

to uncovering Pauli's answers to these questions in his early writings on general relativity and unified field theory. In the process, Hendry exhibits the close relation between the epistemological and methodological issues that arose in discussions of relativity and unified field theories in the teens and the methodological issues that shaped the development of quantum mechanics. Another chapter shows how Bohr's position developed out of his struggle in the teens to shape a quantum theory of the atom. Hendry then traces Pauli's and Bohr's ideas through the '20's by examining the way they influenced and were influenced by the creation of modern quantum mechanics, describing in moderately technical detail the line of research that led from early attempts to construct a quantum theory of dispersion, through the development of matrix mechanics and transformation theory, to von Neumann's Hilbert space formulation of quantum mechanics and its general probabilistic interpretation.

Notably absent from the set of issues that Hendry finds influential in the creation of quantum mechanics is whether causality should be relinquished. At the several points in his narrative where the issue of causality arises, Hendry pauses to consider Forman's thesis that the antipathy to determinism that prevailed in Weimar culture influenced certain physicists to reject causality in quantum theory. He argues that pronouncements and actions portrayed by Forman as reactions to general cultural pressure are better explained as reactions to developments internal to quantum physics. Using his own analysis of the route to quantum mechanics to reveal the origins of the Copenhagen interpretation, Hendry argues, also, that causality became a theme in that interpretation for similar internal reasons.

Much of the ground Hendry traverses has been covered by others, and readers of Hendry's own articles will recognize familiar themes. This book is much more than a summary or reworking of other scholarship, however. Hendry also utilizes details he has gleaned in his own examination of the historical documents, particularly those contained in the first published volume of Pauli's correspondence. The fruits of this research are seen most clearly in the excellent chapter on the development of transformation theory and of the generalized probabilistic interpretation of quantum mechanics, topics no one has analyzed in detail before. Moreover, Hendry uses these resources to tell a long and complicated story in a new way, revealing especially

the extensive behind-the-scenes role of Pauli not only in philosophical but also in technical matters.

This book is not a "complete" history of the creation of quantum mechanics. Little is said, for example, about the origins and technical development of wave mechanics. Nor is there any attempt to portray personalities or personal lives, professional circumstances, or cultural and political climate. Indeed, the strength of the book stems, at least in part, from the attempt to identify and trace an important, coherent, and relatively independent line of development. But Hendry also leaves unanswered questions that do seem to fall within his purview. For example, we are given no clue why Pauli took the positions mentioned above. He first publicly espoused those positions while addressing questions concerning relativity and unified field theories, but, as Hendry himself points out, Weyl and Einstein addressed the same issues in the same context and disagreed with Pauli. Furthermore, there is a gap in Hendry's story. He rightly takes what we now call "the Born interpretation" as the starting point for the development of transformation theory, but he fails to recognize that this was not Born's own original statistical interpretation of the wave function. He therefore does not recognize the need for an account of the step from the one to the other.

Hendry has carved out his subject matter by trying to relate specific philosophical ideas and specific scientific developments. This results in an extremely interesting study, but it also poses problems. One arises from the attempt to tell two stories at the same time. One story is about certain ideas of Bohr and Pauli, their conflict and development; the other is about the creation of matrix mechanics and how it led to quantum mechanics and its Copenhagen interpretation. Hendry shows the two stories are more closely related than one might have thought. Yet the second has a larger cast of major characters (Born, Heisenberg, Jordan, Dirac, and von Neumann in addition to Pauli and Bohr), and the attempt to weave the two together precludes a full account of the role of these other characters. Hendry finds the primary link between the two stories in Pauli's influence on Heisenberg, Dirac, and Jordan. The result is that the influence of Born is underplayed and the way the characters in the second story were influenced by their own past work and independently fashioned methodological views is largely unexplored. Another problem, as Hendry himself notes in his

"Concluding remarks," is that the focus on "ideas" gives rise to an ambiguity. When we are shown that Pauli's and Bohr's ideas clashed, are we to infer that Pauli and Bohr themselves were engaged in "an active and conscious dialogue" about them? When we are shown that a particular piece of Heisenberg's work was guided by an idea that was espoused by Pauli, are we to understand that Heisenberg got the idea from Pauli? Neither Hendry's account nor the historical evidence to which he appeals always distinguishes clearly between the conflict or influence of persons and the conflict or influence of ideas held by those persons.

This book is required reading for anyone interested in the history of quantum physics. It is also enjoyable reading. The style is pleasant, clear and yet concise. Readers who already know much about the history of quantum mechanics will learn even more, and the attempt to fashion a fairly broad but unifying perspective will be welcomed by those who have tried to understand the development of modern quantum mechanics in the '20's by reading an array of journal articles. I recommend the book also as the best entry into these topics for anyone with even a moderate understanding of mathematics and physics.

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ANIMAL PHYSIOLOGIST UNIVERSITY OF CALIFORNIA

The Department of Animal Physiology invites applications for a faculty position at the rank of assistant professor, the level depending on background and experience. This is an 11-month, full-time, tenure-track appointment. The successful applicant will be expected to contribute to the department's advising and teaching program in systemic physiology for undergraduate and graduate students. Minimum qualifications include a Ph.D. and a demonstrated ability to conduct high quality and original research in animal physiology. Applicants should submit curriculum vitae, statement of research and teaching interests, reprints, transcripts (if Ph.D. conferred within last 5 years), and names and addresses of at least three references to: Chair, Animal Physiologist Search Committee, Department of Animal Physiology, University of California, Davis, Calif. 95616. Closing date of receipt of applications is 30 September 1985. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR. Teach graduate level courses in molecular genetics of prokaryotes and eukaryotes; conduct research and develop grants to obtain external funding for research in molecular genetics; use of laboratory equipment including electrophoresis, spectrophotometer, and other equipment; instruct and supervise staff in required techniques and equipment; administrative duties; 40 hours per week with overtime as needed; 8 a.m. to 5 p.m. daily office hours; salary: \$25,000 per annum; must have Ph.D. in genetics and 1 year of experience in the job offered or research associate. Must be able to conduct research in mutagenesis using DNA sequencing techniques including above equipment in genetics research as demonstrated through postdoctoral publication in a professional journal within the last 3 years. Please send résumé to: Illinois Job Service, 910 South Michigan Avenue, 3rd floor, Chicago, Ill. 60605; Attention: Minaia Y. Jaskowiak. Reference Number 4245-J. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

FACULTY POSITION IN ORGANIC CHEMISTRY AT IOWA STATE UNIVERSITY

Applications are invited for this position which will become available either January 1986 or summer 1986. All research areas in organic chemistry will receive consideration. The appointment probably will be at the level of assistant professor; however, applications at all levels will be considered. Candidates with outstanding potential for, and commitment to, excellence in both research and teaching are sought to join a faculty with a strong tradition of research in organic chemistry. Applicants should submit curriculum vitae, transcripts, a documented summary of past accomplishments, and an explicit statement of research plans and teaching objectives to: Professor D. K. Hoffman, Chemistry Department, Iowa State University, Ames, Iowa 50011. Junior applicants also should arrange for at least three letters of recommendation to be sent. Evaluation of applications will begin in October 1985. *Women and minority applicants are encouraged to apply. Iowa State University is an Affirmative Action/Equal Opportunity Employer.*

INORGANIC CHEMISTRY— FACULTY POSITION

The Chemistry Department at Iowa State University invites applications and nominations of candidates for one (and possibly two) faculty positions available in summer 1986. Any appointment probably will be made at the level of assistant professor, although an advanced-level appointment might be possible for an outstanding person with suitable experience and credentials. Applications are sought from individuals in all specialties within inorganic chemistry. The position requires demonstrated aptitude for creative research and for teaching, and a commitment to excel in both. Applications should be directed to: Professor David K. Hoffman, Chairman, Department of Chemistry, Iowa State University, Ames, Iowa 50011. Applicants should submit curriculum vitae, transcripts, and an outline of their research plans during the initial stages of their independent scientific careers. Junior applicants should arrange for three references to send letters directly to Professor Hoffman. Screening of applications will begin in October 1985. *Women and minority applicants are encouraged to apply. Iowa State University is an Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

AQUATIC ANIMAL DISEASE ASSISTANT/ASSOCIATE/FULL PROFESSOR. Rank and salary commensurate with experience and qualifications. The Department of Medicine, School of Veterinary Medicine, University of California, Davis, is seeking applicants for a faculty position to teach and conduct research in the areas of aquatic animal disease and toxicology, and develop a clinical practice concerned with aquatic species. A postgraduate degree with advanced training and experience in aquatic animal pathology and toxicology is essential to the position, a D.V.M. desirable. The development of a productive toxicological research program relating to animals significant to fisheries and aquaculture is an indispensable requirement of the position. Applicants are requested to submit curriculum vitae and the names of three individuals who may be contacted for letters of evaluation to: **Dr. Alex Ardans, Department of Medicine, School of Veterinary Medicine, University of California, Davis, Calif. 95616.** Final filing date is 1 October 1985 or until a suitable candidate is identified. *The University of California is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSORS. Wesleyan University's newly formed Department of Molecular Biology and Biochemistry has two tenure-track openings at the assistant professor level. We expect to make a third appointment in the near future. Research excellence will be the prime consideration and candidates must have a minimum of 2 years of relevant postdoctoral experience. We are searching for: (i) a **molecular geneticist** using recombinant DNA techniques to study genome organization, development, cell transformation, gene regulation or immunogenetics. (ii) A quantitatively oriented **biochemist** using recombinant DNA methods to study structure-function relationships in macromolecules. Research areas or methods of particular interest include protein-nucleic acid interactions, macromolecular structure, quantitative foot-printing, and site-directed mutagenesis. Candidates for both positions will be expected to initiate vigorous programs meriting support by federal agencies and to participate in an active Ph.D. training program. Excellence in teaching at both the graduate and undergraduate levels is expected. Please forward an application, including curriculum vitae, three references, and a detailed research plan to: **Search Committee, Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, Connecticut 06457,** indicating the position in which you are interested. *Wesleyan University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from minority candidates and women.*

ASSISTANT PROFESSORS—The Department of Microbiology, University of Massachusetts at Amherst, invites applications for two tenure-track positions. We are seeking individuals with strong research backgrounds in microbial genetics or physiology whose interests will complement established research programs in our department in the areas of physiology and genetics of procaryotic microorganisms. Candidates will be responsible for teaching courses in introductory microbiology and bacterial genetics. Applicants should forward curriculum vitae, including the names of individuals who may be contacted for letters of recommendation, to: **T. G. Lessie, Search Committee Chairman, Department of Microbiology, University of Massachusetts, Amherst, Mass. 01003,** by 15 October 1985. *The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY MOLECULAR BIOLOGY

The Department of Biochemistry at the Upstate Medical Center of the State University of New York (SUNY) is expanding its commitment to molecular biology and invites applications for a tenure-track position. Candidates should have experience with recombinant DNA techniques and be interested in applying these techniques to the study of fundamental biochemical problems. Applicants should have postdoctoral experience, demonstrated productivity in research, and a commitment to excellence in teaching medical and graduate students. Application deadline: 30 November 1985. Applicants should send curriculum vitae, a summary of research plans, and have three letters of reference forwarded to: **Dr. J. Clint Elwood, Chair, Biochemistry Search, Department of Biochemistry, SUNY-Upstate Medical Center, Syracuse, New York 13210. Telephone: 315-473-5129.** *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

An immediate tenure-track position at the **ASSISTANT/ASSOCIATE PROFESSOR** level is available for a bright, energetic **molecular virologist/biologist** to participate in our program on the production of molecular probes for the early detection of cancer and to develop novel, innovative molecular approaches towards the understanding of the mechanisms involved in human cardiomyopathy. Interested individuals please send curriculum vitae and three letters of reference to: **K. W. Sell, M.D., Ph.D., Professor and Chairman, Department of Pathology and Laboratory Medicine, 703 WMB, Emory University School of Medicine, Atlanta, Georgia 30322.** *An Equal Opportunity/Affirmative Action Employer.*

THE UNIVERSITY OF MARYLAND, DEPARTMENT OF ORAL PATHOLOGY, has an opening for an **ASSISTANT PROFESSOR** (tenure-track). The position has two primary responsibilities. One will be to initiate and maintain an active, independent research program in a contemporary area of pathology or pathobiology. The second responsibility is to assist in either the didactic or clinical activities of the department. Applicants should have either a D.D.S., Ph.D., or equivalent degree. Please submit curriculum vitae, statement of professional objectives, and the names/addresses of those who may provide letters of support to: **Dr. John J. Sauk, Chairman, Department of Oral Pathology, University of Maryland Dental School, 666 West Baltimore Street, Baltimore, Maryland 21201.** *The University of Maryland is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY. Tenure-track position in Department of Chemistry. Applicant will be expected to participate in teaching and in developing a research program in some aspect of plant or environmental biochemistry; collaborative opportunities in related disciplines. Doctoral degree required; strong background in chemistry and postdoctoral experience desirable. Send detailed curriculum vitae, research plans, and three letters of recommendation by 1 October 1985 to: **Dr. R. M. Silverstein, Department of Chemistry, State University of New York, College of Environmental Sciences and Forestry, Syracuse, New York 13210.** *An Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF BIOCHEMISTRY AND MOLECULAR BIOLOGY—The Department of Biochemistry and Molecular Biology, Louisiana State University (LSU) School of Medicine in Shreveport, invites applications for two tenure-track positions at the assistant professor level. Candidates with a strong background in molecular biology, membrane biochemistry, and molecular virology are especially encouraged to apply; however, outstanding candidates in other areas of biochemistry will definitely be considered. Applicants should submit curriculum vitae, description of future research program, and have three letters of reference sent by 15 October 1985 to: **Dr. Richard Courtney, Head, Department of Biochemistry and Molecular Biology, LSU Medical Center, 1501 Kings Highway, Shreveport, La. 71130.**

Affirmative Action/Equal Opportunity Employer

ASSISTANT PROFESSOR, BIOSTATISTICS. The Pennsylvania State University School of Medicine, Department of Behavioral Sciences. Ph.D. and at least 2 years of experience in cancer clinical trial research. Specific program includes work in breast and prostate cancer clinical trials. Salary negotiable, based upon experience. Send curriculum vitae and three letters of reference to: **Dr. Richard J. Santen, Chief, Division of Endocrinology, The Milton S. Hershey Medical Center, The Pennsylvania State University, P.O. Box 850, Hershey, Pa. 17033.** Deadline for receipt of application is 1 October 1985. *The Pennsylvania State University is an Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR OF ENTOMOLOGY—Tenure-track, Ph.D., research and teaching position in insecticide toxicology/biochemistry. Emphasis on mode of action, pest resistance, and control of resistant insects. Candidate should be familiar with molecular biology techniques. Teaching to include a graduate course in insecticide toxicology. Send letter of application, résumé, transcripts, and three letters of reference by 15 October 1985 to: **Dr. D. G. Cochran, Department of Entomology, Virginia Polytechnic Institute and State University, Blacksburg, Va. 24061.**

MANAGING DIRECTOR

Boyce Thompson Institute at Cornell University

Applications and nominations are invited for the position of managing director of Boyce Thompson Institute for Plant Research at Cornell University. Boyce Thompson Institute (BTI) is a nonprofit, privately endowed organization conducting research on plants and plant pests. The Institute is located in a facility completed in 1978 on the campus of Cornell University and is affiliated with the College of Agriculture and Life Science. BTI has an annual budget of \$7 to \$8 million and employs approximately 125 scientists and support staff, 60 at the Ph.D. level.

The managing director serves as chief executive officer and is responsible for formulation of Institute policy, evaluation of productivity of research programs, selection of scientific personnel, recruitment of research support, and overall operation of the Institute and interaction with Cornell University administration.

Selection will be based upon experience, consistent with the goals of the Institute, which include basic and applied research in the plant sciences relevant to national and world agriculture. Previous scholarly endeavor, organizational ability, and success in recruiting research support will be considered. Applicants should send curriculum vitae, bibliography, and names of five professional people acquainted with the applicant's background to: **Dr. Leonard H. Weinstein, Chairman of the Screening Committee, Boyce Thompson Institute at Cornell University, Ithaca, N.Y. 14853.** Nominations should also be sent to Dr. Weinstein. All applications and nominations should be submitted as soon as possible, but not later than 15 October 1985. *An Affirmative Action/Equal Opportunity Employer.*

INSECT NEUROBIOLOGY FACULTY POSITIONS

The Arizona Research Laboratories, Division of Neurobiology (ARLDN), a new research unit devoted to cellular, developmental, and molecular neurobiology and neuroethology of insects, invites applications for up to three state-funded, tenure-track faculty positions. These appointments will involve research, teaching, supervision of pre- and postdoctoral trainees, and collaboration with other ARLDN scientists on joint projects.

The disciplines and research areas that will receive special attention in this search are:

- 1) **Neuroanatomy**—Emphasizing development, functional organization, and synaptology of the insect CNS, and using electron microscopy, intracellular staining, cytochemistry, and correlative physiological methods.
- 2) **CNS Neurophysiology**—Emphasizing development, synaptic and integrative mechanisms, neuroethology, and membrane physiology, and using intracellular recording and staining.
- 3) **Molecular Neurobiology**—Emphasizing molecular analysis of neural development and function in insects, and using methods of molecular genetics, protein biochemistry, and hybridoma technology.

Candidates should have a Ph.D. or equivalent degree, at least 3 years of postdoctoral research experience, and a demonstrated dedication to multidisciplinary, collaborative, and independent research.

It is anticipated that these positions will be assistant professorships, but particularly qualified candidates at more advanced levels are encouraged to apply. These appointments, in the ARLDN and jointly in an appropriate department of the University of Arizona, will be effective on or after 1 July 1986.

Applications, including curriculum vitae, at least three letters of recommendation, and a brief outline of previous research accomplishments and future research plans, should be sent by 1 October 1985 to: **Neurobiology Faculty Search, ARL Division of Neurobiology, Flandrau Planetarium, University of Arizona, Tucson, Ariz. 85721.**

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

POSITIONS OPEN

Harvard University ASSISTANT PROFESSOR CELLULAR AND DEVELOPMENTAL BIOLOGY (CDB)

The Department of Cellular and Developmental Biology intends to make one and possibly more appointments at the assistant professor level, effective 1 July 1986. Our department covers a broad range of topics in cellular biology and developmental/molecular genetics. We are seeking outstanding candidates in these fields. We are particularly interested in possible appointments in the areas of vertebrate development, neurobiology, plant molecular biology, and cell biology. However, we will consider exceptional applicants in other fields as well. *We encourage applications from women and minority groups.* Applications should include curriculum vitae, reprints of publications, and a statement of research plans. Complete applications and three letters of recommendation, solicited by the applicant, should be received no later than 31 October 1985 by:

Diane Baldwin, Administrator
CDB Search Committee
Cellular and Developmental Biology
The Biological Laboratories
Harvard University
16 Divinity Avenue
Cambridge, Mass. 02138

Harvard University is an Affirmative Action/Equal Opportunity Employer.

YALE UNIVERSITY. The Department of Chemistry invites applications for two tenure-track **ASSISTANT PROFESSOR** positions, effective academic year 1986. We seek outstanding individuals in any field of chemistry. Applications from those whose research interests overlap with the areas of organic or inorganic chemistry and the biological sciences are particularly welcome. Applicants should send curriculum vitae, a statement of research plans, and should arrange for the submission of three letters of recommendation. All materials should be received by 1 December 1985. Send application to: **Professor S. L. Schreiber, Chairman, Search Committee, Department of Chemistry, Yale University, P.O. Box 6666, New Haven, Conn. 06511.** *Yale University is an Equal Opportunity/Affirmative Action Employer.*

THE DEPARTMENT OF CHEMISTRY OF THE UNIVERSITY OF WISCONSIN-MADISON invites applications for one or more tenure-track **ASSISTANT PROFESSOR** positions, effective August 1986. The primary requirement is excellence in research and teaching. Research may be in any area of organic, physical, or analytical chemistry; preference will be given to candidates whose research interests are complementary to those of the present faculty. Teaching responsibilities may involve undergraduate courses, including general chemistry, and graduate courses. Interested persons should forward curriculum vitae, a summary of proposed research, and an outline of teaching interests, and arrange to have three letters of recommendation sent to: **Professor Phillip R. Certain, Chairman, Department of Chemistry, University of Wisconsin, 1101 University Avenue, Madison, Wis. 53706.** To be assured of full consideration, candidates should have completed their applications by 15 October 1985. *The University of Wisconsin is an Equal Opportunity/Affirmative Action Employer; applications from qualified women and minority candidates are encouraged.*

ASSISTANT PROFESSOR OF CHEMISTRY. The Chemistry Department of Amherst College has available a regular tenure-track faculty position for a Ph.D. with a strong background and interest in experimental physical chemistry. Postdoctoral experience is desirable. The appointment, which takes effect on 1 July 1986, represents an excellent professional opportunity for a person committed to both research and teaching at an institution dedicated to the education of undergraduates. Teaching responsibilities customarily involve instruction in departmental courses at the elementary and advanced levels. Participation in interdisciplinary, extra-departmental courses and programs is also encouraged. The successful candidate will be expected to develop an active research program that encourages undergraduate participation. Applicants should submit a résumé, the names of three references, and a brief description of both teaching and research ideas to: **Search Committee, Department of Chemistry, Amherst College, Amherst, Massachusetts 01002,** by 1 November 1985. *Amherst College is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

ASSISTANT PROFESSOR OF FOOD CHEMISTRY. Tenure-track starting January 1986. Ph.D. in related field with strong background in chemistry or food chemistry and experience in polysaccharides. Teach 40 percent, research 60 percent. Mail curriculum vitae and names of three references by 1 November 1985 to: **Dr. C. J. Argoudelis, Chairman, Search Committee, Department of Food Science, University of Illinois, 567 Bevier Hall, 905 South Goodwin, Urbana, Ill. 61801.** *Affirmative Action/Equal Opportunity Employer.*

ASSISTANT PROFESSOR—GENETICIST. Emporia State University invites applications for a broadly based geneticist to teach the general genetics course and develop a research program. The successful candidate will be expected to teach other upper level courses, dependent upon the candidate's experience and qualifications, and must also teach introductory level courses. Qualifications include the Ph.D. and a commitment to excellence in teaching and scholarly activities. Beginning date is 6 January 1986. Send cover letter, curriculum vitae, and names of three references to: **Dr. Gaylen Neufeld, Division of Biological Sciences, Emporia State University, Emporia, Kans. 66801.** Applications are due 4 October 1985. *An Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR—INFECTIOUS DISEASES/EPIDEMIOLOGY

The Department of Veterinary Science, University of Wisconsin-Madison, invites applications for an **assistant professor, tenure-track, or associate professor, tenure position, in infectious diseases/epidemiology.** The candidate is expected to develop an independent research program with focus on the mechanisms of animal disease and direct graduate student training. The primary teaching responsibility is a graduate level course in epidemiology.

Opportunities exist for collaboration with other faculty having programs in epidemiology, experimental pathology, immunology, virology, microbiology, reproductive and cardiopulmonary physiology, and parasitology. Departmental facilities include a P3 laboratory. Candidates for the position must possess a Ph.D., D.V.M.-Ph.D., or equivalent. Submit curriculum vitae, description of research goals, teaching experience, and names of four references to: **Dr. G. Splitter, Associate Professor, Department of Veterinary Science, 1655 Linden Drive, Madison, Wis. 53706.**

The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSORS—MOLECULAR BIOLOGY—MOLECULAR GENETICS

Several tenure-track positions are available as part of a major expansion in the biological sciences at Drexel University. Research areas we intend to develop include the regulation of gene expression (both eukaryotic and prokaryotic), molecular and biochemical immunology, virology, and molecular developmental biology. Outstanding aptitude and potential for research, as well as an interest in teaching at the graduate and undergraduate levels, is expected. Postdoctoral training is desirable. Submit curriculum vitae, statement of interests, and the names of three references to: **Dr. Wayne E. Magee, Head, Department of Bioscience and Biotechnology, 227 Stratton Hall, Drexel University, 32nd and Chestnut Streets, Philadelphia, Pa. 19104.** *Drexel University is an Equal Opportunity/Affirmative Action Employer. Applications are especially welcome from women and minority applicants.*

ASSOCIATE DIRECTOR—MEDICAL RESEARCH, ASIA PACIFIC/LATIN AMERICA/CANADA. To assist international medical director responsible for the areas of Asia Pacific, Latin America, and Canada in all aspects of product development, with particular emphasis in cardiovascular and anti-inflammatory drugs.

This candidate must have a degree in medicine, a strong background in international medicine, and at least 10 years of international pharmaceutical experience, 3 of them in the United States. The applicant must have good ties established with investigators in cardiology and anti-inflammatory compounds, particularly with those in leading centers in Latin America, Asia Pacific, and Canada. The applicant must be fluent in Spanish and Portuguese. Salary: \$5100 per month. Send résumé to: **Marianne Procak, Division of Employment and Training, 3301 Lancaster Pike, P.O. Box 2168, Wilmington, Del. 19899.** *Job Reference Number 601016.*

POSITIONS OPEN

ALBERT EINSTEIN COLLEGE, THE DEPARTMENT OF NEUROSCIENCE, seeks investigators for a position at the **ASSISTANT PROFESSOR** level with interests in **molecular neurobiology.** Preference will be given to individuals with expertise in molecular biology. Send curriculum vitae, bibliography, and names of three references to: **Dr. Michael V. L. Bennett, Chairman of the Department of Neuroscience, ALBERT EINSTEIN COLLEGE OF MEDICINE, 1300 Morris Park Avenue, Bronx, N.Y. 10461.** *An Equal Opportunity Employer*

ASSISTANT PROFESSOR PHYSICAL BIOCHEMISTRY

The Department of Microbiology/Biochemistry, University of Wyoming, has available 1 October 1985 a nontenure-track assistant professorship (5 years of funding are presently available) to work on problems concerning protein-protein interactions between immunoglobulins, lens crystallins or membrane-associated hormone receptors. Unusually complete facilities are available and the teaching of approximately one course per semester is expected. The salary is \$30,000 per year with full benefits. Applicants should send complete curriculum vitae and three letters of reference to: **Dr. C. R. Midgough, Department of Microbiology/Biochemistry, University of Wyoming, Box 3944, University Station, Laramie, Wyoming 82071.**

ASSISTANT PROFESSORSHIP IN PLANT BIOLOGY. The Department of Biology, University of Virginia, invites applications for a tenure-track position in the genetics or molecular biology of plants, beginning fall 1986. The successful candidate would be expected to have substantial postdoctoral experience and exceptional potential for creative research. She/he will teach in both undergraduate and graduate courses in plant biology. Send summary of present and future research interests, curriculum vitae, and three letters of recommendation to: **Chairman, Botanical Search, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, Va. 22901.** Application deadline: 1 January 1986. *An Equal Opportunity/Affirmative Action Employer.*

University of California, San Diego School of Medicine ASSISTANT RESEARCH NEUROPSYCHOLOGIST Department of Psychiatry

Cognitive psychologist, Ph.D., is needed to conduct research in human memory and amnesia. Candidate should have 3 years of postdoctoral experience in neuropsychological research and have expertise in cognitive psychology, neuropsychology, biological psychiatry, computer programming, and statistics. Neuropsychological expertise should include the construction, administration, and interpretation of tests sensitive to memory dysfunction and other cognitive impairment. Candidate would be expected to develop a research program to investigate the neuropsychology of learning and memory, train graduate students, and interact extensively with others in the field of cognitive psychology, neuropsychology, and neurosciences.

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

Salary: related to academic rank and step within the established salary schedule of the University of California, San Diego.

Send curriculum vitae by 20 September 1985 to:

Search Committee D
Larry R. Squire, Ph.D.
Department of Psychiatry, M-003
University of California, San Diego
La Jolla, Calif. 92093

BIOCHEMIST to study long-term biochemical regulation of membrane channels within an established multidisciplinary program investigating molecular substrates of learning and memory. High resolution, two-dimensional gel electrophoresis; HPLC; auto-radiography; enzymatic assays (for example, kinases, adenylate cyclase, phosphatase, and so forth); protein synthesis, recombinant DNA techniques; and artificial membranes are examples of desirable areas of expertise. Candidates with a Ph.D. and/or M.D. and at least 2 years of postdoctoral experience preferred. Salary range: \$25,000 to \$35,000 with excellent benefits. Submit résumé to: **Personnel Office, Marine Biological Laboratory (MBL), Woods Hole, Mass. 02543,** by 20 September 1985.

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MOLECULAR GENETICS, INC., a leading biotechnology firm, is seeking two talented individuals to join us:

POSTDOCTORAL POSITION/ ANIMAL SCIENCES

Available immediately, to investigate molecular biology and biochemical features of viral glycoproteins and define their roles in virus infection, host immune response and pathogenesis. Ph.D. with experience in protein chemistry, membrane biology, virology, and/or molecular biology preferred. Genetic engineering, recombinant DNA, protein structural studies, and immunologic analyses will be involved. Send curriculum vitae, three letters of recommendation, and a short statement regarding research interests to: *Dr. Marc S. Collett, Director of Molecular Biology*

RESEARCH SCIENTIST/PLANT SCIENCES

To join our expanding Plant Sciences Group. The selected individual will develop research strategies for identifying plant genes of commercial importance and will clone, transfer, and characterize expression of such genes in crops of interest. Applicants must hold a Ph.D., plus 2 years postdoctoral or professional experience in plant molecular biology or related field, and have demonstrated collaborative and supervisory skills. Preference will be given to candidates with additional experience in plant biochemistry and/or plant genetics. Send curriculum vitae and three letters of reference to: *Mary S. Barton, Manager, Human Resources*

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CANCER CONTROL SCIENCE ASSOCIATES PROGRAM

The Division of Cancer Prevention and Control, National Cancer Institute is accepting applications for the Cancer Control Science Associates Program. This three-year program is designed to attract qualified individuals into the field of cancer control research. Depending on availability of funding and/or personnel slots, up to five Science Associates will be eligible for a July 6, 1986 entry into the program. Requirements for the three-year appointment are: 1) M.D., D.O., or accredited doctoral degree in an allied or public health profession, biomedical, behavioral, or social science, or equivalent; 2) A minimum of one year of postdoctoral training or experience at the time of application, which included a familiarity with the basic fundamentals of scientific research methodology; 3) academic-professional excellence supported by official transcripts and four letters of reference; and 4) U.S. citizenship or permanent residency status at the time of application. Current salaries for the first year for an M.D./D.O. or a Ph.D., respectively, are \$31,044 or \$26,381 per annum, plus normal Federal employment benefits. To obtain details, **SEND A POSTCARD ONLY** with your printed name and home mailing address to: Ms. Nancy E. Garner, Program Coordinator, CCSAP, NIH/NCI/DCPC/CCAB, Blair Building, Room 4A01, Bethesda, MD 20205-4200, or call (301) 427-8788. The National Institutes of Health is an Equal Opportunity Employer.

DEADLINE FOR RECEIPT OF
APPLICATIONS IS NOVEMBER 22, 1985

CONFERENCE ON MANAGING CONDUCT AND DATA QUALITY OF TOXICOLOGY STUDIES

Quality Inn
Mission Valley Conference and Expo Center
Raleigh, NC
November 18-20, 1985

This conference, sponsored jointly by the National Toxicology Program/National Institute of Environmental Health Sciences and Industry (American Industrial Health Council, Petroleum Institute, Chemical Manufacturers' Association, and National Agricultural Chemical Association) is intended to provide opportunities for the presentation of views and discussion of concerns related to the importance of the quality of data generated from toxicology studies. The conference objectives are to:

- Review and exchange current concepts and strategies to improve the quality of toxicological studies.
- Present and discuss Quality Assurance (QA) programs utilized by government and industry.
- Provide a forum for the exchange of ideas between government and industry to strengthen a mutual commitment to quality.
- Publish conference proceedings.

Presentations will be made by leaders in various disciplines which contribute to the quality assurance of toxicological studies. The interaction needed between management and scientists to maintain standards of quality in the conduct of toxicology programs will be the focus of this conference.

To receive information for the conference, please contact:

Ms. Alice S. Glover
Corporate Travel International/NC
P.O. Box 30607
Raleigh, NC 27622

1-800-672-8537 (within NC)
1-800-334-9798 (outside NC)

EARLY RESERVATIONS RECOMMENDED
DUE TO SPACE LIMITATIONS.

DEADLINE FOR REGISTRATION AND
RESERVATIONS IS OCTOBER 15th.

Biotechnology



Repligen Corporation, a rapidly growing biotechnology company involved in the development of a variety of innovative peptide and protein products by recombinant DNA and conventional biochemical techniques, seeks qualified candidates for the following positions:

Principal Investigators: Qualified individuals will have a Ph.D. or M.D. degree, with at least 5 years' post-doctoral experience in either protein chemistry or molecular biology. Successful candidates will possess an exceptional record of achievement and have proven program management skills.

Research Scientists: Qualified individuals will possess a Ph.D. degree, with post-doctoral experience in either protein chemistry or molecular biology. Successful candidates will have proven records of research achievement and the motivation which will allow them to take advantage of the growth opportunities available at Repligen.

Research Assistants: M.S./B.S. level positions with at least two years' laboratory experience in the areas of protein chemistry or molecular biology. For highly motivated candidates these positions offer the opportunity to expand his or her technical expertise into virtually all areas of research technology.

Repligen offers a competitive salary, excellent benefits, and equity participation. Submit cover letter, resume, and references to: Personnel Manager, Repligen Corporation, 101 Binney Street, Cambridge, MA 02142

RepliGen

RESEARCH SCIENTIST

An opportunity exists for a motivated scientist to conduct innovative exploratory experimentation in skeletal muscle biology within the framework of an assembling multidisciplinary research team working in the area of domestic livestock growth and development. With a strong understanding of muscle biology, the applicant will be expected to draw from the fields of neurobiology, peptide biology, endocrinology and cell biology to establish a basic research program in skeletal muscle protein metabolism, growth and development, nutrient flux/energetics or a related area.

The minimum qualifications include a Ph.D. and two years post doctoral or related experience in biochemistry, cell biology, nutrition or animal science. Demonstrated ability in enzymology, protein chemistry, tissue culture, pharmacokinetics and radio ligand preparation is highly desirable. Familiarity with large animals will be helpful.

Kalamazoo is a medium sized Southwestern Michigan community with immediate access to a mix of excellent cultural, educational and recreational pursuits including numerous lakes and four-season climate. Upjohn offers an excellent salary, commensurate with experience and an outstanding benefits program.

For confidential consideration, please call inside Michigan, collect 616-323-6767 or from outside Michigan toll free 1-800-253-8600, Ext. 3-6767, to request an employment application sent to you immediately. Please refer to Ad Number 18022-A when calling.

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POSITIONS OPEN

AVIAN ECOLOGIST, assistant professor of wildlife biology, permanent, 9-month, tenure-track. Teach wildlife ecology, introductory wildlife management, course in area of speciality (alternate year). Develop active, extramurally funded research. Ph.D. wildlife biology or closely related field. Salary: competitive. Apply to: **Dr. Charles T. Robbins, Chair, Program in Wildlife Biology, Washington State University (WSU), Pullman, Wash. 99164-4220.** Deadline: 1 January 1986. Starting date: 16 August 1986. *WSU is an Equal Opportunity/Affirmative Action Employer.*

BEHAVIOR ANALYST—PROFESSOR. The Division for the Experimental Analysis of Behavior (EAB) in the Department of Psychology at the University of Florida announces the availability of a faculty position, at the rank of professor, for a behavior analyst. Applicants should be well versed in both applied behavior analysis and the experimental analysis of behavior. Preference will be given to candidates with an established record of accomplishment in the analysis of human behavior. Teaching responsibilities will include participation in both undergraduate and graduate instruction in experimental and applied behavior analysis. A strong commitment to research and scholarship is necessary. Applicants should send curriculum vitae, a letter describing teaching and research interests, and the name of at least five persons who can be asked to provide letters of reference. *Applications from women and members of minority groups are encouraged.* Information should be sent to: **Chair, EAB Search Committee, Psychology Department, University of Florida, Gainesville, Fla. 32611.** Deadline for receipt of materials is 15 November 1985. Anticipated starting date: fall term 1986. *The University of Florida is an Equal Opportunity/Affirmative Action Employer.*

BEHAVIORAL BIOLOGY. The Department of Zoology has a tenure-track position in behavior available beginning September 1986. While persons in any behavioral specialty will be considered, the department is particularly interested in the following behavioral areas: development, ecology, genetics, and neurobiology. Applicants for this position should submit a brief summary of their research, along with their curriculum vitae, and have four letters of reference sent to: **Behavior Search Committee, Department of Zoology, Michigan State University, East Lansing, Mich. 48824.** *Michigan State University is an Equal Opportunity Employer.*

BIOCHEMIST/MOLECULAR BIOLOGIST

The Department of Biochemistry and Biophysics is seeking applications for two assistant or associate professorships. These are 12-month, tenure-track positions jointly funded by the College of Agriculture and the Texas Agricultural Experiment Station. Outstanding individuals having research interests dealing with the molecular aspects of regulation, structure, mechanism, or function in microbial, animal, or plant systems are sought. In addition to research, participation in the department graduate and undergraduate teaching programs will be required. A terminal degree in either biochemistry or a related field, plus appropriate postdoctoral experience, is required.

Applicants should send curriculum vitae, list of publications, a brief description of current and future research directions, and names of three references to:

**Dr. E. G. Sander, Head
Department of Biochemistry and Biophysics
Texas A&M University
College Station, Tex. 77840-2128**

Applications will be accepted until 15 October 1985, or until suitable candidates are found.

The Texas A&M University System is an Affirmative Action/Equal Opportunity Employer.

CHAIRMAN Department of Obstetrics and Gynecology

The University of Pennsylvania School of Medicine has an opening for the position of professor and chairman of the Department of Obstetrics and Gynecology. Applicants must be certified by the American Board of Obstetrics and Gynecology and have demonstrated qualifications in the administration of a large program in research, education, and patient care. *The University is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.* Interested applicants should send curriculum vitae to: **Albert J. Stunkard, M.D., Chairman of the Search Committee, Suite 507, 133 South 36 Street, Philadelphia, Pa. 19104.**

POSITIONS OPEN

BIOLOGY AND CHEMISTRY DEPARTMENT HEAD

Administrative and leadership responsibilities for a department of 14 faculty with enrollments of 200 students in 4-year curricula and 50 students in 2-year curricula; some teaching responsibilities.

Earned doctorate required with demonstrated leadership abilities, a documented record of professional accomplishment, and commitment to excellence in undergraduate education. Twelve-month appointment; commencing 1 July 1986. Salary commensurate with qualifications; excellent fringe benefits.

Deadline: 15 January 1986. Apply to: **Office of Employee Relations, LAKE SUPERIOR STATE COLLEGE, Sault Ste. Marie, Mich. 49783.** *An Equal Opportunity/Affirmative Action Employer.*

BOTANICAL GARDEN DIRECTOR

The University of North Carolina at Chapel Hill and its Department of Biology invite applications and nominations for the position of director of The North Carolina Botanical Garden (NCBG) beginning 1 July 1986. The appointment will be made at a tenure-track faculty rank commensurate with qualifications and experience. The successful candidate will be expected to manage the Garden, carry on a research program, and will have limited teaching duties. Applications received after 1 December 1985 cannot be assured of consideration. Applicants should send complete curriculum vitae and four letters of recommendation to: **Chairman of the NCBG Search Committee, Department of Biology, Coker Hall 010A, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. 27514.** *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.*

CELL BIOLOGY AND PHYSIOLOGY WASHINGTON UNIVERSITY SCHOOL OF MEDICINE ST. LOUIS, MISSOURI

The Department of Cell Biology and Physiology, Washington University School of Medicine, St. Louis, Missouri, is expanding its commitment to research in the following areas: (i) membrane protein function and biogenesis; (ii) assembly, function, and movement of intracellular organelles; (iii) cell motility and contractility; and (iv) cell-cell and cell-matrix interactions. Individuals who employ novel biophysical and recombinant DNA methodologies are especially encouraged to apply. Tenure-track positions are available for successful candidates who will be expected to develop an independent research program and to participate in the training of medical and graduate students. Please submit curriculum vitae and the names of three references to: **Dr. Phillip Stahl, Department of Cell Biology and Physiology, Washington University School of Medicine, 660 South Euclid Avenue, St. Louis, Mo. 63110.** *An Affirmative Action/Equal Opportunity Employer.*

CELLULAR/MOLECULAR NEUROBIOLOGIST

The University of Massachusetts Medical Center, Department of Neurology. An established investigator with a background and interest in studying mechanisms of neuronal aging, death, and selective vulnerability in Alzheimer's disease and related disorders is sought to join an expanding Neurology Department and interdisciplinary neurobiology program. Initial appointment will be made at the assistant or associate professor level (tenure-track). Applications should include curriculum vitae, relevant reprints, a statement of research interests, and names of at least three references. Salary is commensurate with experience. Appointment effective January 1986. Applications should be sent to: **David A. Drachman, M.D., Chairman, C/MN Search Committee, Department of Neurology, University of Massachusetts Medical School, Worcester, Massachusetts 01605.**

An Affirmative Action/Equal Opportunity Employer

Seeking Board-certified or eligible **Ph.D. CYTOGENETICIST** for tenure-track position including research, teaching, and direction of clinical laboratory. Send curriculum vitae, a résumé of current and future research plans, and three letters of reference to: **Dr. Harold O. Goodman, Section on Medical Genetics, Bowman Gray School of Medicine, Winston-Salem, N.C. 27103.** *Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN

CHAIR OF MICROBIOLOGY/IMMUNOLOGY

The School of Medicine and the College of Science and Engineering of Wright State University invite applications and nominations for the position of chair of the Department of Microbiology and Immunology. The candidates should have an M.D., or Ph.D., or both; and have demonstrated leadership and productivity in teaching, research, and academic administration. Those in the areas of immunology and of molecular science are especially sought although candidates from all relevant fields will be considered. The department offers courses at the baccalaureate, graduate, and undergraduate medical school levels, and participates in the Biomedical Sciences Ph.D. Program. The department is part of both the School of Medicine and the College of Sciences and Engineering.

Nominations and applications should be sent to: **Robert Weisman, Ph.D., Chair of Search Committee for M/I Chair, Wright State University, 234 Biological Sciences Building, Dayton, Ohio 45435.** Applications should include curriculum vitae and the names of three references. The closing date for applications is 15 November 1985.

Wright State is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF EDINBURGH FACULTY OF MEDICINE Chair of Pathology

Applications are invited for the Chair of Pathology, which will fall vacant following the retirement of Professor Sir Alastair Currie on 31 March 1986. The professor of pathology will be expected to be of high academic standing, to have a wide interest in general pathology, to have a substantial record of achievement in research, and to provide academic leadership as head of the department.

The department has responsibility for undergraduate teaching to medical and dental students, and for postgraduate teaching in the Faculty of Medicine. There is an honours B.Sc. course in pathology. The department also has major responsibilities for the provision of diagnostic services to the National Health Service.

The salary will be at the clinical professorial level (£26,080 per annum) if the successful candidate holds a registrable medical qualification or, if the successful candidate does not possess such a qualification, at the preclinical professorial level (minimum: £18,555 per annum); these salaries are under review.

Further particulars may be obtained from: **The Personnel Office, University of Edinburgh, 63 South Bridge, Edinburgh, Scotland EH1 1LS,** with whom applications (20 copies), including curriculum vitae and the names and addresses of three referees, should be lodged not later than 1 November 1985. Overseas candidates need submit only one copy of the application.

Please quote Reference Number 31/85.

INDIANA UNIVERSITY, BLOOMINGTON ECOLOGY/EVOLUTION/ORGANISMAL BIOLOGY Fall 1986

Applications are invited for two tenure-track positions at the level of assistant professor. We are seeking individuals with outstanding research potential in the following three areas: animal behavior (preference for a mechanistic approach to behavior, such as information processing, hormones and behavior, or biological timekeeping), aquatic biology (preference for studies of the dynamics of phytoplankton, zooplankton, macrophytes, fish populations, or other lake components), plant ecology or plant evolutionary biology (preference for whole plant physiology or morphology combining field and laboratory approaches). Although applications will be received from three areas, only two lines can be filled. The successful applicants will be expected to teach both graduate and undergraduate students and to establish and maintain strong research programs.

Please submit curriculum vitae, summary of past and present research, a statement of research objectives, and a set of publications, and have three letters of reference sent to: **Rollin C. Richmond, Chairperson, Department of Biology, Indiana University, Bloomington, Ind. 47405.** Applications received before 1 November 1985 will be assured of consideration. *Applications from minorities and women are especially desired.*

Indiana University is an Affirmative Action/Equal Opportunity Employer.

ARGONNE NATIONAL LABORATORY ENVIRONMENTAL RESEARCH DIVISION

is seeking environmental scientists and engineers for a multidisciplinary group involved in gathering data and analyzing impacts associated with energy development and waste management. Findings are reported in environmental assessments, impact statements, and other technical reports. Applications are being sought for:

GEOHYDROLOGIST - geologic characterization, migration of contaminants in groundwater and long-term degradation of waste containment systems. **Box-J-ERD-15693-55.**

HYDROLOGIST - hydrographic analysis, erosion and stream sedimentation, and pollutant transport in surface waters. **Box-J-ERD-15684-55.**

WILDLIFE ECOLOGIST - dynamics and management of recreationally important wildlife populations. **Box-J-ERD-15691-55.**

NUCLEAR/CHEMICAL ENGINEER - construction, operation, and decontamination of nuclear and chemical facilities; waste management. **Box-J-ERD-15688-55.**

SOCIOLOGIST - social and economic effects of energy facilities, resource development, and waste management projects in urban and rural settings. **Box-J-ERD-15686-55.**

Candidates should have an appropriate advanced degree or equivalent experience in their discipline. Salaries are competitive.

Send curriculum vitae by September 30, 1985, to the appropriate box number, to the attention of:



Rosalie L. Bottino,
ARGONNE NATIONAL
LABORATORY
9700 South Cass Avenue
Argonne, IL 60439
An affirmative action/equal
opportunity employer m/f.

UNUSUAL OPPORTUNITY FOR A SCIENTIST IN ATHEROSCLEROSIS AT

BRISTOL-MYERS

POSITION

You will be part of an expanding research program in the biosynthesis and metabolism of lipids and expected to plan and implement new research thrusts in this multi-faceted program. We require a minimum of one year post doctoral research experience in cholesterol/lipid metabolism after an appropriate Ph.D. degree.

INNOVATION

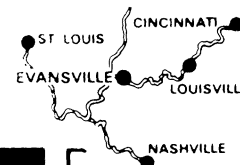
Bristol-Myers, a world-wide leader in research and development, has a strong heritage of accomplishments and a strong future. Our growth is the direct result of our innovation. Our operating style encourages personal creativity and contribution and we're thoroughly professional.

LOCATION

This unit of Bristol-Myers is currently located in Evansville, Indiana. It will relocate to our new research facility in the New Haven, Connecticut area in early 1987. This area of Connecticut couples New England charm with exceptional recreation, education and cultural facilities.

To investigate these reasons for joining Bristol-Myers Research is to discover a wealth of others; excellent salaries; superb benefits; including liberal relocation benefits; real growth, both personal and professional. Discover us! When it comes to your career, no one can offer more!

Send resume in confidence to: Employment Dept.
6L37, Bristol-Myers Research Recruitment, Mead
Johnson & Company, 2404 W. Pennsylvania Ave.,
Evansville, IN 47721.



An Equal Opportunity Employer M/F/H/V

PROJECT LEADER

Genetic Systems, a leader in the field of biotechnology, has need of a Project Leader in Therapy.

Ph.D. with post-doctoral experience and supervisory ability will co-direct technical staff. Requires background in cell culture, preferably monoclonal, immunology or microbiology.

Genetic Systems offers competitive salaries and excellent benefits. Equal Opportunity Employer.

Desired starting date July, 1985. Please send curriculum vitae to:

Karen Hedine, Personnel Manager



Genetic Systems
CORPORATION

3005 FIRST AVENUE SEATTLE,
WA 98121-1035
(206) 624-4300

SUPERVISOR HEMODYNAMICS UNIT

With high productivity and large numbers of drugs in development, this expanding subdivision at Wyeth Laboratories, Inc., offers excellent recognition factors.

Development of cardiovascular drugs has considerable priority at our corporate administrative and R&D headquarters in Radnor, PA. Our stature as a pharmaceutical company, and our investigations of leading edge areas are assurances of continued productivity.

To qualify, you must have a PhD in Physiology or Pharmacology, and at least 2 years post-doctoral experience in conscious animal research, preferably dogs or other large animals. Experience in chronically instrumented animals, disease models, telemetry technology, and regional blood flow studies preferred—as is experience in supervising BS/MS level technicians.

Explore your exceptional career advantages with Wyeth including a very competitive salary, extensive company benefits and a distinctive work environment on our 20-acre Corporate campus located in an attractive community on Philadelphia's prestigious Main Line. Please send curriculum vitae to: **Position #WD4084S, Manager of Recruitment, Wyeth Laboratories, Inc., P.O. Box 8299, Philadelphia, PA 19101.** Equal Opportunity Employer, M/F/H/V responses encouraged.

Wyeth Laboratories, Inc.



POSITIONS OPEN

CHIEF, ILLINOIS STATE WATER SUPPLY. Illinois is seeking a distinguished scientist or engineer with administrative capability to serve as chief of the Illinois State Water Survey, a division of the Department of Energy and Natural Resources. The Survey's main facility is located on the University of Illinois Campus at Urbana. The chief is responsible for the scientific and administrative direction of a multidisciplinary organization staffed by about 230 persons with a budget in excess of \$8 million. The position requires the ability to deal with relevant agencies at all levels of government. Salary is in the range of \$65,000 to \$75,000.

Applicants should possess a Ph.D. degree or the research equivalent in a discipline such as atmospheric science, hydrology, chemistry, or environmental engineering.

To ensure consideration, send résumé, including complete publications record, by 30 November 1985 to: **R. J. Schicht, Chairman, Search Subcommittee for Chief, Illinois State Water Survey, 2204 Griffith Drive, Champaign, Ill. 61820; telephone: 217-333-2210. The State of Illinois is an Equal Opportunity/Affirmative Action Employer.**

THE UNIVERSITY OF MISSISSIPPI IS SEEKING NOMINATIONS AND APPLICATIONS FOR THE POSITION OF DEAN OF THE COLLEGE OF LIBERAL ARTS. The candidate must hold an earned doctorate with qualifications for appointment at professorial rank in a department within the college. The candidate should have demonstrated excellence in academic administration, research, and teaching. Applications must be postmarked no later than 31 October 1985, and should include a letter of interest, curriculum vitae, and the names, addresses, and current telephone numbers of five references. The starting date will be no later than 1 July 1986. Nominations and applications should be sent to:

**Dr. Charles C. Alexander, Chair
Search Committee for Dean
Department of Mathematics
The University of Mississippi
University, Miss. 38677**

ECOLOGIST. Private liberal arts college for men has a one-semester sabbatical replacement position available beginning 1 January 1986. Appointment will be at the instructor or assistant professor level. Course responsibilities include advanced ecology and general biology. Interested candidates should forward their curriculum vitae and three letters of reference by 15 October 1985 to: **Dr. David T. Krohne, Biology Department, Wabash College, Crawfordsville, Ind. 47933. Applications from women and minorities encouraged. Equal Opportunity Employer.**

ELECTROPHYSIOLOGIST

Postdoctoral position to collaborate in studies of development and activity-dependent plasticity in networks of cultured neurons. New noninvasive techniques, such as voltage sensitive dyes, will be used as well as conventional intracellular and patch recordings [see *Soc. of Neurosci. Abstr.* 171, 1 (1984)]. Reply to: **J. Pine, California Institute of Technology 256-48, Pasadena, Calif. 91125.** Please include curriculum vitae and names of three references.

ENVIRONMENT, TECHNOLOGY, AND SOCIETY CLARK UNIVERSITY

We invite applications for a tenure-track faculty position in the Program on Environment, Technology, and Society (ETS). The program has 11 faculty appointed in ETS, biology, chemistry, economics, geography, and physics; supports an undergraduate major; and offers an M.A. degree in either environmental affairs or technology assessment and risk analysis. To complement present strength we seek applicants who have research interests and experience that include background in the physical or life sciences or technology. Areas of special interest include environmental impact analysis, technological risk assessment, occupational health and safety, and technology assessment. Candidates from other closely related research areas will be considered. Promise of excellence in teaching and strong research performance are expected from the successful candidate. The rank of the position is assistant or associate professor. Please send a résumé, the names of three references, and a brief letter outlining research and teaching plans to: **Roger Kasperson, Chair, Search Committee, ETS Program, Clark University, Worcester, Mass. 01610. Clark is an Affirmative Action Employer. Deadline for application is 6 January 1986.**

POSITIONS OPEN

DIRECTOR OF COMPUTATION CENTER IOWA STATE UNIVERSITY

A person with demonstrated management experience is needed to provide leadership for a Computation Center with approximately 100 full-time professionals, providing instructional and research computing services to a campus with 26,000 students. A large new building is being planned for the Center. Present equipment consists of an NAS 9160 mainframe with vector processing facility, several VAX-based satellite centers, and clusters of personal computers in a distributed computing environment.

Applicants should have broad interest in computer technology and preferably should qualify for senior faculty status. Position will be available due to retirement on 1 July 1986. Compensation is commensurate with responsibilities of the position.

Iowa State University provides a favorable environment for interdisciplinary research, and there are many shared appointments among departments, including the Computation Center, The Administrative Data Processing Center, and University Extension. A satellite link to supercomputing facilities is planned. A new communication system handling a voice, video, and data network is being installed on campus.

Applications deadline is 1 December 1985, or until the appointment is made. Send to:

**D. J. Zaffarano
Vice President for Research
201 Beardshear
Iowa State University
Ames, Iowa 50011**

Iowa State University is an Affirmative Action/Equal Opportunity Employer.

THE UNIVERSITY OF CALIFORNIA, SAN DIEGO, DEPARTMENT OF CHEMISTRY, invites applications for a faculty position in **EXPERIMENTAL PHYSICAL CHEMISTRY.** The appointment will be at the assistant professor level (\$25,500 to \$32,200). We are seeking candidates with a Ph.D. and a demonstrated ability for creative research and teaching at the undergraduate and graduate level. Candidates should send curriculum vitae, a list of publications, reprints of representative papers, a summary of research plans, and names and addresses of three references to: **Chairman, Department of Chemistry, B-032, University of California, San Diego, La Jolla, Calif. 92093.** Prompt response is recommended but all applications received by 15 November 1985 will be given thorough consideration.

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

UNIVERSITY OF ARIZONA FACULTY POSITION IN BIOCHEMISTRY DEPARTMENT

Applications are invited from outstanding candidates who have demonstrated originality and productivity for a tenure-track faculty position at either the junior or senior level. Preference will be given to candidates with research interests in either experimental or theoretical aspects of macromolecular dynamics or in the application of NMR spectroscopy to biological problems. The successful candidate will also participate in graduate/undergraduate teaching.

Applicants should submit curriculum vitae, bibliography, a two-page summary of research plans, copies of two representative publications or preprints, and arrange for three letters of reference to be sent by 1 November 1985 to: **Dr. Gordon Tollin, Department of Biochemistry, Biosciences West, University of Arizona, Tucson, Ariz. 85721. An Equal Opportunity/Affirmative Action/Title IX/Section 504 Employer.**

FACULTY POSITION IN GENETICS UNIVERSITY OF WASHINGTON

Applications are invited for an assistant professor position in genetics with a beginning date between September 1986 and September 1987. Candidates should have a Ph.D. degree, postdoctoral experience, and demonstrated accomplishments in research. Responsibilities will include teaching and research. Interested persons should submit curriculum vitae, a description of research plans, and letters of reference to:

**Chairman, Search Committee
Department of Genetics, SK-50
University of Washington
Seattle, Washington 98195**

The University of Washington is an Equal Opportunity Employer.

POSITIONS OPEN

FACULTY APPOINTMENTS/ BIOLOGY OF AGING

**Institute of Gerontology
The University of Michigan**

Two new faculty positions in the biomedical sciences are available at the University of Michigan, Institute of Gerontology. Primary responsibilities are to develop and to direct a grant-supported program of independent research. Joint tenure-track teaching appointments will be arranged in an appropriate academic department. Academic rank, salary, and specific research interests are negotiable for appointments that begin on or about 1 September 1986. Applicants must forward a letter of interest; curriculum vitae, including complete bibliography; detailed record of grant/fellowship support; and the names, mailing addresses, and telephone numbers for at least three references to: **Dr. Richard C. Adelman, Director, Institute of Gerontology, 300 North Ingalls, The University of Michigan, Ann Arbor, Michigan 48109-2007. A nondiscriminatory, Affirmative Action Employer.**

FACULTY APPOINTMENTS

The Department of Pharmacology, Yale University, seeks to expand its full-time faculty by hiring up to three tenure-track assistant or associate professors. Applicants should have a Ph.D. or equivalent degree and 2 or more years of postdoctoral research experience. Candidates with an outstanding record of research innovation and productivity in any area of modern biology or chemistry relevant to pharmacology will be considered. A commitment to excellence in teaching and involvement in our educational programs for medical and graduate students is expected. Applications will be accepted until 30 November 1985. Rank and salary commensurate with experience. Applicants should submit letters of application, a summary of research experience and goals, and the names of at least three references to: **Dr. John Perkins, Chairman, Department of Pharmacology, Yale University School of Medicine, 333 Cedar Street, New Haven, Conn. 06510. Yale University is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITIONS in:

MOLECULAR or VIRAL ONCOLOGY TUMOR BIOLOGY IMMUNOPATHOLOGY MOLECULAR BIOLOGY OF INFLAMMATION

The Pathology Department of the Yale University School of Medicine is expanding its research program. Applications are invited for tenure-track positions at the assistant and associate professor levels from individuals with Ph.D., M.D., or M.D.-Ph.D. degrees. Successful candidates will have a demonstrated ability to apply modern biochemical and molecular biological techniques to biological problems, a strong commitment to research and graduate student teaching, and will be expected to establish independent research programs in one of the areas listed above. Applicants should forward their curriculum vitae, selected reprints, and names of three references to:

**Vincent T. Marchesi, M.D., Ph.D.
Chairman, Search Committee
Department of Pathology
Yale University School of Medicine
310 Cedar Street
New Haven, Conn. 06510**

Yale University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN FISHERIES MANAGEMENT. The Department of Range and Wildlife Management at Texas Tech University is seeking applicants for an assistant or associate professor position in fisheries management starting 15 January 1986. The successful candidate is expected to teach courses related to fisheries, aquatic habitats, and ecology and conservation of natural resources. Research responsibilities are open to the specific interests of the individual. Opportunities exist in warm water fish biology in Texas, study of genetics, pesticide residues in terrestrial and aquatic ecosystems, and investigations of water quality. Applicants must have a Ph.D. Submit letter of application, curriculum vitae, an outline of research interests, and have three letters of recommendation sent by 31 October 1985 (or until a suitable candidate can be identified) to: **Dr. Henry A. Wright, Department of Range and Wildlife Management, Texas Tech University, P.O. Box 4169, Lubbock, Texas 79409. An Equal Opportunity/Affirmative Action Employer.**

ASSOCIATE DEAN FOR RESEARCH AND ASSISTANT DIRECTOR OF THE AGRICULTURAL EXPERIMENT STATION, College of Veterinary Medicine, University of Illinois at Urbana-Champaign.

The position is full-time, permanent and tenured with the rank of full or associate professor; salary is open and commensurate with qualifications. The position carries a joint appointment in the College of Veterinary Medicine and College of Agriculture.

Starting date: As soon as possible.

Minimum qualifications: D.V.M. and Ph.D. or equivalent required. Knowledge of food and companion animal health and disease research, comparative animal research, biomedical and biotechnological research, including funding sources of such research is essential. Applicants are expected to have well-established, recognized research credentials. Research administrative experience preferred.

Duties: The associate dean provides administrative leadership and coordinates research efforts of the College in cooperation with the dean and department heads; provides liaison with the Agricultural Experiment Station and administers funds supporting veterinary research in the station; administers and coordinates interdisciplinary research programs and research support units, including research farms; develops research support funds from federal, state, private, and international agencies; and assists faculty in obtaining and maintaining extramural grant support.

Send curriculum vitae and names, addresses, and telephone numbers of three references to:

Dr. A. Robert Twardock
Chairman, Search Committee,
Associate Dean for Research
College of Veterinary Medicine
University of Illinois
2001 South Lincoln Avenue
Urbana, Ill. 61801
Telephone: 271-333-2760

In order to insure full consideration, applications must be received by 27 September 1985.

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

DIRECTOR
SCRIPPS INSTITUTION
OF OCEANOGRAPHY
(SIO)

The University of California, San Diego, is seeking a new leader for its marine research activities, effective upon the retirement of Dr. W. A. Nierenberg from the SIO directorship 30 June 1986.

The position combines three functions: Vice Chancellor for Marine Sciences, Director of the Scripps Institution of Oceanography, and Dean of the Scripps Graduate Faculty. It includes a tenured professorship on the San Diego Campus with the related implications of substantial research achievement.

To be assured of consideration, nominations and applications should be mailed by 4 October 1985 to: **Professor Walter H. Munk, Chair, SIO Director Search Committee, Scripps Institution of Oceanography, Mail Code A-025, La Jolla, California 92093.** Applications should include a complete résumé and the names of at least three referees. A detailed description of the position is available upon request.

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

MOLECULAR BIOLOGY AND GENETICS

The University of Guelph, in expanding its research base in molecular genetics, is seeking applications for tenure-stream and NSERC-sponsored faculty positions. Opportunities include:

New research and teaching facilities on a historic and picturesque campus.

Established graduate and undergraduate programs in molecular biology and genetics.

Unlimited opportunities for collaborative research in biotechnology and agriculture through the Guelph-Waterloo Biotechnology Institute and the Ontario Colleges of Agriculture and Veterinary Medicine.

Low living costs in a small and pleasant community closely located to large urban centres.

The applicant will join a new and active Department of Molecular Biology and Genetics whose mandate is to provide the campus with a focus in eukaryotic genetics including related areas of cell and molecular biology. Preferred areas of research are chromosome structure, recombination and repair, gene expression or developmental biology, but any promising research program will be considered.

An appointment will be made either as an NSERC sponsored post or as a University supported position; position subject to final budgetary approval.

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

Send application and three references to:

Ross N. Nazar, Chairman
Department of Molecular Biology
and Genetics
College of Biological Science
University of Guelph
Guelph, Ontario, Canada N1G 2W1

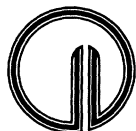
NORTH CAROLINA BIOTECHNOLOGY CENTER

The North Carolina Biotechnology Center is a non-profit corporation enhancing economic development statewide through research, programs, and commercial initiatives in biotechnology. The Center is expanding to increase North Carolina's national and international strength in biotechnology.

Central among its activities are Programs to implement multidisciplinary and multi-institutional research, and to encourage mutually beneficial collaboration between universities and industry. Current Programs include: the Biomolecular Engineering and Materials Applications Center; the Consortium for Research and Education in Plant Molecular Biology; the Consortium for Bioelectronics; the Polysaccharide Materials Interdisciplinary Group; the Monoclonal Lymphocyte Technology Center; the Visiting Industrial Scientists and Engineers Program; and the Competitive Grants Program. Future Programs will maintain the Center's responsiveness to scientific and economic opportunities.

The Biotechnology Center is seeking Directors, Managers and Specialists responsible for the administration and long-term development of these Programs. These individuals will work with academic and industrial scientists; develop plans, documents, and proposals; coordinate meetings; monitor budgets; and interact closely with Center staff. Individuals selected must combine practicality with imagination, and be flexible in an innovative setting.

A letter detailing qualifications for these positions, a resume, and the names of three references should be submitted by October 1st to:



Richard J. Patterson, PhD
President
North Carolina Biotechnology Center
Box 13547
Research Triangle Park, NC 27709



University of Massachusetts Medical School interdepartmental program in Environmental Health Sciences has available a tenure-track position in either Pharmacology or Pathology. Preferred areas of general research interest include Mutagenesis/Carcinogenesis or Inhalation Pulmonary Toxicology.

The University of Massachusetts Medical School seeks to recruit a tenure-track faculty member to join several of its faculty in continuing to develop the above interdepartmental program. The appointment may begin as early as the fall of the 1985-86 academic year. The appointee will be accorded considerable institutional resources and be expected to pursue an independent research program and to participate, in the context of an interdepartmental program, in service, medical education, and/or the education of graduate students in an institutional Ph.D. program.

Position Requirements: Appointment of a senior, established investigator at the level of Associate Professor or Professor is preferred, although exceptional candidates for Assistant Professor will be considered. The applicant should have the Ph.D. or equivalent, such as the M.D. or D.V.M. with appropriate research experience. Preference will be given to an investigator with an established program. The appointee's interest should fall within the context of the areas cited above and be relevant to the broad discipline of environmental-toxicologic pathology or Pharmacotoxicology, including the pharmacokinetics and metabolism and mechanisms of mutagenic/carcinogenic effects of drugs and environmental chemicals.

Deadline: General inquiries or letters of application (including a curriculum vitae and a list of three references) should be sent before September 15, 1985 to: **Neal C. Brown, Professor & Chairman, Department of Pharmacology.**

University of Massachusetts
Medical School

55 Lake Avenue North
Worcester, MA 01605

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POSITIONS OPEN

FACULTY POSITION available tenure-track, in molecular genetics, with a special interest in membranes. Applicants should have research background in recombinant DNA technology (preferably also in somatic cell genetics) and working knowledge of membrane proteins. M.D. and/or Ph.D. in appropriate field required. Successful candidate will hold tenure-track appointment (assistant or associate professor, depending upon qualifications) in Department of Physiology and Molecular Biophysics at Baylor College of Medicine. Joint appointments in relevant academic departments also possible. Laboratory space and basic equipment provided and initial laboratory support available. Successful candidate will devote majority of his/her effort to establishing and maintaining an independent research program related to the main interests of the department. The department is building a strong program in membrane biophysics with expertise in electrophysiology, membrane biochemistry, reconstitution, and modelling. Send curriculum vitae, a brief description of past and present research experience, and names of three or more references to: **Dr. A. M. Brown, Incoming Chairman, Physiology and Molecular Biophysics Department, Baylor College of Medicine, One Baylor Plaza, Houston, Texas 77030. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION—MOLECULAR BIOLOGIST. Tenure-track opening for a molecular biologist at the assistant or associate professor level in the Department of Chemistry and Biochemistry at Texas Tech University for the fall semester of 1986. Experience with recombinant DNA techniques and/or related molecular biological methods required. Prior to 16 October 1985, applicants should forward a résumé and description of proposed research and arrange to have three letters of recommendation sent to: **Professor Phill-Soon Song, Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, Texas 79409. Texas Tech University is an Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION: RHEUMATOLOGY AND IMMUNOLOGY. Research position for M.D. to conduct an independent research program in rheumatology-immunology with pertinence to the rheumatic diseases (rheumatoid arthritis). Will supervise research projects of trainees in rheumatology, and will participate in teaching programs in rheumatology and immunology. Will receive academic appointment commensurate with his/her qualifications. Submit curriculum vitae and names of three references to: **D. L. Conn, M.D., Division of Rheumatology, Mayo Clinic, Rochester, Minn. 55905. An Equal Opportunity/Affirmative Action Institution.**

GASTROENTEROLOGY POSITION as visiting assistant professor of medicine in-residence available. Active research interest demonstrated by research papers accepted by peer-review journals. Minimum of 3 years of experience in teaching undergraduate medical students and gastroenterology fellows. Candidate should have 1 year of experience in neuropeptide control of smooth muscle function. Candidate should have 1 year of experience in therapeutic endoscopy including training gastrointestinal fellows in the practice of gastroenterology and therapeutic endoscopy. California physician license required. Research time and facilities for smooth muscle physiologic studies available. Salary: approximately \$65,000. Position now available. *Affirmative Action Employer.* Submit curriculum vitae and references to: **William J. Snape, Jr., M.D., Department of Medicine, Harbor-UCLA Medical Center, Torrance, Calif. 90502-2064.**

INORGANIC CHEMIST

Outstanding inorganic chemists are invited to apply for a regular faculty position in the **Department of Chemistry, Washington University, St. Louis, Missouri.** While preference will be given to applicants at the full professor level, candidates with distinguished research and teaching accomplishments will be considered for appointment as associate or assistant professors. Liberal research funds will be made available to the successful applicant. Applicants are requested to submit by 15 November 1985 curriculum vitae and a moderately detailed statement of research interests and professional objectives, and to arrange to have three letters of reference sent to: **Professor Edward S. Macias, Chairman, Department of Chemistry, Washington University, St. Louis, Mo. 63130.**

Washington University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The **UNIVERSITY OF PITTSBURGH** has initiated a **Center for the Molecular and Genetic Analysis of Development (CMGAD)**, and will be filling several **FACULTY POSITIONS** over the next few years to augment existing strengths in this area. The Department of Biological Sciences is currently recruiting to fill at least one related position at the assistant professor level or above; two positions could be available for the right combination of candidates. Applications are invited from those using molecular and/or genetic methods to study development or closely related processes in any of several systems including, but not limited to, yeast, trypanosomes, *C. elegans*, *Drosophila*, amphibians, rodents, and primates. Candidates should send curriculum vitae, a statement of research interests, and the names of three references to: **Search Committee, CMGAD, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260.** Additional appointees are being sought for a parallel and complementing Center for the Analysis and Design of Macromolecular Structure (CADMS). *The University of Pittsburgh is an Equal Opportunity Employer.*

The **UNIVERSITY OF PITTSBURGH** has initiated a **Center for the Analysis and Design of Macromolecular Structure (CADMS)**, and will be filling several **FACULTY POSITIONS** over the next few years to augment existing strengths in this area. The Department of Biological Sciences is currently recruiting to fill at least one related position at the assistant professor level or above; two positions could be available for the right combination of candidates. Applications are invited from those using X-ray crystallography, spectroscopic methods (for example, NMR), electron microscopy, or other biophysical or molecular genetic methods to study structure-function relationships in macromolecules or their assemblies, including, but not limited to, protein complexes, protein-nucleic acid complexes, viruses, and membranes. Candidates should send curriculum vitae, a statement of research interests, and the names of three references to: **Search Committee, CADMS, Department of Biological Sciences, University of Pittsburgh, Pittsburgh, Pa. 15260.** Additional appointees are being sought for a parallel and complementing Center for the Molecular and Genetic Analysis of Development (CMGAD). *The University of Pittsburgh is an Equal Opportunity Employer.*

DUKE UNIVERSITY SCHOOL OF FORESTRY AND ENVIRONMENTAL STUDIES FOREST MANAGEMENT FACULTY

Full-time, tenure-track position; rank commensurate with qualifications. Responsible for graduate-level teaching and advising, development of externally funded research, coordination of joint MF/MBA program. Requires Ph.D. in forest management, including operations research, economics, business; degree or experience in public or private forestry; strong forest management research interests. Submit curriculum vitae, representative publications, transcripts (recent graduates), and names of three references to: **Chairman, Forest Management Search Committee, Department SC, School of Forestry and Environmental Studies, Duke University, Durham, N.C. 27706.** Applications accepted until 1 November 1985 or until position filled.

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A **HARD MONEY** position available immediately for a recent Ph.D. or M.S. with experience. The position requires monitoring of **EVOKED POTENTIALS** (somatosensory, visual, auditory; knowledge of one of these necessary) using **NICOLET PATHFINDER II.** Facilities for research and other academic pursuits available. Salary commensurate with qualifications. Send curriculum vitae to: **Dr. H. N. Sapru, Neurosurgery, MSB H-592, New Jersey Medical School, Newark, N.J. 07103.**

RESEARCH SCIENTIST position available immediately for a recent Ph.D. The project involves central and peripheral neuronal recording, monitoring of ion fluxes in CNS, and CNS control of circulation. Candidates must have experience in some of these techniques and capability of learning others. Salary commensurate with qualifications. Send curriculum vitae to: **Dr. H. N. Sapru, Neurosurgery, MSB H-592, New Jersey Medical School, Newark, N.J. 07103.**

POSITIONS OPEN

PRINCETON UNIVERSITY

GEOCHEMIST to participate in the development of models of trace metal cycling processes for incorporation in three-dimensional ocean circulation and biological cycling models presently in development. Participation in measurement programs a possibility. Appointment will be to the research staff at the postdoctoral level or higher. Send résumé and three references to: **The Director, Geophysical Fluid Dynamics Program, Department of Geological and Geophysical Sciences, Princeton University, Princeton, N.J. 08544. Princeton University is an Equal Opportunity/Affirmative Action Employer.**

GREAT LAKES RESEARCH (Two Positions)

The Research Center of the State University of New York (SUNY) College at Oswego seeks two Ph.D. scientists with a minimum of 2 years of postdoctoral research experience to develop programs on Lake Ontario and other Great Lake systems. Salary will be commensurate with experience. The first position is in the area of **physical limnology/oceanography** for development of a program in large lake dynamics. A second position is available in **aquatic microbial ecology** with emphasis in microbial decomposition, nutrient regeneration, and other associated rate processes, or in **biological limnology** with emphasis in nutrient cycling, phytoplankton productivity, and grazing effects. Successful candidates will be expected to develop extramurally supported, multidisciplinary research programs with other New York institutions. Selection for one of the successful applicants will be based upon demonstrated research administrative experience. *Women and minorities are encouraged to apply.* Send curriculum vitae with a brief statement of future research plans and names of four references by 14 October 1985 to: **Great Lakes Search Committee Chair, Research Center, King Hall, SUNY College, Oswego, N.Y. 13126.**

An Affirmative Action/Equal Opportunity Employer

HEAD DEPARTMENT OF ORAL ANATOMY

The University of Illinois College of Dentistry seeks an individual of scientific attainment to head a department with research emphasis in functional morphology and teaching duties in gross, neuro, and dental anatomy. Both D.D.S. and Ph.D. are desirable. Send curriculum vitae, publications, and names of five references to: **Dr. Dale R. Eisenmann, Chairman of Search Committee, Department of Histology, University of Illinois at Chicago, P.O. Box 6998, Chicago, Illinois 60680. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

IMMUNOLOGY/TISSUE TYPING. The Department of Pathology, Case Western Reserve University School of Medicine, and University Hospitals of Cleveland has a tenure (track) opening in its growing immunology program for director of its service tissue-typing (HLA) laboratory. The director must work closely with clinicians doing solid organ and bone marrow transplantation. Candidates should also (potentially) have an active, high quality, independent research program in some area of contemporary immunology, basic or applied. Applicants should send curriculum vitae, bibliography, representative reprints, brief statement of experience and future research plans, and names of three references to: **Michael E. Lamm, M.D., Director, Institute of Pathology, Case Western Reserve University, 2085 Adelbert Road, Cleveland, Ohio 44106. An Equal Opportunity/Affirmative Action Employer.**

PHYSICAL CHEMIST

Applications are invited for a tenure-track position in experimental physical chemistry in the **Department of Chemistry, Washington University, St. Louis, Missouri.** Preference will be given to applicants at the assistant professor level, but appointment as associate or full professor will be considered for candidates with demonstrated distinguished research and teaching accomplishments. Liberal start-up funds will be made available to the successful applicant. Applicants are requested to submit by 16 December 1985 curriculum vitae and a moderately detailed statement of research interests and professional objectives, and to arrange to have three letters of reference sent to: **Professor Edward S. Macias, Chairman, Department of Chemistry, Washington University, St. Louis, Mo. 63130.**

Washington University is an Equal Opportunity/Affirmative Action Employer.

EXPERIMENTAL OR THEORETICAL PHYSICIST IN ATMOSPHERIC SCIENCE/AERONOMY

SPACE SCIENCE LABORATORY
NASA—Marshall Space Flight Center
Huntsville, AL 35812

The Atomic Physics Branch has positions available for researchers with a successful theoretical or experimental background in one of the areas of particular interest to the Branch. Research programs are currently underway in stratospheric, mesospheric, thermospheric, and lower magnetospheric photochemistry, energetics, and dynamics. Instruments for Space Shuttle, satellite, and high altitude balloon investigations of these regions currently emphasize state-of-the-art optical instrumentation over wave-lengths extending from the extreme ultraviolet to the infrared. Well equipped laboratory facilities are available within the Branch to support instrument design, development, and calibration. Computer facilities available within the Branch include a VAX and various mini-computers. Computer facilities within MSFC are currently being upgraded and will soon be unsurpassed anywhere. Theoretical modeling is underway in each of the major atmospheric regions. In support of the atmospheric programs and studies of induced vehicle environments, a program of laboratory measurements is being initiated.

An effort will be made to strengthen the Branch in the areas of the middle atmosphere and in infrared spectroscopy. Individuals are also being sought who can take responsibility for and further develop existing programs.

Salaries range from \$31,619 to \$37,599 per annum, depending on experience. Forward resumes to the following address not later than September 30, 1985.

Dr. M. R. Torr
ES55
Space Science Laboratory
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If you are an innovative and productive group leader with a demonstrated ability in clinical chemistry assay development, this could be the opportunity you have been looking for. Your group will be responsible for the development of diagnostic chemistry systems for on-site testing. This position requires a PhD in Biochemistry, or equivalent, with a record of accomplishment in the field.

BIOCHEMIST

You will be responsible for the development of reagent systems for physician's office based testing. You should have several years' applicable experience, including enzyme work, be familiar with present state-of-the-art, and experienced in the use of related instrumentation. This position requires a PhD in Biochemistry, or equivalent.

CHEMIST

Your assignment will be the development of separation methods for whole blood, maintaining the integrity of both cells and serum. You should have detailed knowledge of the present art in membrane separation technology. A PhD in the field of chemistry, or the equivalent, with experience in the development of devices is required. Math modeling ability, and some familiarity with clinical testing are desirable.

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POSITIONS OPEN

HUMAN GENETICIST/EPIDEMIOLOGIST. A faculty position supported by the University of Texas is available in the area of the genetics of chronic disease. Applicants must have a Ph.D. or M.D.; research experience in genetics and epidemiology preferred, however exceptional candidates in related areas will be considered. Teaching responsibilities are modest, but guidance of graduate students and postdoctoral fellows is expected. Salary, title, and tenure will be commensurate with experience. *An Equal Opportunity Employer; women and minorities are encouraged to apply.* Submit curriculum vitae, brief statement of research plans, and names of three referees by 31 December 1985 to: **Ranjit Chakraborty, Ph.D., Chairman, Search Committee, Center for Demographic and Population Genetics, Graduate School of Biomedical Sciences, University of Texas Health Science Center, P.O. Box 20334, Houston, Texas 77225. Telephone: 713-792-4680.**

INVERTEBRATE PALEONTOLOGIST

The Academy of Natural Sciences of Philadelphia seeks an assistant curator to head invertebrate paleontology. Responsibilities include: (i) Develop vigorous research program involving invertebrate fossils, systematics, and evolutionary biology. (ii) Direct curation of immense collections of invertebrate fossils. Qualifications: (i) Ph.D. in paleontology/geology; (ii) knowledge of data processing and museum curation; (iii) knowledge of computer-mediated statistical methods. Preference is for a malacologist to match greatest collection strengths. Potential exists for interaction with Geology Department of the University of Pennsylvania for research and teaching at graduate and undergraduate levels.

Send curriculum vitae, letter stating research interests, and selected reprints no later than 1 October 1985 to: **Dr. George Davis, Chairman, Invertebrate Paleontology Search Committee, Academy of Natural Sciences, 19th and the Parkway, Philadelphia, Pa. 19103. Equal Opportunity Employer, M/F.**

YALE UNIVERSITY/INVERTEBRATE PALEONTOLOGIST. The Department of Geology and Geophysics is soliciting applications for a faculty position in invertebrate paleontology to begin in the academic year 1986-1987. The position may be filled at either the tenured or the untenured level. Curriculum vitae, list of publications, and the names of three referees should be sent by 15 November 1985 to: **Karl K. Turekian, Chairman, Department of Geology and Geophysics, Yale University, Box 6666, New Haven, Conn. 06511.**

Yale University is an Equal Opportunity/Affirmative Action Employer and encourages applications from all qualified scientists.

JUNIOR FACULTY POSITION for Ph.D. with recent postdoctoral experience in the area of tumor immunology or biologic response modifiers. The successful candidate must have recent publications in this field and must demonstrate the capability to develop independent research. Half of the junior faculty's time will be committed to collaboration in basic research with clinical faculty in the Division of Gynecologic Oncology. The remaining time will be devoted to the candidate's own research. The possibility exists for a joint faculty appointment with a basic science department in the medical school.

Salary and departmental support of research are negotiable. Send curriculum vitae, copies of three recent publications, and three letters of recommendation to:

**H. Marvin Camel, M.D.,
Director, Division of Gynecologic Oncology
Department of Obstetrics and Gynecology
Washington University School of Medicine
4911 Barnes Hospital Plaza
St. Louis, Mo. 63110**

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MUSHROOM RESEARCH SCIENTIST

The Microbiology Division of NPI, a leading biotechnology company, invites applications for the position of senior scientist to develop efficient production techniques for exotic edible mushrooms. Applicants must have a Ph.D. in microbiology or a related field with experience in fungal genetics, biochemistry of fungal development, and solid state fermentation, to lead research toward selection of superior strains, mushroom breeding, and improved mushroom cultivation techniques. Please send a résumé and names and addresses of three references to: **Dr. R. K. Kulkarni, NPI, 417 Wakara Way, Salt Lake City, Utah 84108.**

POSITIONS OPEN

MANAGER, INHALATION TOXICOLOGY—Major contract toxicology group seeking M.S. or Ph.D. level individual for position of manager of inhalation reporting to Department Director. Successful applicant must demonstrate strong working knowledge of current inhalation technology, good personnel administrative skills, and working knowledge of EPA/FDA GLP's. Responsibilities include the day-to-day direction of the department supervisor and approximately 15 staff members involved in acute/chronic inhalation programs. Send résumé to: **Box 181, SCIENCE.**

MARINE SCIENTISTS. The University of Texas Marine Science Institute has openings for three, state-funded, nontenure track **RESEARCH SCIENTISTS IN: benthic ecology/invertebrate zoology, zooplankton ecology, and fisheries biology/ichthyology.** Candidates must have Ph.D. degree in marine science and a record of research accomplishments. Postdoctoral experience is preferred. Successful applicants will be expected to obtain funding to develop an independent research program and to cooperate in development of multidisciplinary projects.

Send letter of application, statement of research interests, curriculum vitae, and names of three references before 1 November 1985 to: **Dr. Robert S. Jones, Director, Marine Science Institute, The University of Texas at Austin, Port Aransas, Texas 78373.**

The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGIST—The Department of Pathology in the College of Medicine at the University of Florida is seeking a molecular biologist (Ph.D. and/or M.D.) to fill a tenure-track position at the assistant or associate professor level. Research experience in human molecular genetics, especially involving the HLA complex, is highly desirable. The successful candidate will be expected to develop an independent research program in human molecular genetics, participate in the education and training of graduate students, and provide technical expertise for the development of a Clinical Pathology Laboratory of Molecular Biology. Starting date for position is 1 January 1986.

Applicants should submit their curriculum vitae, plus copies of three publications which best exemplify their work, and the names of three referees to: **Raul C. Braylan, M.D., Professor Box J-275, Department of Pathology, University of Florida College of Medicine, Gainesville, Florida. 32610.** Recruiting deadline is 1 November 1985.

Equal Opportunity/Affirmative Action Employer

MOLECULAR BIOLOGISTS

Research associate (postdoctoral) and research assistant (technical) positions available immediately to participate in studies on molecular biology of fertilization and early embryogenesis. Applicants must have experience with recombinant DNA techniques including gene cloning, gene transfer, DNA sequencing, RNA isolation, two dimensional gel electrophoresis, and so forth. Research assistant must have at least 3 years of experience in a molecular biology laboratory. Send curriculum vitae and three letters of reference to: **Dr. Gary Hodgen, Scientific Director, Jones Institute for Reproductive Medicine, Department of Obstetrics/Gynecology, Lewis Hall-Room 2011, 700 Olney Road, Norfolk, Va. 23507. An Equal Opportunity Employer.**

NEUROBIOLOGIST. A tenure-track faculty position is available at the assistant professor level in the Department of Anatomy and Neurobiology. Applicants should have Ph.D. and/or M.D. degree and a minimum of 2 years of postdoctoral training. Candidates should have a strong record of research productivity and potential to establish an independent research program meritorious of extramural support. Preference will be given to applicants with research interests in the neurosciences. The quality and potential of research program as well as the potential for interaction with present faculty members is more important than specific research area. Teaching duties include lectures in medical histology and/or neuroscience and participation in a multidisciplinary neuroscience program. Send curriculum vitae, description of research interests, and summary of teaching experience with names of three references by 15 October to: **Dr. Rodney L. Parsons, Chairman, Department of Anatomy and Neurobiology, College of Medicine, The University of Vermont, Burlington, Vt. 05405.**

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POSITIONS OPEN

DEPARTMENT OF MOLECULAR BIOLOGY OF VANDERBILT UNIVERSITY

We invite applications for a tenure-track position, the rank dependent upon qualifications. Scientists with experience and research programs in the areas of structural, molecular, cellular, or developmental biology are invited to apply. Candidates qualifying for a senior rank should have a record of distinguished contributions. Other candidates should have already demonstrated their research capabilities. Responsibilities will include development of a strong independent program of research and participation in the teaching program. *Women and minority candidates are especially encouraged to apply.* Please submit curriculum vitae, list of publications, summary of research plans, and three letters of reference to: **Dr. Oscar Touster, Chairman, Department of Molecular Biology, Vanderbilt University, Nashville, Tenn. 37235.** Applications are requested by 1 October 1985, but will be accepted as long as necessary to fill the position.

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PEDIATRIC HEMATOLOGY/ONCOLOGY RESEARCH—The Department of Pediatrics at the Medical College of Wisconsin is seeking an established investigator with current support or demonstrated ability to attract extramural grant support. The investigator will be affiliated with the Midwest Children's Cancer Center at Milwaukee Children's Hospital. Substantial clinical and laboratory facilities as well as financial resources will be made available to the investigator. For further information, please contact: **Starkey D. Davis, M.D., Professor and Chairman, Medical College of Wisconsin, Department of Pediatrics, P.O. Box 1997, Milwaukee, Wis. 53201, or telephone: 414-933-4689.**

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Ph.D. or POSTDOCTORAL BIOCHEMIST, PHYSIOLOGIST, PHARMACOLOGIST, or related discipline, entry level, with strong background in skin and sweat gland physiology desired. U.S. citizens or permanent visa holders only. Send résumé and publication list to: **Dr. T. J. Logan, Manager, Ph.D. Recruiting, Biochemist/Physiologist Position, Procter & Gamble Company, P.O. Box 39175, Cincinnati, Ohio 45247. An Equal Opportunity Employer.**

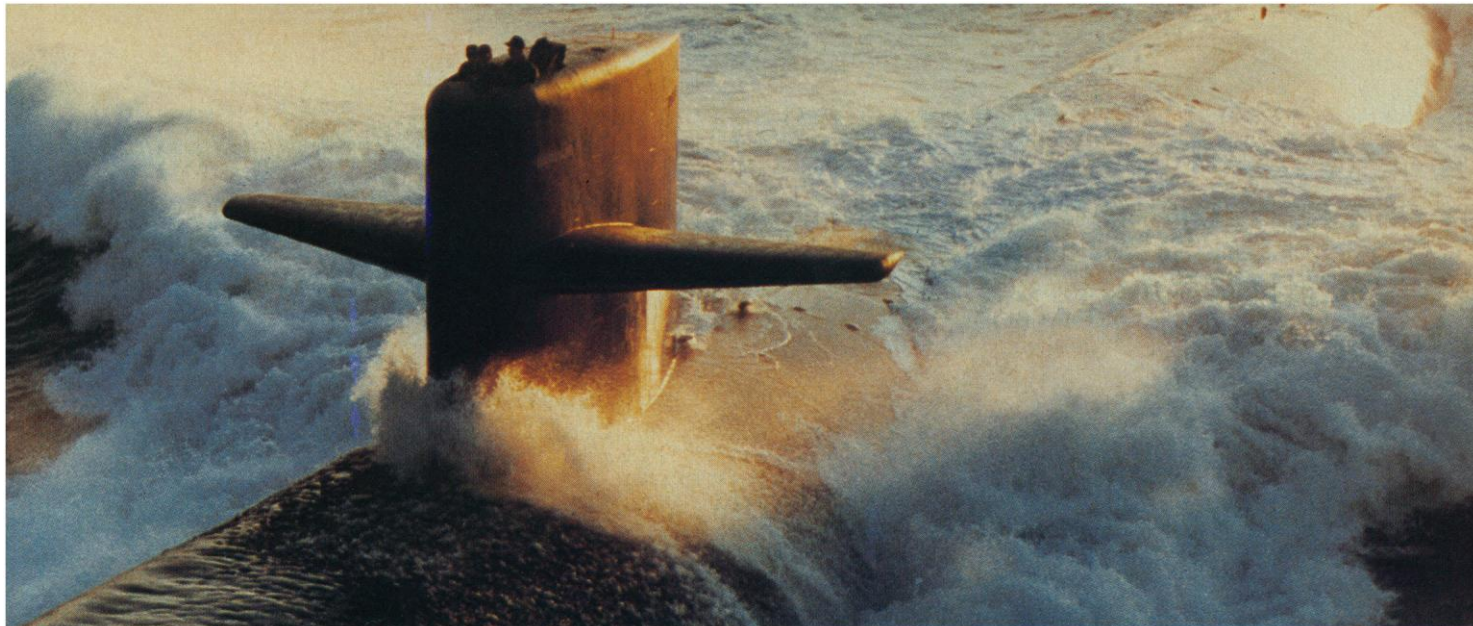
INDIANA UNIVERSITY, BLOOMINGTON Plant Growth and Development Fall 1986

Applications are invited for a tenure-track position at the level of assistant professor in the Department of Biology to begin August 1986. We are seeking an individual with a background in plant sciences who is using molecular approaches for the analysis of plant growth and development. The successful applicant will be expected to teach both graduate and undergraduate students and maintain a strong research program.

Submit curriculum vitae, summary of past and present research, a statement of research objectives, a set of publications, and have three letters of reference sent to: **Plant Sciences Search Committee, Department of Biology, Indiana University, Bloomington, Ind. 47405.** Applications received before 18 October 1985 will be assured of consideration. *Applications from minorities and women are especially welcome.*

PLANT CELL BIOLOGIST. The Department of Biology, The University of North Carolina at Chapel Hill, invites persons analyzing cellular mechanisms in plant growth and/or development to apply for a tenure-track assistant professor position. Applicants developing independent research programs focused on significant problems in plant cell biology will be considered, regardless of particular techniques being employed. Applicants should send curriculum vitae, reprints of publications, a **ONE-PAGE** summary of research plans, and four letters of recommendation by 15 October to: **Plant Cell Biology Search Committee, Department of Biology, Coker Hall 010A, University of North Carolina, Chapel Hill, N.C. 27514.** *The University of North Carolina is an Equal Opportunity/Affirmative Action Employer and encourages applications from women and minorities.*

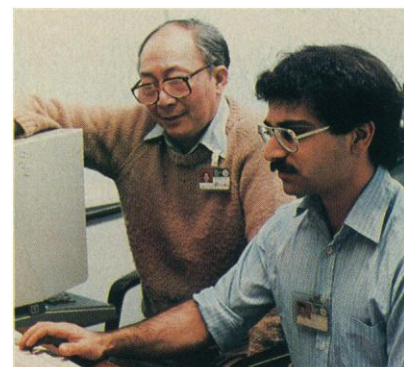
POSTDOCTORAL POSITION available immediately in marine cell biology to study ultrastructural and biochemical aspects of fertilization mechanism and development in shrimps and prawns. Send curriculum vitae to: **Dr. W. J. Dougherty, Anatomy Department, Medical University of South Carolina, 171 Ashley Avenue, Charleston, S.C. 29425.**



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POSITIONS OPEN

PLANT PHYSIOLOGIST

Tenure-track position at the assistant/associate professor level for an individual with postdoctoral experience and research goals in plant physiology at the cell/molecular level. Appointment to be effective as early as 1 January 1986. Candidates must have a good botanical background with the capability to teach general botany as well as upper-level courses in plant physiology and development. The candidate must be proficient in plant tissue culture methodology. Reappointment and tenure decisions will be based on teaching effectiveness and research productivity. Forward curriculum vitae, reprints, statement of research goals, and three letters of recommendation to: **Chairperson, Plant Physiologist Search Committee, c/o Mayerlyn Miller, Director of Personnel and Affirmative Action, State University of New York, Plattsburgh, N.Y. 12901.** Deadline: 15 October 1985. *An Equal Opportunity/Affirmative Action Employer.*

PLANT SYSTEMATIST. The Department of Ecology and Evolutionary Biology at the University of Connecticut seeks a higher plant systematist with an interest in plant evolution for a tenure-track assistant professorship. The successful candidate will teach an intensive course in plant taxonomy, participate in an introductory biology course, should have enthusiasm for curating a moderate-sized herbarium, and will be expected to continue an active research program in systematics. Send by 15 January 1986 a letter explaining background and research plans as well as curriculum vitae, copies of transcripts, or a detailed summary of educational background, and reprints. Please request three letters of recommendation. Send all information to: **Gregory J. Anderson, Chairman, Search Committee, Department of Ecology and Evolutionary Biology, UNIVERSITY OF CONNECTICUT, U-43, 75 North Eagleville Road, Storrs, Conn. 06268.** *An Affirmative Action/Equal Opportunity Employer. Search Number 6A9.*

POSTDOCTORAL FELLOW

UNIVERSITY OF MICHIGAN: Unexpected opening for postdoctoral fellow. Position open 1 October 1985. Laboratory involved in developing, evaluating in vitro and in vivo monoclonal antibodies for purposes of scintigraphic tumor diagnosis and therapy. Ph.D. in immunology, molecular biology, or chemistry desirable. Salary is in excess of \$20,000 per year. Send curriculum vitae with letter of application and three references to: **Richard L. Wahl, M.D., Division of Nuclear Medicine, Box 21, W5514, University of Michigan Medical Center, Ann Arbor, Mich. 48109-10.** *A nondiscriminatory, Affirmative Action Employer.*

POSTDOCTORAL FELLOW POSITION available in estrogen metabolism and carcinogenesis research. The mechanism of carcinogenesis by estrogens and the involvement of catechol estrogens in this process is studied. Perform animal experiments and simple surgery, knowledgeable with radiotracer techniques, HPLC, TLC, GLC, and other separation techniques. Familiarity with metabolite identification and must be self-motivated and able to work independently. Ph.D. in pharmacology or related science required with 3 years of training. 40 hours per week/\$19,000 annual salary. Contact: **Texas Employment Commission, Alien Labor Certification Unit, Austin, Texas 78778.** Job Order Number 4274066. *An Equal Opportunity Employer. Women and minorities are encouraged to apply.*

TWO POSTDOCTORAL POSITIONS for recent Ph.D. or M.D. graduates are available for studies on the molecular aspects of membrane transport. The three areas of interest as applied to membrane transport proteins are: (i) production of monoclonal antibodies; (ii) identification of mRNA molecules using an oocyte translation system; (iii) reconstitution of membrane proteins into liposomes. Send curriculum vitae and the names of three references to: **Dr. Michael S. Kilberg, Department of Biochemistry and Molecular Biology, Box J-245 JHMC, University of Florida, Gainesville, Fla. 32610.**

POSTDOCTORAL POSITION IN IMMUNOPARASITOLOGY available immediately to study the mechanisms of macrophage-mediated cytotoxicity against malaria parasites in vitro and in vivo. Strong background in cellular immunology required. Salary commensurate with experience. Send curriculum vitae and the names of three references to: **Hannah L. Shear, Ph.D., Department of Medical and Molecular Parasitology, New York University Medical Center, 550 First Avenue, New York, N.Y. 10021.**

POSITIONS OPEN

THE BLAUSTEIN INTERNATIONAL CENTER FOR DESERT STUDIES BEN-GURION UNIVERSITY OF THE NEGEV POSTDOCTORAL POSITIONS—1986-1987

One-year postdoctoral fellowships are available in fields of arid zone research. Programs include meteorology, architecture, solar energy, ecology, agriculture, sociology, plant and animal physiology, hydrology, and so forth. For further information and application forms, contact: **Michael Adam, Executive Coordinator, Blaustein International Center for Desert Studies, Ben-Gurion University, Sede Boqer Campus, 84990 Israel.**

POSTDOCTORAL POSITIONS—RESEARCH HEMATOLOGY. The Hematology Division of The Johns Hopkins University School of Medicine has positions available for 1985 and 1986 for individuals with an M.D. or Ph.D. degree and an interest in hematology research (normal and neoplastic cell proliferation, coagulation, immunohematology, membrane proteins, genetic control of globin synthesis, oxygen transport, red cell enzymes). U.S. citizenship required. Send curriculum vitae and three references to: **J. L. Spivak, M.D., Hematology Division, The Johns Hopkins Hospital, Baltimore, Md. 21205.** *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available after 1 December 1985 in a training program in pharmacology of drugs of abuse funded by the National Institute of Drug Abuse. Research areas include neuropharmacology, electrophysiology, biochemical pharmacology, and molecular pharmacology including studies of serotonergic, histaminergic, and neuropeptide systems. A Ph.D. or equivalent in any of the biomedical sciences or in biology, chemistry, physics, or psychology or an M.D. required. Salary in NIDA stipend plus supplements. Send letter with research interests, curriculum vitae, and names of three references to: **J. Goldfarb, Department of Pharmacology, MOUNT SINAI SCHOOL OF MEDICINE, One Gustave L. Levy Place, New York, N.Y. 10029.** *An Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN MOLECULAR ECOLOGY. A 2-year position is available immediately to study bacterial gene transfer and genetic recombination in fresh water environments. Doctorate in microbial ecology preferred. Send curriculum vitae and at least two letters of reference to: **Dr. Robert V. Miller, Department of Biochemistry and Biophysics, Loyola University of Chicago Medical Center (LUMC), 2160 South First Avenue, Maywood, Ill. 60153.** *Loyola is an Equal Opportunity Employer.*

POSTDOCTORAL POSITION IN BIOCHEMICAL TOXICOLOGY

Position available 1 October 1985 for study of pulmonary toxicology of oxidants in aged animals. Requires expertise in chemistry, biochemistry, and mammalian toxicology. Starting salary: \$17,500. Reply with curriculum vitae and three references to:

**Dr. Mark R. Montgomery, Research Service (151)
VA Hospital
1300 North 30 Street
Tampa, Fla. 33612**

The VA is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

Position open January 1986. To study the global control of gene expression in *Salmonella typhimurium* including oxygen-regulated and starvation-regulated stimulons. Experience in microbial genetics, recombinant DNA, or two-dimensional gel electrophoresis preferred. Salary range: \$18,000 to \$19,000, commensurate with experience. Please send curriculum vitae and three letters of reference to: **Dr. John W. Foster, Department of Microbiology, Marshall University School of Medicine, Huntington, West Va. 25704.**

POSTDOCTORAL POSITION, YEAST MOLECULAR GENETICS, available immediately to study the dsRNA viruses of *S. cerevisiae* with emphasis on the chromosomal genes which affect viral replication and gene expression. Attractive compensation package. *Potential for academic appointment with the opportunity to develop an independent research program in 2 to 3 years.* Please submit curriculum vitae and names of three references to: **Steve S. Sommer, M.D., Ph.D., Department of Cell Biology, Mayo Foundation School of Medicine, Rochester, Minn. 55905.** *An Equal Opportunity/Affirmative Action Institution.*

POSITIONS OPEN

POSTDOCTORAL POSITION available in fall 1985 to study various aspects of the mechanism of inhibition of tumor cell growth by the lymphokine, soluble immune response suppressor (SIRS). Experience or interest in biochemistry or molecular biology preferred. Please send curriculum vitae and names of three references to: **Dr. Thomas M. Aune, Department of Pathology, CSB-7, The Jewish Hospital of St. Louis, Washington University Medical Center, 216 South Kingshighway, St. Louis, Mo. 63110.**

POSTDOCTORAL POSITION available immediately for research in enzymology and regulation of DNA methyltransferases/DNA methylation transcriptional control mechanisms. Background and experience in protein chemistry/recombinant DNA technology desired. Send curriculum vitae and names of three references to: **Dr. Jean-Numa Lapeyre, Section of Experimental Pathology, Box 85E, The University of Texas System Cancer Center, Houston, Texas 77030.** Telephone: 713-792-7607. *Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITIONS STATISTICAL MECHANICS OF BIOMOLECULES AND SURFACTANTS

Positions are presently available to develop theory for protein folding and stability; and aggregation and solubilization processes within lipid bilayer membranes, surfactant micelles, and other amphiphilic aggregates. Experience with theory or computer simulation in these or other areas of statistical mechanics or polymer physics is highly desirable. Send curriculum vitae and two letters of reference to: **Professor Ken A. Dill, Department of Pharmaceutical Chemistry, University of California, San Francisco, Calif. 94143.** *Affirmative Action/Equal Opportunity Employer.*

POSTDOCTORAL POSITION immediately available to participate in ongoing projects studying an autocrine growth factor for T cell leukemia and cloned T cell lines of varying tumorigenicity. Applicants should have a background in cellular immunology/cell biology. U.S. citizenship required. Please send curriculum vitae and three letters of recommendation to: **Dr. Esther F. Hays, University of California, Office of the Dean, School of Medicine, Los Angeles, Calif. 90024.**

POSTDOCTORAL POSITION available immediately in laboratory which studies cellular and molecular biology, biochemistry and immunology of *Giardia lamblia*, an important human parasitic protozoan. Send letter, curriculum vitae, publications, and names and telephone numbers of three references to: **Dr. Frances Gillin, Division of Infectious Diseases, H811F, University of California Medical Center, San Diego, Calif. 92103.** Telephone: 619-294-6146.

POSTDOCTORAL POSITION IN CHEMICAL NEUROSCIENCE—Project: identification of neuropeptides that trigger analgesia when released into spinal cord by specific sensory stimulation. Expertise preferred: radioactive iodination, separation and purification of peptides by HPLC and/or RIA measurement of peptides. Support: NIMH Training Grant (U.S. citizens or permanent residents only). Salary: \$16,000 to \$30,000. Send curriculum vitae and two letters of recommendation to: **Barry R. Komisaruk, Institute of Animal Behavior, or Frank Jordan, Department of Chemistry, Rutgers—The State University, Newark, New Jersey 07102.** *Rutgers University is an Equal Opportunity/Affirmative Action Employer.*

POSTDOCTORAL POSITION available immediately for the study of mechanisms of chemically induced lung injury. Recent Ph.D. with training in one of the following areas: Prostanoid pharmacology, oxygen radical biology, platelet or phagocytic cell function, or microvascular injury. Send résumé and names of three references to:

**Dr. Robert A. Roth
Department of Pharmacology and Toxicology
Michigan State University (MSU)
East Lansing, Mich. 48824**

MSU is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study membrane or secreted toxins of bacteria. Must be willing to learn molecular genetics/recDNA technology. Experience in biochemistry or microbiology desirable. Send curriculum vitae and names of references to: **Ry Young, Medical Biochemistry and Genetics, 425 Medical Sciences Building, Texas A&M University, College Station, Tex. 77843-1112, or telephone: 409-845-2087.**

DIRECTOR MOLECULAR GENETICS

The Center for Molecular Medicine and Immunology is seeking a Director for the newly established Institute for Molecular Genetics. A national leader in the development and application of genetic approaches to cancer research is sought to direct the future program of this research unit, including the recruitment of scientific personnel. Candidates should have a commitment to excellence in research with a history of extramural funding and administrative experience. Special consideration will be given to those individuals with interest in oncogenes and related problems. Adjunct faculty appointment is available. Applications, to include curriculum vitae, bibliography, a statement of career and research goals and the names of three references should be sent to:

David M. Goldenberg, Sc.D., M.D.
President

**CENTER FOR MOLECULAR
MEDICINE AND IMMUNOLOGY**
University of Medicine and Dentistry
of New Jersey
100 Bergen Street, Newark, NJ 07103

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**Mobay
Chemical
Corporation**

The corporate Environmental Health Research Facility of Mobay Chemical Corporation is currently searching for qualified professionals for the following:

VETERINARY PATHOLOGIST

To conduct bench histopathology studies. Candidates must have DVM with MS or PhD in veterinary pathology; board certification or eligibility and a minimum of 4 years experience in rodent histopathology.

STUDY DIRECTOR

Aquatic and Avian Toxicology

Responsibilities include planning and directing all acute, chronic, and life cycle studies in aquatic area with technical and formulated products, and acute, subchronic, and reproduction studies in avian area. Candidates must have a PhD in related discipline or DVM with MS degree and several years experience in this area.

Position offers a competitive salary and comprehensive paid benefits package including complete relocation. Send resume and salary history to: R.M. Dischner, P.O. Box 4913, Kansas City, Mo. 64120.

NATIONAL INSTITUTE OF HEALTH STAFF FELLOWSHIPS AND SENIOR STAFF FELLOWSHIPS MOLECULAR GENETICS

The Molecular Genetics Branch of the National Institute on Aging is seeking individuals experienced in recombinant DNA techniques with an interest in applying these techniques to fundamental questions in aging research. Candidates for Staff Fellowships should have 3 years or less of post-doctoral experience and candidates for Senior Staff Fellowships should have 3 to 7 years of post-doctoral experience. The initial appointment is for a starting salary range of \$17,000 – \$36,889 for Staff Fellowship positions and \$20,688 – \$47,788 for Senior Staff Fellowship positions depending on background and experience. The positions are available starting in July, 1986. Send curriculum vitae to Dr. Edward L. Schneider, Laboratory of Molecular Genetics, Gerontology Research Center, 4940 Eastern Ave., Baltimore, MD 21224.

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CHAIRMAN, DEPARTMENT OF PHYSIOLOGY, Northeastern Ohio Universities College of Medicine (search reopened). Chairman is responsible for physiology curriculum taught to medical students; for recruitment and development of physiology faculty; for the education of graduate students in the biomedical disciplines through the graduate programs of the College's three consortium universities; for a personal research program; and for the day-to-day administration of the physiology department. Department strengths are in cardiopulmonary and reproductive physiology. The College has a separate department of neurobiology.

The Northeastern Ohio Universities College of Medicine, in consortium with The University of Akron, Kent State University, and Youngstown State University, offers a 6-year combined B.S./M.D. degree program. Undergraduate clinical education takes place in associated hospitals in Akron, Canton, Youngstown, and surrounding areas.

The College enjoys strong support from the state of Ohio, with a capital expansion project about to begin on the basic medical sciences campus, Rootstown, Ohio.

Position requires a Ph.D. (physiology) or M.D. degree; qualifications for senior faculty appointment; experience in medical school education and administration; and demonstration of an active research program.

Send curriculum vitae with list of references by 10 October 1985 to: **Office of the Provost and Dean, Northeastern Ohio Universities College of Medicine, Rootstown, Ohio 44272.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

THE WAKSMAN INSTITUTE RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

POSTDOCTORAL POSITIONS IN MOLECULAR BIOLOGY are available in our groups at the Waksman Institute. We are moving into a rapidly expanding research facility with a new laboratory complex that is part of a major land-grant university centrally located in the New York-Princeton-Philadelphia corridor. Institute programs of research and instruction operate in collaboration with allied interests in academic departments of the university, an adjacent medical school, and a nearby College of Agriculture and Environmental Sciences.

We are interested in regulation of gene expression in eukaryotes—both plants and animals. Particular attention is paid to the control of gene action during either host-pathogen interactions or plant development. Pathogen studies involve either human adenoviruses or tobacco mosaic virus, while work on plant development focuses on organelle differentiation in amaranth, endosperm development in maize, and the role of maize controlling elements in genome organization.

Drs. Daniel Klessig and Joachim Messing
The Waksman Institute
Busch Campus, Rutgers University
P.O. Box 759
Piscataway, New Jersey 08854-0759

Please include a statement of research interest with your curriculum vitae, and please have three letters of recommendation sent. Applications will be accepted until positions are filled.

Rutgers University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION for research in cellular or molecular immunology. Specific areas of investigation include lymphocyte interactions, T cell activation, suppressor cells, B cell differentiation, and macrophage function. Send résumé and three letters of reference to: **M. E. Dorf, Department of Pathology, Harvard Medical School, 25 Shattuck Street, Boston, Mass. 02115. Harvard Medical School is an Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCH ASSOCIATES

Positions for NCI postdoctoral training program in molecular and cellular mechanisms of carcinogenesis are available at The University of Texas System Cancer Center (UTSCC) Science Park. Research programs focus on the following areas: somatic cell genetics, DNA repair and mutagenesis, carcinogen metabolism and adduct formation, tumor promotion, mechanisms of lymphomagenesis, normal and tumor cell differentiation, biochemical genetics, and growth factors. Current approaches in whole animal and in vitro culture systems include: flow cytometry (BD FACS 440), HPLC, monoclonal antibody production, Southern blot analysis and DNA sequencing, isoenzyme analyses, and electron microscopy. Applicants must be U.S. citizens or permanent residents and have a Ph.D., M.D., or D.V.M. degree. For application forms, contact: **Dr. Thomas J. Slaga, Director, UTSCC, Science Park-Research Division, P.O. Box 389, Smithville, Tex. 78957, Telephone: 512-237-2403. An Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH POSITION available immediately for the study of B lymphocyte activation and B cell-T cell interactions in murine systems. Applicant should have experience in cellular immunology, protein chemistry, cell membrane protein characterization, and/or molecular biology. Salary competitive and commensurate with experience. Send curriculum vitae and names of three references to: **Dr. Fred Finkelman, c/o Civilian Personnel, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, Md. 20814. Equal Opportunity Employer.**

Harvard University invites inquiries from persons qualified for appointment to **FULL PROFESSORSHIP** in the area of **visual perception**, broadly construed to include individuals who may have collateral interests in psychobiology, psychophysics, or cognition. Candidates should indicate their interest by writing to: **S. H. White, Chairman, Department of Psychology and Social Relations, 33 Kirkland Street, Cambridge, Mass. 02138.** Curriculum vitae and the names of potential referees should be included. *Applications from women and members of minority groups are especially welcome.* The closing date for applying is 1 November 1985.

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately to study enzymology/regulation of processing of cytosolic protein precursor(s) for two chloroplast-localized glutamate dehydrogenase isoenzymes involved in NH_3 assimilation. Experience required in protein chemistry/enzymology, in vitro translation of poly(A)⁺ RNA, and Western blotting procedures. Salary: \$18,000 per year. **Dr. Robert R. Schmidt, Department of Microbiology and Cell Science, 1059 McCarty Hall, University of Florida, Gainesville, Fla. 32611. Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION available now to study ionic channels and neuron-glial interactions in normal, demyelinated, and remyelinating nerve. Both electrophysiological (patch clamp) and optical (potential-sensitive dyes) techniques are used. The appointment can be continued for 3 years. Experience in excitable membrane function is desirable. Send curriculum vitae and names of three references to: **Dr. Peter Shrager, University of Rochester Medical Center, Department of Physiology, 601 Elmwood Avenue, Box 642, Rochester, N.Y. 14642. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL RESEARCHERS. The Department of Physiology, University of California, Irvine, is developing a postdoctoral candidate pool for possible openings during the 1985-1986 fiscal year. Openings may be available in the following research areas: ion channels in lipid bilayers, physical chemistry of membranes, mechanisms and regulation of steroid hormone biosynthesis, exercise physiology; in situ electrophoresis of membrane proteins: molecular properties of ion channels in excitable cell membranes. Salary is in accordance with current NIH, NSF postdoctoral stipends which are based upon qualifications and years of prior, relevant postdoctoral experience. *Minorities and women are encouraged to apply.* Send curriculum vitae and names of three references to: **Professor Stephen H. White, Chairman, Department of Physiology, University of California, Irvine, California 92717.**

POSTDOCTORAL POSITION available immediately for studies of spontaneous animal cancer in vitro. Research will involve techniques in protein biochemistry and immunocytochemistry and the use of clonogenic assays and monoclonal antibodies. Experience in cell culture and biochemistry preferred. Send résumé and names of three references to: **Dr. L. G. Wolfe, Department of Pathology and Parasitology, Auburn University, Ala. 36849. Equal Opportunity/Affirmative Action Employer.**

POSTDOCTORAL RESEARCH ASSOCIATE, (1-year appointment, nonbenefits eligible), available immediately to work on purification of Arginine and Ornithine decarboxylases from plant tissues or isolation and characterization of histones and their acetylated forms from plant cell cultures. Experience in protein purification and immunoassays desirable. Salary range: \$15,140 to \$23,300, normally not to exceed \$16,890. Write or telephone: **S. C. Minochas, Department of Botany, University of New Hampshire, Durham, N.H. 03824. Telephone: 603-862-2060.**

POSTDOCTORAL RESEARCH POSITIONS available immediately to investigate mechanisms regulating collagen and proteoglycan gene expression in transformation, tumor growth, and differentiation. Cell culture, protein chemistry, molecular biology, and recombinant DNA techniques are employed. Applicant should have training in biochemistry or molecular biology. Experience with recombinant DNA techniques desirable. Submit résumé and names of three references to: **Dr. Barbara Smith, Collagen Research Laboratory, Veterans Administration Outpatient Clinic, Boston, Mass. 02108.**

PSYCHOPHYSICS. Research laboratory affiliated with Yale University has a postdoctoral research position available immediately. Projects deal with perception in several sense modalities. Appointment will run through 30 June 1987. Send curriculum vitae and names of three references to: **Dr. Lawrence E. Marks, John B. Pierce Foundation Laboratory, Inc., 290 Congress Avenue, New Haven, Conn. 06519. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH TECHNICIAN Molecular Genetics

Master's degree in molecular genetics with 2 years of experience in recombinant DNA techniques, tissue cultures of mammalian cells. Send résumé to: **Human Resources Department, Allegheny General Hospital, 320 East North Avenue, Pittsburgh, Pa. 15212. An Equal Opportunity Employer, M/F/H.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITIONS (3-year) to study the role of p53 in multistage carcinogenesis. (i) In SV40 and Adenovirus transformation. Reagents available include p53 deletion mutants that bind SV40T or Elb55k but defective for cellular immortalization, p53 antisense retroviral vectors, and so forth. (ii) Study of p53 mutants with enhanced cellular immortalization activity. University lecturer scale. Applications to: **Dr. J. Jenkins, Marie Curie Research Institute, The Chart, Oxted, Surrey, U.K. Telephone: 088-388-2306.**

A POSTDOCTORAL RESEARCH POSITION is available immediately to study transcription and gene expression of geminiviruses, single-stranded DNA viruses of plants. Salary is \$18,000 and funding is available for 1 year with the possibility of renewal. Experience in transcript mapping and cDNA cloning is highly desirable. Send letter of application, résumé, and three letters of recommendation to: **Dr. Alan J. Howarth, Department of Plant Pathology, University of Arizona, Tucson, Ariz. 85721. The University of Arizona College of Agriculture is an Equal Employment Opportunity and Affirmative Action Employer.**

PRIMATE REPRODUCTIVE BEHAVIORIST/BIOLOGIST

The Center for Research in Reproductive Physiology at the University of Pittsburgh is seeking applications for a **Director** of the Center's Primate Facilities, which maintain a colony of macaques for investigators studying various aspects of the physiology of reproduction in higher primates. In addition to directing this research resource, the individual will be expected to develop and pursue an independently funded research program in the general area of reproductive biology/behavior of higher primates. Candidates should hold a Ph.D. or D.V.M. degree, have at least 2 years of postdoctoral experience, and have an interest in the care of nonhuman primates. The appointment, which will be available after 1 December 1985, will probably be made at the research assistant/associate professor level (depending on experience). Funds for this position will be available for 5 years.

Applicants should send their curriculum vitae, an outline of their research interests, and names of four references as soon as possible to: **Dr. Tony M. Plant, Department of Physiology, University of Pittsburgh, Pittsburgh, Pa. 15261.**

PROFESSOR OR ASSOCIATE PROFESSOR OF TOXICOLOGY/PHARMACOLOGY

The Department of Pharmacology, University of Tennessee Center for the Health Sciences, is inviting applications for a tenure-track position available immediately. The applicant should possess the Ph.D. or M.D. degree and should be an established scientist with demonstrated experience in the application of biochemical, molecular and/or immunological knowledge in the study of basic toxicological problems. The applicant would be expected to maintain an active, independent research program and participate in undergraduate and graduate teaching. Please submit complete curriculum vitae, and three letters of reference before 30 November 1985 to: **Dr. K. U. Malik, Chairman Search Committee, Department of Pharmacology, University of Tennessee Center for the Health Sciences, Memphis, Tennessee 38163. An Equal Opportunity/Affirmative Action Employer.**

RESEARCH ASSOCIATE AND POSTDOCTORAL POSITIONS available for M.D. or Ph.D. interested in research on mechanism of hormone and growth factor action and/or receptor recycling and turnover. Forward curriculum vitae and letter describing qualifications, interest, and three referees to: **B. I. Posner, Chief, Endocrinology, Royal Victoria Hospital, Montreal, Quebec, Canada H3R 2A7.**

TOXICOLOGIST. The Department of Pharmacology and Therapeutics, Schools of Medicine and Dentistry, State University of New York at Buffalo, invites applications for a full-time faculty position as assistant professor. Position offers opportunities for basic research and teaching. Candidates must have a Ph.D. degree in toxicology, pharmacology, or a closely related discipline, or an M.D. degree with appropriate training in basic toxicology. Postdoctoral experience and evidence of ability to conduct independent basic research in toxicology, for example, publications and grants obtained, are required. Send curriculum vitae and also request that three letters of recommendation be sent to: **Dr. Edward A. Carr, Jr., 127 Farber Hall, State University of New York at Buffalo, Buffalo, New York 14214. Equal Opportunity/Affirmative Action Employer.**

CELLULAR IMMUNOLOGIST

The Department of Surgery, Division of Surgical Research, at R.I. Hospital/Brown University has a position immediately available at the Research Associate level for a Ph.D. cellular immunologist with research experience using current technology in humoral and cell-mediated immunology. The successful applicant will be in charge of immunological investigations concerned with the role of neuroendocrine and metabolic sequelae in trauma-induced anergy as part of a multidisciplinary clinical and basic research team dedicated to the study of the pathophysiological responses to trauma. This 2.5yr, NIH funded position offers a unique opportunity for the development of professional recognition and career growth for the individual who desires independence and responsibility. The renewal of the position will be dependent upon the effective participation by the successful applicant in the enhancement of the department's research objectives. Appointment level will be commensurate with training and experience. Applicants should send curriculum vitae, brief description of research experience and interests and the names of three references to: Dr. Donald S. Gann, Chief of Surgery, Department of Surgery, R.I. Hospital, 593 Eddy Street, Providence, Rhode Island, 02902.

R.I. Hospital is an Equal Opportunity/
Affirmative Action Employer.

Postdoctoral Scientist

The Analytical Physical and Structural Chemistry Department of SK&F Laboratories has an immediate opening for a postdoctoral scientist to develop spectroelectrochemical techniques for biomedical research and applications.

The successful candidate must have a Ph.D in chemistry or a related discipline. An electrochemist with a strong background in biochemistry and analytical spectroscopy is preferred.

Postdoctoral appointments are of one year duration and may be renewable for a second year upon mutual agreement. We offer an excellent salary, benefits and relocation package as well as the opportunity to work in a state-of-the-art laboratory located near Valley Forge in suburban Philadelphia. Please forward your c.v. to George P. Kissell, Jr., Manager, Personnel Relations, SK&F Laboratories, 1572 Spring Garden Street, Philadelphia, PA 19101. Equal Opportunity Employer, M/F/H/V

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HEAD

DEPARTMENT OF MICROBIOLOGY AND BIOCHEMISTRY

The Department of Microbiology and Biochemistry, College of Agriculture, University of Wyoming, invites applications for the position of department head at either the associate or full professor level. The department consists of 17 faculty members who are engaged in a wide variety of basic and applied research projects. The department has B.S., M.S., and Ph.D. degree programs in microbiology and biochemistry. Equipment and facilities include an extensive micro protein isolation and characterization facility with two gas-phase protein sequencers, a DNA and a peptide synthesizer, equipment for extensive biophysical characterization, monoclonal antibody production and gene cloning capabilities. In addition to recently constructed microbiology laboratories (48,000 sq. ft.), construction of a new biochemistry research/teaching facility of 45,000 sq. ft. has begun and is scheduled for completion in 1986/7. Collaborative research interactions are encouraged and supported by the College and University. The University is developing a biotechnology program within which the Department of Microbiology and Biochemistry will be the major participant. We seek an individual with an established record of leadership in research and teaching in microbiology and/or biochemistry. In addition to the administrative responsibilities of this position, the maintenance of an active research program will be expected. Send letters of nomination or application to Dr. Leroy Maki, Search Committee Chairman, Department of Microbiology and Biochemistry, PO Box 3354, University of Wyoming, Laramie, WY 82071. Applicants should include a detailed curriculum vitae including research interests and have three references sent directly to the Search Committee. Laramie is located between the Snowy and Laramie Mountain Ranges with abundant outdoor recreation opportunities. The University of Wyoming is an Equal Opportunity Employer.

Research Pathologist/ Veterinary Pathologist

Syntex, an international healthcare corporation, has an excellent opportunity for a Research Pathologist/Veterinary Pathologist to perform gross and microscopic pathologic examinations for preclinical toxicity and other research experiments, and prepare reports of the highest quality. These results will be used to support national and international regulatory filings for new drug registrations. Strict adherence to established SOP's and GLP's is required.

The successful candidate will have a DVM degree with advanced training in pathology. Eligibility for certification by the American College of Veterinary Pathologists is required. Actual certification is preferred, as is advanced coursework in statistics, toxicology and pharmacology at the postgraduate level. Experience in laboratory and domestic animal pathology is required and additional experience in toxicologic pathology is preferred. The ability to work in a team structure is essential.

Send your resume and salary history to Syntex Corporation, Professional Employment, Dept. JB, 3401 Hillview Avenue, Palo Alto, CA 94304. We are an equal opportunity employer.



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- ☐ \$125 air-surface delivery via Holland

- ☐ **Subscriber rates**
- ☐ \$98 USA ☐ \$122 Canada ☐ \$125 Foreign
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Address

City State Zip SA16R95

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POSITIONS OPEN

POSTDOCTORAL RESEARCH POSITION available 1 July 1986 to participate in on-going studies of human muscle function and disease. Current studies are concerned with human muscle fatigue utilizing nuclear magnetic resonance spectroscopy and electrophysiologic techniques. A background in neurophysiology or muscle physiology is required. Starting salary range between \$20,000 and \$30,000 per year, depending upon experience. Send curriculum vitae and names of three references to: **Robert G. Miller, M.D., Director of Neuromuscular Research, Children's Hospital of San Francisco, 3700 California Street, San Francisco, Calif. 94119.** An Equal Opportunity/Affirmative Action Employer.

The University of Texas at Austin Department of Zoology PROFESSOR AND CHAIRMAN

The Department of Zoology of the University of Texas at Austin invites applications or nominations for a departmental chairmanship to be occupied in September 1986. The Department of Zoology is multidisciplinary in scope and includes research interests ranging from molecular biology to evolutionary ecology. Specific research interest of the applicant is not of great concern, but an appreciation for the breadth and integration of such diverse biological disciplines and a strong personal research program are deemed important. Some administrative experience is preferred.

Applicants should send curriculum vitae, a letter elaborating upon research and administrative goals, and the names and addresses of four references to: **Dr. F. H. Bronson, Department of Zoology, University of Texas, Austin, Texas 78712.** The deadline for applications is 1 November 1985.

The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer.

PSYCHIATRIST sought to fill full-time, tenure-track position as Director of the Schizophrenia Disorders Program, Department of Psychiatry, University of Michigan Medical Center. Responsibilities include the development and leadership of the patient care, basic and clinical research, and training efforts of the program. Board-certification in psychiatry is desired; interest in the neurobiology of schizophrenia and orientation towards use of brain imaging (PET and Magnetic Resonance Imaging) are essential. Candidates must have a proven track record of research productivity. Send curriculum vitae to: **John F. Greden, M.D., Professor and Chairman, Department of Psychiatry, University of Michigan Medical School, Ann Arbor, Michigan 48109.** *The University of Michigan is an Affirmative Action Employer.*

TWO RADIOLOGY POSITIONS. Tufts University, School of Veterinary Medicine, invites applications for two faculty positions in radiology, based at our New England Veterinary Medical Center at North Grafton, Massachusetts. One position will commence on or before 1 January 1986 and the other on or after 1 July 1986. The applicants for these appointments must have a D.V.M. degree and have completed a formal radiology residency program or their equivalents. Board-certification by the ACVR or eligibility for certification is necessary for both positions. One of the positions to be filled primarily will be responsible for directing the continued development of nuclear medicine; the other position to be filled primarily will be responsible for developing and implementing a radiation therapy program. Both positions also will contribute to the function of the overall radiology program and will be expected to develop clinical and/or basic research programs. Applications for the first position will be accepted until 1 November 1985 and for the second position until 1 January 1986, or until a suitable candidate is identified in each case. Salary and rank will be commensurate with qualifications and experience. Individuals interested in either position should submit an autobiographical letter of intent, curriculum vitae, and the names of at least three references to:

**Dr. Lawrence J. Kleine, Head
Section of Radiology
Tufts New England Veterinary Medical Center
200 Westboro Road
North Grafton, Mass. 01536**

Tufts University is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

VISITING RESEARCH ASSISTANT PROFESSOR Department of Microbiology/ School of Life Sciences

University of Illinois at Urbana-Champaign

Visiting Research Assistant Professor to perform and help direct day-to-day activities in active research laboratory involved in the molecular biology of photosynthetic membrane synthesis in the bacterium *Rhodospseudomonas sphaeroides*. Applicants should have: at least 2 years of postdoctoral experience, experience in recombinant DNA techniques and/or molecular genetics of procaryotes, experience with common bacteriological techniques and, if possible, experience in membrane biology and/or chemistry. Starting salary is \$25,000 per annum, with additional consideration for qualifications. Providing satisfactory performance, reviewed yearly, employment will be for at least 3 years. For full consideration, please send application materials and three letters of reference by 15 November 1985 to: **Dr. Samuel Kaplan, Chair, Department of Microbiology, University of Illinois at Urbana-Champaign, 164 Burrill Hall, 407 South Goodwin Avenue, Urbana, Illinois 61801.** Telephone: 217-333-2044. Starting date will be approximately 1 January 1986.

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

RESEARCH ASSOCIATE/POSTDOCTORAL position available immediately for a recent Ph.D. who has experience with molecular genetics technology. The research involves studies on oncogene activation and changes in growth regulation during chemically induced hepatocarcinogenesis in the rat. Send curriculum vitae and three letters of reference to: **Dr. James D. Yager, Department of Anatomy, Dartmouth Medical School, Hanover, N.H. 03756.** An Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE POSITION IN MOLECULAR BIOLOGY

The Department of Microbiology and Immunology of the University of Tennessee Center for the Health Sciences invites applications for several positions in a newly established Molecular Resource Center funded by a Tennessee Centers of Excellence Award. This center will house state of the art equipment that will provide exciting and challenging opportunities for creative interdisciplinary research. Candidates should have 2 to 3 years of experience in eukaryotic genetics, DNA cloning, and sequencing, and basic techniques used for the study of gene expression. Teaching in Molecular Resource Center workshops will be required. Salary: \$23,000. Those interested should submit a résumé, statement of research and teaching experience, and three letters of reference to:

**Dr. Terrance G. Cooper
Department of Microbiology and Immunology
University of Tennessee
Center for the Health Sciences
858 Madison Avenue, Room 801
Memphis, Tennessee 38163**

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

RESEARCH SCIENTIST III (nonfaculty) required to study lipoprotein metabolism in diabetes. Must have strong experience in diabetes and lipoprotein research including clinical investigation and in vitro studies. M.D. and/or Ph.D. required with minimum of 2 years of postdoctoral experience. Salary: \$24,000 to \$30,000 depending on experience. Send résumé to: **Department of Medicine (RG-26), University of Washington, Seattle, Washington 98195, Attention: Dr. Chait.** *The University of Washington is an Equal Opportunity/Affirmative Action Employer.*

VASCULAR RESEARCH Ph.D. SCIENTIST

Major teaching medical center seeks individual to direct research activities of Radiation Oncology Department, including developing and conducting scientific research, presenting at scientific meetings, and supervising in vivo and in vitro laboratories. Qualifications: related Ph.D., experience with biochemistry and vascular research, cell culture, and recombinant techniques. Position offers attractive compensation and academic appointment in affiliated medical school based on publication record and experience. Submit curriculum vitae to: **Employment Manager, Department RO,**

**LONG ISLAND JEWISH
MEDICAL CENTER
New Hyde Park, N.Y. 11042
An Equal Opportunity Employer**

POSITIONS OPEN

RENAL LABORATORY TECHNOLOGIST

M.S., Ph.D., or Ph.D. candidate, immunoelectrophoretic protein and micro protein experience preferred. Half-time or full-time, in a New York hospital. Telephone: 718-780-1247.

Needed: **RESEARCHER** with background in plant tissue culture. Work involves the production of secondary metabolites. Salary is commensurate with training and experience. Please write: **K. Schoen, David Michael & Co., Inc., 10801 Decatur Road, Philadelphia, Pa. 19154.**

RESEARCH NEUROPATHOLOGIST—We are looking for a creative person interested in developing collaborative research projects in the neurosciences. Fargo-Moorhead is a thriving community on the edge of the great plains and near the Minnesota lake country. It offers four seasons, three colleges, good schools, nice people, a modest cost of living, and a low crime rate. Board-certified preferred; established record of research expected; position is fully funded; laboratory space with clinical and research equipment provided; laboratory technician negotiable; includes academic appointment with teaching duties; some clinical work; position available immediately. Applications will be considered until position is filled. Please send curriculum vitae, names with telephone numbers of three references, and supporting material such as publications to: **Dr. H. A. Whitaker, Research Director, The Neuropsychiatric Institute, 700 First Avenue South, Fargo, N.D. 58103.** Telephone: 701-235-5354.

SENIOR RESEARCH SCIENTIST— PROJECT LEADER

Research and development company in the field of biotechnology with special emphasis on development in creating improved biological compounds and enzyme/catalysts seeks senior research scientist—project leader. Applicant will be responsible for supervising and developing program concerning biochemical compounds to fight viral diseases. Applicant will also be responsible for overall supervision and direction of research projects in this area. Must have Ph.D. in biochemistry. At least 2 years of postdoctoral experience, one of which must be in the isolation of naturally occurring antiviral-antitumor compounds from plant and mammalian systems. Must have demonstrated knowledge in the areas of culture techniques, gel electrophoresis, isolation and elucidation of enzymes, and structural elucidation and mode of action of oligonucleotides by enzymatic and chemical analyses and by enzyme-linked immunosorbent assay (ELISA). Hours: 40 per week. Salary: \$40,000 per year. Send résumé to: **Division of Employment Security, Number 5878, Hurley Building, Boston, Mass. 02114.**

VIROLOGISTS

Difco Laboratories new Research and Development Center has openings for technical management positions in viral diseases. A Ph.D. in microbiology, biochemistry, or chemistry with relevant research experience in virology is required. Project emphasis will be to develop antibody-oriented and/or nucleic acid probe assays for disease-causing viruses. Commercial experience is preferred and knowledge of medical microbiology, nucleic acid probe technology, and hybridoma technology is helpful. Proven leaders with sound publication lists and good research potential will be given preference. Send your résumé, publication list, and the names of three references to: **Darlene Schafer, Difco Laboratories, Research and Development Center, 1180 Ellsworth Road, Ann Arbor, Mich. 48104.** *Equal Opportunity Employer, M/F.*

VISION RESEARCH SCIENTIST

The School of Aerospace Medicine is seeking a senior research psychologist (psychophysicist) to study the effects of lasers on vision and visual performance. The candidate must have 3 years of professional research experience or a Ph.D. in physiological psychology and a demonstrated history of publication in peer-reviewed journals. Knowledge of physics, optics, and computer modeling of ocular systems is desirable. The position will be filled at the GS-180-12 level, \$31,619 per annum, and is open to all interested U.S. citizens. Applicants must submit SF-171 (personal qualifications statement). Submission of curriculum vitae is desirable. Applications must be received by 30 September 1985 at: **6570 ABG/DPCS, Attention: 85-40, Brooks Air Force Base, Texas 78235.** Direct inquiries to Ms. Hudson, telephone: 512-536-3353. *An Equal Opportunity Employer.*

POSITIONS OPEN

RESEARCH ASSISTANT PROFESSOR OF IMMUNOBIOLOGY. The Departments of Microbiology/Immunology and Medicine, State University of New York (SUNY), invite applications for a non-tenure position available 1985. Applicants must have Ph.D., original research productivity, extramural support potential. Conduct research on cell biology, immunology and/or biochemistry of immunologically mediated diseases using contemporary methodologies. Participate in graduate training programs. Competitive, 12-month salary based on experience. Apply with curriculum vitae, research interests, and three references to: **Dr. George G. Holz, Jr., Chairman, Department of Microbiology and Immunology, SUNY-Upstate Medical Center, Syracuse, N.Y. 13210.** An Equal Opportunity/Affirmative Action Employer.

RESEARCH ASSOCIATE IN GASTROENTEROLOGY to conduct research on the pathogenic mechanisms of homolysis-induced calcium bilirubinate (black) pigment gall stones. Research requires isolation and characterization of biliary constituents in bile and gall stones using latest analytical procedures, involving computerized high pressure liquid chromatography, fluorescence spectrophotometry, infrared spectroscopy, and use of ion-selective microelectrodes. Must have Ph.D. in nutritional biochemistry, with strong analytical biochemistry background and at least 3 years of postdoctoral experience in gastrointestinal biochemistry. Incumbent should be able to develop experimental procedures and supervise and carry out analytical procedures in gastrointestinal biochemistry. Excellent writing skills and sound analytical capabilities are essential. Must be supported by good publication record in gastrointestinal biochemistry and metabolism. Salary \$17,000 per year. 40 hours per week. Contact or send résumé before 20 September 1985 to: **Job Service of Tennessee, 301 James Robertson Parkway, Nashville, Tenn. 37201.** Order Number IHO-808.

RESEARCH ASSOCIATE for research and development company in animal health and biotechnology products in northeast Ohio. Will initiate, develop, and supervise projects leading to new microbiological products in animal health. Plan and execute biological evaluations to achieve objectives of projects. Determine general approaches to meet research objectives. Interpret and evaluate results of research programs and make project recommendations. Assist in training and development of subordinates and act in advisory capacity to other research personnel. Must have Ph.D. in microbiology and 3 years of experience in job described. Salary: \$38,100 per year; 40-hour week, 9 a.m. to 5 p.m. Send résumé to: **Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, Ohio 43216.** Attention: **Job Order Number 0260508, L. Ellison.**

The Division of Nutritional Sciences in the University of California, Los Angeles (UCLA) School of Public Health is seeking a **SENIOR FACULTY MEMBER**, with a commitment to public health nutrition for a tenured position. Candidates for this position should hold a Ph.D., Dr.P.H., or M.D. degree in biochemically oriented nutritional sciences related to public health. The individual selected will assume leadership as division head for the overall nutrition program for at least a normal term of appointment.

The University of California at Los Angeles is an Equal Opportunity/Affirmative Action Employer. Send curriculum vitae to: **Dr. Virginia Clark, Chair of Search Committee, Division of Biostatistics, School of Public Health, University of California, Los Angeles, Calif. 90024.**

SENIOR SCIENTIST

The W. Alton Jones Cell Science Center, Inc., Lake Placid, New York has an immediate opportunity for an innovative and experienced molecular biologist to direct independent research in the field of molecular and cellular biology.

We are seeking a dedicated and talented scientific professional with interest in cell biology and growth factors. The successful candidate will have a doctorate in molecular and cellular biology with at least 3 years of postdoctoral experience. Candidates must have the ability to supervise others. Liberal benefits. Salary will be commensurate with experience.

Applicants are requested to submit complete curriculum vitae and to have three letters of academic references forwarded by 1 October 1985 to:

**Personnel Manager
W. ALTON JONES CELL SCIENCE CENTER
10 Old Barn Road
Lake Placid, New York 12946**

An Affirmative Action/Equal Opportunity Employer

POSITIONS OPEN

RESEARCH SCIENTISTS

The Biomedical Research Division of the Lovelace Medical Foundation has staff openings for the following scientists: cellular immunologist, Ph.D., to participate in one or more ongoing studies in areas of human monoclonal antibody production, flow cytometry, molecular biology, or nuclear magnetic resonance; cell biologist/biophysicist, Ph.D., to develop projects utilizing nuclear magnetic resonance. If qualified, please send résumé to: **Lovelace Medical Center, Human Resources Department, 5400 Gibson, SE, Albuquerque, N.M. 87108.** Equal Opportunity/Affirmative Action Employer, M/F/V/H.

CALL FOR PROPOSALS

CALL FOR PROPOSALS

The Three Mile Island Public Health Fund will commission consultants to develop an emergency plan for the TMI complex. The plan will consider source terms; health risk; evacuation decisions; sheltering; planning of medical registry and services; transportation; essential services; veterinary data network; behavior under stress; and credibility of information sources. For information, telephone or write to: **Jonathan Berger, Ph.D., 1622 Locust Street, Philadelphia, Pa. 19103; telephone: 215-875-3026.** The deadline for proposals is 30 November 1985.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Clinical neurophysiology, with emphasis on development of motor system monitoring methods and multimodality evoked potentials for intraoperative monitoring and intensive care monitoring. Combined clinical and laboratory experience. Send curriculum vitae, three references, and statement of interest to:

**Walter J. Levy, M.D.
N522 Division of Neurosurgery
University of Missouri—Columbia
Columbia, Missouri 65212**

POSTDOCTORAL FELLOWSHIP IN MAGNETIC RESONANCE SPECTROSCOPY. Position is with established group of investigators to develop applications of new 4.7 Tesla NMR spectroscopy unit to biomedical problems. Fellow will participate in chemical pathology, toxicology, and psychopharmacology programs. Background in NMR desirable. Starting date negotiable. Competitive salary. Send curriculum vitae and names of three references to: **Aubrey J. Hough, M.D., Professor and Chairman, Department of Pathology, Slot 517, University of Arkansas for Medical Sciences, Little Rock, Ark. 72205.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP NEUROANATOMY

The Department of Anatomy of the F. Edward Hébert School of Medicine, Uniformed Services University, invites applications for a postdoctoral fellowship in neuroanatomy. This fellowship is for 1 year and is renewable. Applicant must have either an M.D. or Ph.D. in biological science. Preference will be given to candidates with research experience in modern neuroanatomical techniques in mammals. Applications should be received by 1 September along with curriculum vitae, bibliography, and letters of recommendation. Send applications to:

**Malcolm B. Carpenter, M.D., c/o Civilian Personnel
Uniformed Services University
of the Health Sciences (USUHS)
4301 Jones Bridge Road
Bethesda, Maryland 20814-4799**

USUHS is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIP: Available now to work on molecular genetics of immunoglobulin regulation. Must have experience in mRNA purification, translation assays, reverse transcription, and cDNA cloning and sequencing. One year fellowship assured, with possibility of further funding. Desire unusually self-motivated individual to work in University of Texas Medical School (Houston) following approximately 2-month skills—apprenticeship in Philadelphia. Apply: **Dr. Benjamin Wolf, University of Pennsylvania, School of Veterinary Medicine, 3800 Spruce Street, Philadelphia, Pa. 19104.** An Equal Opportunity Employer. Women and minorities are encouraged to apply.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP POSITIONS

available in the following areas: (i) **Seaweed tissue culture/protoplast fusion.** A recent Ph.D. with demonstrated expertise in plant tissue culture and/or protoplast fusion who would be interested in developing these technologies for macroscopic algae. The candidate should have a strong background in the area of plant morphogenesis of cellular biology and be able to work independently. One position—available 1 January 1986. (ii) **Bivalve mollusc culture.** An individual experienced in spawning and rearing of larval and juvenile bivalve molluscs, including mass cultivation of unicellular algal food, to assist in the development of technology and evaluation of commercial potential of new bivalve mollusc species. One position—available immediately. (iii) **Fish reproductive physiology.** An individual experienced in the controlled maturation, natural and/or hormone-induced spawning and larval rearing of fin fish to develop similar technology for marine and freshwater species not previously bred in captivity. One position—available immediately. Annual stipend for each position is \$22,000, plus travel. Send résumé and names of three references to: **Dr. John H. Ryther, Division of Applied Biology, Harbor Branch Foundation, Inc., RR 1, Box 196, Fort Pierce, Fla. 33450.** Equal Opportunity Employer.

COURSES

PRINCIPLES AND MECHANISMS OF NEUROTOXICITY, 13 to 15 November 1985, The Johns Hopkins University School of Hygiene and Public Health, Department of Environmental Health Sciences. Course director: **Zoltan Annau, Ph.D.** For further information: **Dr. Jacqueline Corn, The Johns Hopkins University, School of Hygiene and Public Health, 615 North Wolfe Street, Room 1101, Baltimore, Md. 21205.** Telephone: 301-955-2609.

STEREOLOGICAL TECHNIQUES IN BIOLOGY

9 to 11 October 1985, Fee: \$370
The Lodge—Oakbrook, Illinois

The Center for Electron Microscopy at the University of Illinois at Urbana-Champaign announces a workshop for researchers on stereological techniques.

Contact: **Mary Hoffman, Conferences and Institutes, 116 Illini Hall, 725 South Wright Street, Champaign, Illinois 61820,** or telephone: 217-333-2881.

PROGRAMS

THE WORLD HEALTH ORGANIZATION

Has initiated a programme on vaccine development to take full advantage of the recent advances in biotechnology. The programme is supporting goal-oriented research in the following subjects:

**Acute respiratory virus diseases of children
Dengue
Encapsulated bacteria
Hepatitis A
Tuberculosis**

Interested scientists should contact: **Chief, Immunology, World Health Organization, 20 Avenue Appia, 1211 Geneva 7, Switzerland,** for information about the aims of the programme and application forms.

JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS (JILA)

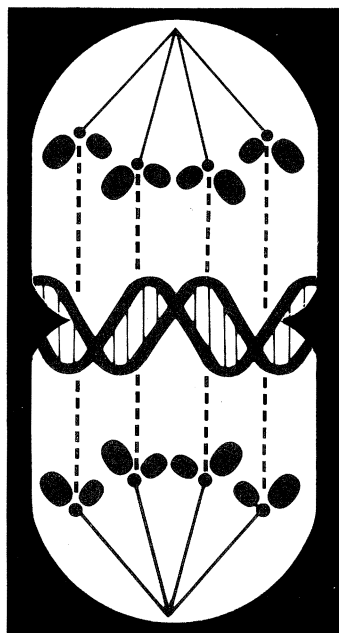
JILA (operated jointly by the U.S. National Bureau of Standards and the University of Colorado) is devoted to research, study and teaching in atomic and molecular physics, laser physics, astrophysics, precision measurements, geophysical measurement, and related areas. Applications are invited for three programs:

- 1) **Research Associateships**, for advanced research by recent Ph.D.'s. Applications are accepted and considered anytime throughout the year.
- 2) **Research Fellowship for Teachers**, for U.S. teachers who have an active role in the instruction and counseling of minority and women students. Deadline for completed applications is 10 January 1986.
- 3) **Visiting Fellowships**, for advanced research by senior scientists. Deadline for completed applications is 10 January 1986.

Further information can be obtained from: **The Secretary, Visiting Scientists Program, JILA, Box 440, University of Colorado, Boulder, Colo. 80309.**

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

nature



UPDATE IN MOLECULAR BIOLOGY 1985

Genes and Systems in Development

You are invited to join a select group of participants and some of the world's foremost speakers at NATURE's fifth international conference.

Presented in conjunction with the University of California at San Francisco.

**OCTOBER 7, 8, 9, 1985—SHERATON-PALACE HOTEL
SAN FRANCISCO, CALIFORNIA**

The 1985 conference presented by NATURE, the international weekly journal of science, in association with the University of California at San Francisco will address what is perhaps the central unanswered question of biology today: How is the process of development directed by genes?

For three days, you will meet and listen to preeminent scientists, physicians and biotechnologists describe their research and first-hand involvement in experimental approaches involving the application of molecular biology to systems and organisms. Topics will include the diagnosis and therapy of genetic defects, homeotic genes, yeast development, development of the immune system—including T-cell receptors—and the use of new biological materials in medicine and industry. Roundtable discussions will be held each afternoon to give delegates ample opportunity to mix with and question the speakers. Participants will have an opportunity to take part in detailed discussions and present their own ideas. Poster presentations are also being invited.

WHO SHOULD ATTEND

Senior Level Scientists, Medical Research Scientists, Biotechnologists, Scientific Policy Makers, R & D Scientists, Departmental Chairpeople.

TO REGISTER FOR THE CONFERENCE

Return the form with your check, credit card authorization, or an authorized purchase order.

Full 3-day registration fee: \$375.00

Pay only \$350.00 if you register before September 15.

LOCATION

The Sheraton-Palace Hotel located at 639 Market Street is convenient to the business and financial districts as well as downtown's most stylish shops and finest restaurants. Since its opening in 1875, this elegant hotel has hosted such world figures

as seven U.S. presidents, Winston Churchill, Nikita Krushchev, Sarah Bernhardt, Enrico Caruso and Oscar Wilde.

ROOM RESERVATIONS

A large block of rooms has been set aside for attendees at preferred rates. However, we suggest you make your reservations early as delegate places and accommodations are filling fast. Rooms can be reserved directly with the Sheraton-Palace Hotel by calling 800-325-3535. Be sure to mention your participation in the NATURE 1985 Conference to qualify for special rates. Singles: \$95. Doubles: \$105 and \$115.

CMEs WILL BE AWARDED

Extended Programs in Medical Education of the University of California School of Medicine in San Francisco designates this continuing medical education activity for 18 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association and the Certification Program of the California Medical Association.

YOUR REGISTRATION FEE COULD BE TAX DEDUCTIBLE

CONFERENCE DINNER

Our gala Conference dinner will be held Tuesday, October 8, in the historic, glass-domed Garden Court. To insure seating, please include your dinner ticket requirements and payment of \$29.50 per person with your registration.

EXHIBITS

A major exhibition of scientific products and services will be held in conjunction with the Conference.

POSTER SESSIONS

To have your poster considered, please include a working title and brief synopsis of your topic and send to Posters Editor, Nature Publishing Company, 65 Bleeker Street, New York, 10012

FINAL PROGRAM

Genes and Systems in Development: *Nature* Update in Molecular Biology, Sheraton Palace Hotel, San Francisco, 7-9 October 1985.

DAY 1 MONDAY, 7 OCTOBER

8.45-8.50	Chairman	
8.50-9.40	<i>Drosophila</i> early development	<i>C. Nüsslein-Volhard, Max Planck, Tübingen</i>
9.40-10.30	Genetic control of <i>Drosophila</i> development	<i>D. Hogness, Stanford University</i>
10.30-11.10	COFFEE	
11.10-12.00	Comparative expression of homeobox genes in fly and mouse	<i>W. McGinnis, Yale University</i>
12.00-1.30	LUNCH	
1.30	Chairman	
1.30-2.15	Cytoplasmic localizations in the amphibian egg	<i>J. Gerhart, University of California, Berkeley</i>
2.15-3.00	Genes that control nematode cell lineage	<i>H.R. Horvitz, Massachusetts Institute of Technology</i>
3.00-4.00	ROUND TABLE with day's speakers	
4.00-4.30	TEA	
4.30-5.30	Closing talk	<i>G. Stent, University of California, Berkeley</i>

DAY 2 TUESDAY, 8 OCTOBER

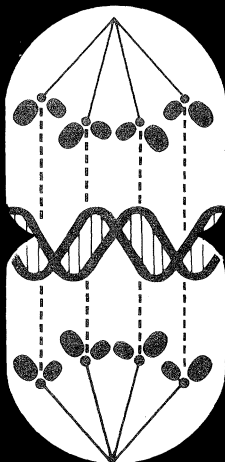
8.45-8.50	Chairman	
8.50-9.40	A master regulatory locus that determines cell specialization in yeast	<i>I. Herskowitz, University of California, San Francisco</i>
9.40-10.30	Regulatory proteins in bacteria and yeast	<i>M. Ptashne, Harvard University</i>
10.30-11.10	COFFEE	

11.10-12.00	Simple and combinatorial regulation of gene transcription	<i>K. Yamamoto, University of California, San Francisco</i>
12.00-1.30	LUNCH	
1.30	Chairman	
1.30-2.15	Control of animal growth by gene transfer	<i>R. Palmiter, University of Washington, Seattle</i>
2.15-3.00	Models for human gene therapy	<i>T. Friedmann, University of California, San Diego</i>
3.00-4.00	ROUND TABLE with day's speakers	
4.00-4.30	TEA	
4.30-5.30	Closing talk	<i>E. Jaworski, Monsanto Company</i>

DAY 3 WEDNESDAY, 9 OCTOBER

8.45-8.50	Chairman	
8.50-9.40	Structure analysis of T-cell recognition	<i>M. Davis, Stanford University</i>
9.40-10.30	Expression of immunoglobulin genes in transgenic mice	<i>U. Storb, University of Washington, Seattle</i>
10.30-11.10	COFFEE	
11.10-12.00	Proto-oncogenes: the good and the bad	<i>J.M. Bishop, University of California, San Francisco</i>
12.00-1.30	LUNCH	
1.30	Chairman	
1.30-2.15	Cell recognition during neuronal development	<i>C. Goodman, Stanford University</i>
2.15-3.00	Molecular insights into mammalian systems	<i>F. Bloom, Research Institute of Scripps Clinic</i>
3.00-4.00	ROUND TABLE with day's speakers	
4.00-4.30	TEA	
4.30-5.30	Closing talk	<i>D.W. Martin, Genentech</i>

**SAVE \$25
IF YOU
REGISTER
BEFORE
SEPT. 15!**



REGISTRATION FORM

To register for NATURE UPDATE IN MOLECULAR BIOLOGY 1985, mail this form with your payment to: NATURE PUBLISHING COMPANY, 65 Bleecker Street, New York, NY 10012
(Photocopy this form for additional applications.)

Please reserve _____ Conference registration(s) in the name of: (please type or print)

_____ and _____ seats

at the Tuesday Conference dinner in the name of: _____

NAME _____ TITLE _____

COMPANY/INSTITUTION _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

I understand that as a paid conference participant, I may attend all sessions and receive all programs and other materials.

My check for \$ _____ is enclosed.

Charge my credit card as shown.

☐ Amex ☐ Visa ☐ Mastercard

Credit card number _____ Expiration date _____

Signature (as it appears on card) _____ ☐ Bill me. ☐ Bill my organization.

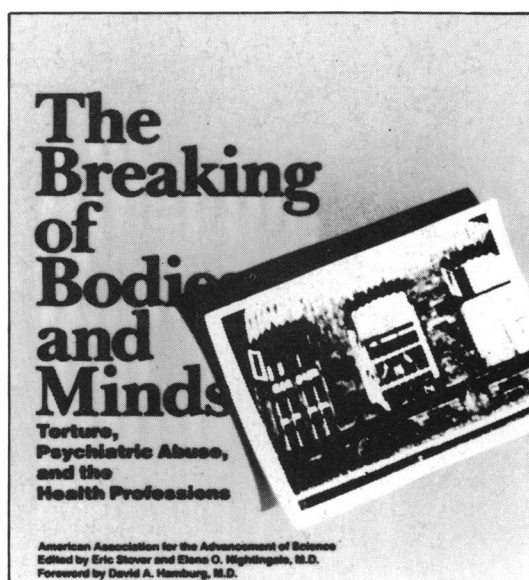
SCI

The Breaking of Bodies and Minds

Torture, Psychiatric Abuse, and the Health Professions

A documentation of systematic use and effects of physical and mental torture throughout the world

Edited by Eric Stover
and Elena O. Nightingale
With a Foreword by
David A. Hamburg



This eye-opening book brings together for the first time writings on the role of medical personnel in cases of torture and psychiatric abuse. Through analyses and case histories, psychiatrists and other health care professionals, political scientists, ethicists, and other writers discuss the systematic use and effects of physical and mental torture in the Soviet Union, Latin America, and other parts of the world.

The book also details the complicity of an alarming number of medical personnel in torture and psychiatric abuse and examines the ways in which governments use a medical rationale to seek legitimacy for human destruction. Finally, it describes efforts by medical and other associations both to combat offensive practices and treat victims.

The Breaking of Bodies and Minds is important reading for anyone concerned with the preservation of basic human rights.

1985 352 pages

Paperbound \$11.95; AAAS members \$9.50
Hardcover \$21.95; AAAS members \$17.50

Order from AAAS Marketing, Dept. ES, 1333 H Street, NW, 8th Floor, Washington, DC 20005.

Please add \$1.50 postage and handling per order. Allow 6-8 weeks for delivery. To charge your order to VISA or Mastercard, please call the Sales Department at (202) 326-6405.

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Torture and the Ethics of Medicine
Albert R. Jonsen and Leonard Sagan

Victims of Torture:

Two Testimonies

Compiled by Cornelius A. Kolff
and Roscius N. Doan

Physical and Psychiatric Effects
of Torture: Two Medical Studies
Federico Allodi, Glenn R. Randall,
and others

Torture on Trial: The Case of
Joelito Filartiga and
the Clinic of Hope
Richard Pierre Claude

Medical Action Against Torture
Eric Stover and
Michael Nelson

Part II Psychiatric Abuse

Psychiatrists and Dissenters
in the Soviet Union
Sidney Bloch and Peter Reddaway

A Question of Conscience
The Cases of Alexei Nikitin
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Walter Reich

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Paul Chodoff and Ellen Mercer

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Elena O. Nightingale and
Eric Stover