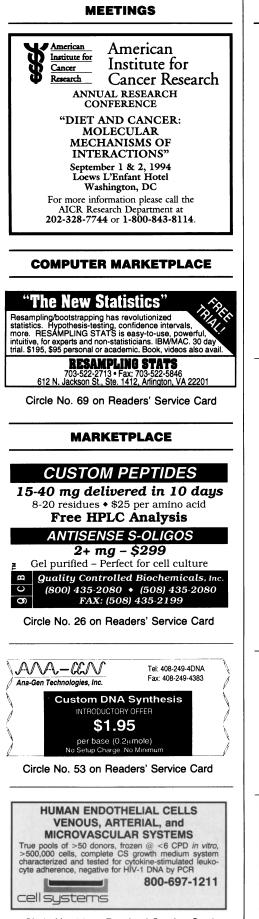
The primary R&D facility for Pfizer Inc is located in a southeastern Connecticut shore community, giving easy access to the well known academic and cultural centers of the Northeast and offers the attractions of a New England life style.

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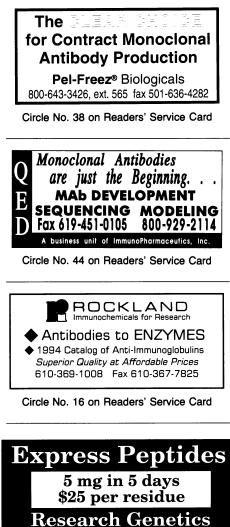
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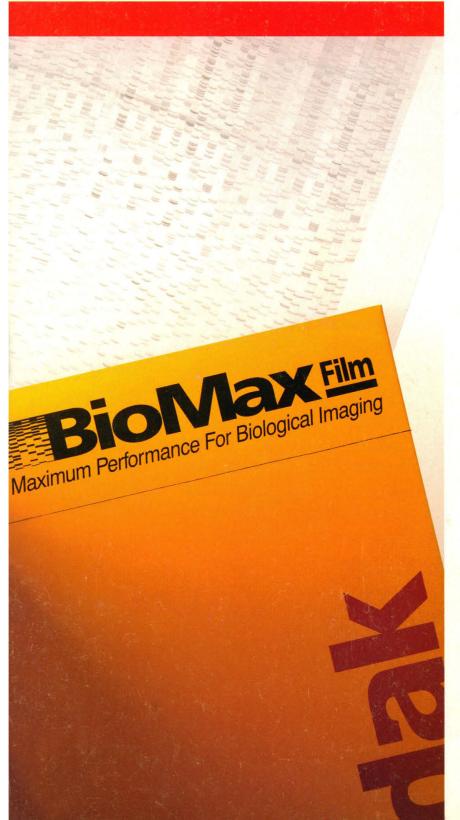


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