Announcing a new AAAS service that may introduce you to your next employer or employee.

AAAS is conducting its first general scientific employment exchange. There are no fees for participating candidate members and Employer fees are minimal for this introductory period.

As a registered, participating candidate you're entitled to:

- On-site interview facilities
- Review descriptions of all available positions
- No charge to members

As a registered, participating employer you're entitled to:

- On-site interview facilities
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For more information and registration forms, contact: Jacquelyn Roberts, AAAS Employment Exchange, Room 1152, 1333 H Street, NW, Washington, DC 20005. (202) 326-6430

All posted positions will follow EEOC guidelines.
POSITIONS WANTED

Flow Cytometry Expert with experience setting up, managing, and operating flow cytometry facility for medical center and biomedical company available for employment. Box 7850, Stanford, CA 94305.

Human Genetics. Ten years of academic experience in cloning, sequencing, recombinant DNA. Includes seven years of independent research. Also, supervisory and administrative experience. Box 189, SCIENCE.


Microbiologist, Ph.D. (1983). Six years of teaching and research experience in food and industrial microbiology, seeking a postdoctoral/lectureship position. Box 192, SCIENCE.

Thirty-one-year-old recently graduated scientist (Danish degree of Cand. Scient.) from Institute of Genetics, Copenhagen University, looking for a job as Molecular Biologist. Specialized in genetics and molecular biology techniques. Final project involved P-element transformation on Drosophila melanogaster. Box 172, SCIENCE.

Plant Pathologist (Ph.D., 1967). Twenty-one years of experience working in the Caribbean region on a wide range of crops, particularly tomato, bean, peanut, pigeon pea, cowpea and other legumes. His considerable experience in: systems of fungicide application, bacterial wilt caused by Pseudomonas solanacearum, disease diagnosis, teaching as extension agent to postgraduate level, administration. Seeking position in academic, industry, or consultant fields. Box 188, SCIENCE.

Retrovirologist, Ph.D. Experienced and published in human immunodeficiency virus and murine retroviruses. Demonstrated ability for independent research and laboratory management. Desires academic/research position. Box 194, SCIENCE.

POSITIONS OPEN

ANATOMY/CELL BIOLOGY

The Department of Anatomy and Cell Biology in the Faculty of Medicine invites applications for up to six FACULTY POSITIONS. Applicants should have research expertise in cell or developmental biology, cellular neurobiology, or molecular biology. Scientists using innovative methods for analyzing cell structure are encouraged to apply. Applicants should have proven records of research achievement and be willing to direct the Alberta Heritage Foundation for Medical Research. Candidates should be capable of teaching graduate courses in cell or developmental biology, or in medical school courses in histology or neuroanatomy. Appointments will be made at all faculty levels. Rank and salary will be determined according to University of Alberta guidelines. Successful candidates will be encouraged to carry on independent research programs, but will also have the opportunity for collaborative interactions with several multidisciplinary research groups within the University. Deadline for receipt of applications is 1 March 1989.

The University of Alberta is committed to the principle of equity in employment but, in accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

Please submit curriculum vitae, a summary of research interests, and the names of four references to: Dr. Richard A. Murphy, Professor and Chairman, Department of Anatomy and Cell Biology, Faculty of Medicine, University of Alberta, Edmonton, Alberta, Canada, T6G 2H7.

ACADEMIC PHYSIOLOGIST

The Department of Anesthesiology of Loyola University Stritch School of Medicine, Maywood, Illinois, is recruiting a physicist for a faculty position at the assistant professor level to work in an stimulating environment that includes excellent research laboratory. The candidates for this position are expected to have a strong commitment to research in the areas of cardiovascular and respiratory physiology and to run large animal experiments in collaboration with the department's physiologists and technologists. For the position, the department invites applications from Loyola University, 2160 South First Avenue, Maywood, Illinois 60153.

AGRO-ECOLOGIST (Rank: Entry-level). Soil ecologist with expertise in microbially mediated nutrient cycling in soil. Will be required to develop a competitive research program on nutrient cycling in plant-soil microorganisms. Position is open for immediate hire. Applicants, please send letter of intent, curriculum vitae, and three letters of recommendation to: Richard F. Deveroux, M.D., Division of General Surgery, Section of Surgical Oncology, University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, CN 19, New Brunswick, NJ 08903-0019. The UMDNJ is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR. Position available in the Department of Surgery for a Ph.D. biochemist, cell physiologist with research experience including background in, cell culture techniques, independent research experience, and possess interest in cancer cachexia and will be expected to pursue grant-supportable research. Submit curriculum vitae, statement of research interest and three references to: Dennis F. Devereux, M.D., Division of General Surgery, Section of Surgical Oncology, University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School, CN 19, New Brunswick, NJ 08903-0019. The UMDNJ is an Equal Opportunity/Affirmative Action Employer. M/F/H/V.

ASSISTANT PROFESSOR, tenure-track, with expertise in cellular and molecular biology. Beginning fall 1989. Teach upper-level molecular genetics course with laboratory, a cell and molecular biology laboratory course, supervise senior research, and participate in course for non-majors. Ability to teach biometry is desirable, but other specializations will be considered. Ph.D. required. Individual must be able to work in cell and molecular biology laboratory methodology. Send résumé, undergraduate and graduate transcripts, description of teaching and research interests, and three letters of recommendation to: Personnel Director, Saint Vincent College, Latrobe, PA 15650, by 6 January 1989. Equal Opportunity/Affirmative Action Employer.

Concordia University, Department of Biology, invites applications for a full-time, tenure-track, assistant professor position, with a preference for candidates in plant molecular biology, at the ASSISTANT PROFESSOR level. The successful candidate will have 2 years of postdoctoral experience and will be expected to develop an independent research program. Duties will include developing a course in biotechnology, participation in undergraduate and graduate teaching and supervision of graduate students. Applications are considered until the position is filled, and appointment will be effective Fall 1989. In addition to curriculum vitae, a brief description of their research interests and the names and addresses of three referees: Dr. E. J. M. Maly, Chairman, Department of Plant Biology, Concordia University, 1455 de Maisonneuve Boulevard West, Montreal, Quebec, H3G 1M8. In accordance with Canadian immigration requirements, this announcement is directed to Canadian citizens and permanent residents. Subject to final budgetary approval.
**POSITIONS OPEN**

**ANALYST IN INFORMATION SCIENCE AND TECHNOLOGY**


Salary levels range from GS-9, GS-11 $22,907 to $36,032. Pay is determined by the Physical Science Analyst, and GS-9, GS-11 $29,199 to $39,537. The position offers non-competitive promotion potential to GS-15 depending solely on demonstration of ability to perform at higher levels.

Candidates will prepare written reports and analyses for Members of Congress on policy issues within the field of computer, information, or telecommunication technology policy. Qualified individual for the GS-9 position, 2 years of specialized experience and 3 years of specialized experience for the GS-11 position that demonstrated computer knowledge, information, or telecommunications technology policy. The minimum requirement is a bachelor's degree in social science, engineering or physical science. Graduate education may be substituted for some or all of the specialized experience.


**ASSISTANT CURATOR**

**VERTEBRATE PALEONTOLOGY**

**AMERICAN MUSEUM OF NATURAL HISTORY**

The Department of Vertebrate Paleontology invites applications from Ph.D.s. in vertebrate paleontology with specialization in non-mammalian tetrapods for an entry-level, tenured-track curator position. Applicant must have experience in collection-based research in systematics and comparative morphology as well as proficiency in related earth and biological sciences. The successful candidate will be expected to develop a strong research program and participate in curation, maintenance, and growth of collections of fossil reptiles, amphibians, and invertebrates in the Department’s exhibition, public education, and graduate teaching programs is also expected. Other responsibilities will include curatorial, research, and curatorial management activities.

Salary will be commensurate with qualifications and experience. Letter of application, curriculum vitae, a brief statement of research objectives, and names and addresses of at least three references should be submitted no later than 15 February 1989. A letter of application, curriculum vitae, a brief statement of research objectives, and names and addresses of at least three references should be submitted no later than 15 February 1989.

Dr. Michael J. Novacek
Chairman, Search Committee
Department of Vertebrate Paleontology
American Museum of Natural History
Central Park West at 79th Street
New York, NY 10024-5192
An Equal Opportunity Employer.

**DEPARTMENT OF BIOLOGY**

**CASE WESTERN RESERVE UNIVERSITY**

A tenure-track position at the ASSISTANT PROFESSOR level is available in the area of

**CELL, MOLECULAR BIOLOGY**

Applications are invited from individuals interested in plant or animal systems, who have a strong commitment to research and undergraduate and graduate education. Interested persons should submit curriculum vitae plus a statement of research interests and three letters of recommendation to: Dr. Norman B. Rushforth, Chairman, Department of Biology, Case Western Reserve University, Cleveland, OH 44106. Case Western Reserve University is an Equal Opportunity/Affirmative Action Employer.

**AQUATIC BIOLOGIST**

Teaching responsibilities to include general biology and area of specialty. Research experience in freshwater biology.

**VERTEBRATE ZOOLOGIST**

Teaching responsibilities to include undergraduate embryology, anatomy, and general biology. Research area open.

**TWO TENURE-TRACK ASSISTANT PROFESSOR**

positions beginning fall 1989.

OTHER QUALIFICATIONS: Ph.D. in discipline completed by starting date; postdoctoral experience preferred. Training or experience in position area and commitment to quality teaching and research. Send, postmarked by 17 January 1989, curriculum vitae, a statement of personal teaching philosophy and research interests, transcripts of all college work, and names of three references to: Chair (Specify position), Search, Department of Biology, Georgia Southern College, Statesboro, GA 30460-8042. Georgia Southern is an Affirmative Action/Equal Opportunity Employer, which invites and encourages applications from women and minorities.

The Physics Department of Tulane University invites applications for a tenure-track ASSISTANT PROFESSOR, faculty position to start in August 1989 in biophysics. Candidates are sought with a record of research achievement and strong aptitude for teaching at the undergraduate and graduate levels. The applicant will provide courses in biophysics, a statement of research interests, and plans, and have three letters of reference sent prior to 31 January 1989 to: Dr. G. Rosensteel, Chair, Physics Department, Tulane University, New Orleans, LA 70118. Tulane University is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR**

**JOHNS HOPKINS UNIVERSITY**

**CELL BIOLOGIST**

The Department of Biology of the School of Arts and Sciences at Johns Hopkins University seeks a tenure-track faculty position. We are searching for an individual who will establish an independent research program in the broadly defined area of cell biology and who will participate in undergraduate teaching and in our graduate training programs.

The Department has 24 full-time and 7 part-time faculty members on the Homewood campus. The full-time faculty are located in a new building with outstanding facilities and spacious labs. The part-time faculty are members of the Cambridge Institution which is located in a nearby building. The research of half the faculty is related to various aspects of cell biology.

Please send curriculum vitae, a statement of research interests, and three letters of reference by 15 January 1989 to:

Chair, Cell Biology Search Committee
Department of Biology
Johns Hopkins University
Baltimore, MD 21218
The Johns Hopkins University is an Affirmative Action/Equal Opportunity Employer.

**ASSISTANT PROFESSOR**

**THE LUNG BIOLOGY CENTER**

The Lung Biology Center at the University of California, San Francisco, is seeking a cell and molecular biologist to lead an independent research program in the molecular biology of cell surface adhesion, with special reference to molecule potentials relevant to lung injury and repair. This faculty member will also be expected to participate in the regular teaching activities of the departments of Medicine and Pharmacology.

Candidates must have a Ph.D. degree, and at least 4 years of postdoctoral research experience in adhesion receptor biology. The annual salary will be $50,000 to $60,000 depending upon experience.

Send resumes to: Dean Sheppard, Director, Lung Biology Center, Building 1, Room 150, San Francisco General Hospital, 1001 Potrero Avenue, San Francisco, CA 94110.

Deadline for receipt of application is 10 January 1989.

The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**ASSISTANT PROFESSOR—THE LUNG BIOLOGY CENTER**

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The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**ASSISTANT PROFESSOR**

**TENURE-TRACK**

**MOLECULAR BIOLOGY**

The Department of Biology and Molecular Biology, Louisiana State University School of Medicine in Shreveport invites applicants for two tenure-track positions at the assistant professor level. We are seeking candidates with a strong background in molecular biology, molecular genetics, protein biochemistry and physical biochemistry. We especially encourage applications whose research interests are focused on cell or cell-free systems, but are open to consider applications that may extend this area. Moreover, outstanding candidates in other areas of molecular biology and biochemistry will definitely be considered. The Department currently has well-funded research programs studying gene expression and regulation in prokaryotic and eucaryotic systems, yeast genetics, molecular biology and protein chemistry. Letters of application, including curriculum vitae, a statement of future research interests as well as three letters of reference should be sent by 15 January 1989 to: Dr. Richard J. Courtney, Chairman, Department of Biology and Molecular Biology, L.S.U. Medical Center, 1801 Kings Highway, Shreveport, LA 71130. An Affirmative Action/Equal Opportunity Employer.

**ASSISTANT PROFESSOR OF MICROBIOLOGY—MOLECULAR BIOLOGY**

The Department of Biochemistry and Molecular Biology at the University of Vermont invites applications for a tenure-track assistant professor position in molecular biology. The candidate should have a strong background in molecular biology, molecular genetics, protein biochemistry and physical biochemistry. The candidate should also be interested in the area of viral biology. The candidate should be willing to participate in the regular teaching activities of the department. Send curriculum vitae, a statement of research interests, and three letters of reference by 15 January 1989 to:

Dr. E. M. Quadri
Department of Microbiology and Immunology
University of Maryland School of Medicine
660 West Redwood Street
Baltimore, MD 21201
An Equal Opportunity Employer.

**ASSISTANT PROFESSOR OF PHYSIOLOGY**

The Department of Physiology is seeking candidates for a faculty (12-month, tenure-track) position at the assistant professor level. This department has an orientation in the area of cardiovascular physiology. We seek an individual whose research interests relate to the microcirculation or vascular endothelial function, but encourage applications from individuals in other areas of cardiovascular or pulmonary physiology as well. The potential appointee is expected to establish an independent research program. The Department has a strong commitment to departmental research activities in molecular and cellular immunology, immunopathology of viral infections, immunology of HIV, and cardiovascular and parasitic diseases. Send curriculum vitae, description of research interests, list of publications, and names and addresses of three references to: Chair, Search Committee, Department of Microbiology and Immunology, University of Maryland School of Medicine, 660 West Redwood Street, Baltimore, MD 21201.
RAMAPO COLLEGE OF NEW JERSEY
Ramapo College of New Jersey, a 4-year undergraduate college of liberal arts, sciences, business and social work, enjoys a reputation for excellence in its academic programs, which have a strong interdisciplinary orientation. Its 357-acre, barrier-free campus is located approximately 25 miles from New York City. The college gives priority to excellence in teaching and expects scholarship. All faculty participate in student advising, governance, committees, student clubs, and college-related activities. For further information, contact Consultant Dr. John Karam, Professor in Chemistry, by phone 201-624-8739.

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
DEPARTMENT OF LABORATORY MEDICINE
Applications are being accepted for an ASSISTANT/ASSOCIATE PROFESSOR OF ANATOMY. Candidates should have a D.D.S./D.M.D. or Ph.D. degree with teaching experience in histology, in addition to at least one other area (neuroanatomy, embryology). The teaching responsibility will be to dental, dental hygiene, and medical students. A record of human students in dentistry is required. The successful applicant is expected to develop a productive research program. Applicants are encouraged to apply. In accordance with Canadian Immigration, priority will be given to Canadian citizens or permanent residents.

ASSOCIATE OR FULL PROFESSOR
DEPARTMENT OF GENETICS
The Department of Genetics, University of Washington, seeks candidates for a tenure-track appointment at the rank of assistant or associate professor, to begin in 1989 or 1990, depending on the availability of funding. The successful candidate is expected to develop a highly visible research program in a field of genetics of potential impact. This position affords the opportunity to develop a full research program in a highly visible, multi-disciplinary department. The department has an active, interdisciplinary program in molecular biology as well as significant strengths in the areas of biochemistry, cell biology, immunology, and population genetics. A Ph.D. degree in a relevant field and a strong background in research is required. The position includes a substantial start-up budget and other standard benefits. Initial applications should be submitted by March 15, 1989.

HARVARD UNIVERSITY
ASSOCIATE PROFESSOR
DEPARTMENT OF BIOLOGICAL SCIENCE
The Department of Molecular Biology at Harvard University is one of the largest and most active in the world. The department includes a vibrant research community with over 100 members. Researchers in the department are active in many areas of molecular biology, from genetics and biochemistry to cell biology and neurobiology. The department has a long tradition of excellence in teaching and is committed to recruiting excellent new faculty members. The department also has a strong graduate program, with over 100 graduate students and 20 postdoctoral fellows. The department is seeking candidates for tenure-track positions in molecular biology, with a particular emphasis on the intersection of molecular biology with other fields such as genetics, biochemistry, cell biology, and neurobiology. The department is particularly interested in candidates with a strong commitment to teaching and mentoring of graduate students and postdoctoral fellows. The department is committed to fostering a diverse and inclusive research community. The application process begins on October 1, 2023, and will continue until the position is filled. Applications must be submitted online through the Department of Biological Science's website. Applications should include a cover letter, curriculum vitae, statement of research plans, and three letters of recommendation. Applicants should submit their applications by January 1, 2024.
Opportunities

Research Engineer Opportunities

Physio-Control, a world leading manufacturer of biomedical instrumentation, is looking for outstanding professionals in the following research and engineering disciplines to join our team.

Research Scientist

You’ll be accountable for database design, graphics software design for data annotation, statistical analysis and biomedical signal processing. An MSEE (Ph.D. preferred) with a minimum of 5 years related experience required. Artificial intelligence/neural experience is highly desirable.

Physiologist

We’re seeking a Physiologist with specialization in the cardiovascular system. A Ph.D. in physiology with undergraduate education in engineering or physics is required. The successful candidate will have a history of medical research publishing in the cardiovascular area. A minimum five years’ experience in the field and a demonstrated ability to teach physiology is necessary.

Physio-Control offers a 4-day workweek, immediate medical/dental coverage, company matched savings plan, bonus plan, and much more. For immediate consideration, send resume and salary history in confidence to: Physio-Control, Human Resources Department, 11811 Willows Road, P.O. Box 97006, Redmond, WA 98073-9706. EOE.

AUSTRALIA

CHIEF OF DIVISION
DIVISION OF CHEMICALS AND POLYMERS
Minimum $75K plus benefits.

Dr. D.H. Solomon, FAA, FTB, the Foundation Chief of the Division, has indicated his intention to retire from his position following the appointment of his successor.

We are therefore seeking a scientist with a commitment to research management, a distinguished record of research achievement and preferably with a knowledge of the Australian chemicals and plastics industry to lead and manage the Division of Chemicals and Polymers.

The Division’s objective is to develop new technologies aimed at making the Australian chemical and plastics industry competitive in domestic and international markets, and to provide support for Australian industries concerned with water purification. The Division is in the process of moving to a new laboratory in Clayton, Victoria. It is well equipped with modern spectroscopic and computer graphics facilities and it has recently spent approximately $1 million in building up its chemical processing and instrumental capabilities. The total staff of the Division is 171 of whom 69 are professional scientists, and the budget in 1988/89 is $10M.

The Chief will be responsible for leadership, scientific direction and integration of the Division’s research programs, the effective management of the Division’s operations, and for the commercialisation of research with Australian industry.

We invite applications for this position, and would also like to hear from people in this field who may wish to suggest possible candidates.

Further information on this appointment can be obtained from Dr C.M. Adam, Director of the Institute of Industrial Technologies, who can be contacted in Melbourne on telephone 613 542 2897.

Applications (including the names of at least two professional referees) should be addressed to Dr J.R. Yates, Manager (Human Resources and Finance), whose postal address is:

CSIRO Institute of Industrial Technologies
PO Box 225
DICKSON ACT 2602
AUSTRALIA

Closing date for applications is 31 December 1988.

CSIRO IS AN EQUAL OPPORTUNITY EMPLOYER

EG&G BIOMOLECULAR

Opportunities in Automated DNA Sequencing Instrumentation

We’re part of EG&G, a Boston-based Fortune 500 Company with a 40-year tradition of leadership in science and technology. We’re looking for people interested in working independently in a dynamic, people-oriented environment. We have openings for:

TRAINING MANAGER: DNA SEQUENCING

You will develop and implement customer training programs for our automated DNA sequencer, and provide technical support to customers and sales/marketing staff. You’ll work closely with customers and scientific advisors to identify new product opportunities. We require an advanced life sciences degree plus DNA sequencing and molecular biology lab experience.

SENIOR LABORATORY TECHNICIAN

This person will conduct research and development activities in our molecular biology lab. We require an MS in Molecular Biology or equivalent plus 3 years of experience in a DNA research lab, preferably in an industrial environment.

Become part of the EG&G tradition. Send a resume with salary requirements to: Christine Zielinski, EG&G Instruments Group, 40 William St., Wellesley, MA 02181.

An equal employment opportunity employer in both policy and practice.
BIOLICAL SCIENCE EDUCATION

The Math, Science, and Technology Cluster, Department of Biological Sciences, is seeking a full-time position as a FACULTY MEMBER with a strong background in the biological sciences. This position offers the opportunity to teach graduate level courses to teachers of science primarily at the precollegiate level. This includes advising of graduate students, supervision of field studies, and direction of student theses and dissertations. An active research program within the area of science teaching and knowledge dissemination will be emphasized along with major responsibilities for program development. Rank: Open. Doctorate required. This is an academic year, tenure-track position. Salary competitive and commensurate with academic background and experience. Send application materials including curriculum vitae, transcripts, and three letters of recommendation before 15 January 1989 to: Search Committee, Biological Sciences Education, Rutgers University, Graduate School of Education, 10 Seminary Place, New Brunswick, NJ 08903. Rutgers University is an Affirmative Action/Equal Opportunity Employer. This position is contingent on available funding.

COLLEGE OF THE ATLANTIC

College of the Atlantic is a small, private, nondepartmental college offering a Bachelor of Arts in Human Ecology. The College emphasizes interdisciplinary study, self-governance, team-teaching and curricular innovations. The College seeks a FACULTY MEMBER in botany to begin in fall 1989. The successful applicant will teach annual courses in sustainable agriculture, plant use, and precollege level courses in several of the following areas: plant physiology, plant pathology, soil science, entomology, and fungal diseases. Responsibilities would include developing a curriculum and teaching in related programs to other courses in the curriculum (e.g., ecology, public policy, landscape design) and supervising the college's greenhouse and living plant collection. Teaching experience and a doctorate are preferred. Send a letter of application, curriculum vitae, and three letters of reference to: Faculty Search Committee, College of the Atlantic, Bar Harbor, ME 04609. Preference may be given to applications received before 16 January 1989.

College of the Atlantic is an Equal Opportunity/Affirmative Action Employer.

CELL BIOLOGY assistant professor, tenure-track, to start summer 1990. Successful candidate will be expected to develop an extramurally funded research program, conduct undergraduate teaching required. Subdisciplinary open; neurobiology, anatomy, histology experience helpful. Some start-up funds available. Open to all qualified candidates, with applications due by 31 January 1989. Send letter, curriculum vitae to: Dr. S. L. Beck, Chair, Department of Biological Sciences, DePaul University, Chicago, IL 60614.

The Marshall University Biology Department invites applications for two 9-month, tenure-track positions beginning fall 1989. CELL/MOLECULAR BIOLOGIST: Teaching responsibilities include cell biology, introductory biology and the opportunity to develop an advanced cell biology course. ANIMAL PHYSIOLOGISTS: DEVELOPMENTAL BIOLOGIST: Teaching duties include sophomore course with laboratory in human physiology, introductory biology; others depend on qualifications. Some positions are open to candidates with Ph.D. or M.D. Ph.D. required. Salary dependent upon qualifications. Send curriculum vitae, research interests, transcripts, and addresses of three references by 31 January 1989 to: Chair, Biology Department, Marshall University, Huntington, WV 25701. Equal Opportunity/Affirmative Action Employer. Minorities and women encouraged to apply.

CONSULTING—Technical and management consultant. Quantitative and qualitative analysis of data and communication of findings to government and others, seeks Ph.D. or M.S. with equivalent experience in biological, chemical, pharmacological or toxicological areas to participate in projects and grow into the consulting business. Please reply: Box 195, SCIENCE.

BIOLICAL SCIENCE EDUCATION

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CHIEF,
CLINICAL IMMUNOLOGY BRANCH

The Allergy, Immunology and Transplantation Program (AITP) of the National Institute of Allergy and Infectious Diseases, NIH, is currently recruiting for Chief of the Clinical Immunology Branch. The incumbent plans and conducts the NIAID’s research and training grants, fellowships and career award programs in this area; coordinates various support programs and develops priorities within this scientific area; reviews and presents to the National Advisory Allergy and Infectious Diseases Council applications in this program area; and develops and maintains liaison with appropriate departments of universities, other institutions, other components of the NIH and DHHS, advisory bodies and other organizations.

Applicants for this position should possess the M.D. degree as well as research and grant experience and should have a track record demonstrating the ability to obtain research support.

Applicants for the Branch Chief position must qualify for a GS-14/15 rating with salary range of $46,679 to $71,377 or an appointment in the USPHS Commissioned Corps; salary to be consistent with appropriate rank. Physician’s Comparability Pay up to $20,000 may be payable, also. U.S. citizenship required.

For further information about these positions, please write directly to:

Dr. Robert A Goldstein, Acting Director, AITP
NIAID, Building 31, Room 7A-52
National Institutes of Health
9000 Rockville Pike
Bethesda, MD 20892

GROUP LEADER
Analytical Methods Development

The Dade Division of the Fortune 75 Baxter Healthcare Corporation is a leading supplier of diagnostic products and instrumentation for clinical laboratories. We are enjoying continued growth and our expansion at facilities in the U.S., Europe and Puerto Rico has created an exciting opportunity to join our outstanding scientific/technical team.

The selected candidate will establish and lead a group responsible for developing, validating, and implementing precise and accurate methods of analysis for our raw material chemicals, in-process materials and products. The incumbent will have responsibility for hiring and training employees, selecting instrumentation, and establishing a rapport with our suppliers on the technical aspects of our materials. The preferred technical background includes a Ph.D. in Chemistry with at least 5 years medical products experience, 2 years at the supervisory level.

For consideration, please send your resume along with salary history in confidence to: Professional Staffing, Baxter Healthcare Corporation, Dade Division, P.O. Box 520872, Miami, FL 33152. Equal Opportunity Employer.

Dade Division

Looking for a Career Change?

An editorial position at Science is available for a PhD biomedical scientist with a broad range of interests and research experience in one or more of the following areas: molecular pharmacology and physiology, pre-clinical sciences, structural biology, or eucaryotic molecular biology. We are seeking someone with at least two or three years of post-doctoral experience in quantitative aspects of the life sciences and publications in the refereed literature. Editors have varied responsibilities in manuscript selection ranging from solicitation to editing for clarity. Previous editorial experience is not required. This is a full-time position in our Washington offices.

Please send resume and list of publications with cover letter and salary requirements to:

Mr. Gregory Stokes
AAAS
1333 H Street, NW
Washington, DC 20005

EOE
The faculty and administrative leadership seek to create a world-class environment for the education and training of students, graduates, and fellows. The position requires strong scientific, organizational and administrative skills. Submit curriculum vitae and references to: Bruce Magness, Chair, Search Committee, Microbiology Search Committee, L 215, Oregon Health Sciences University, Portland, OR 97201. An Affirmative Action/Equal Opportunity Employer.

**Chairperson, Department of Stomatology**

**University of California, San Francisco**

Full-time position as Chairperson of the Department of Stomatology which includes programs in oral biology, oral medicine, oral pathology, periodontology, and oral radiology. Responsibilities include providing academic and administrative leadership in research, teaching, patient care and community and university service for undergraduate, predoctoral and postdoctoral students, and faculty, in conjunction with administrative office and academic qualifications (D.D.S., M.D., Ph.D. or equivalent degree) for a senior professorial rank are required. Salary commensurate with qualifications and experience. Applications from women and minorities are encouraged. The University of California, San Francisco is an Equal Opportunity/Affirmative Action Employer.

Please send curriculum vitae and the names of three individuals familiar with your work to: Dr. Leonard B. Kaban, Chair, Search Committee, In care of: Office of the Dean, School of Dentistry, Box 0430, UCSF, San Francisco, CA 94143. Applications should be submitted by 28 February 1989.

**U.S. Army Chemical Research, Development and Engineering Center**

**Research Directorate**

Edgewood Area

Aberdeen Proving Ground, MD 21010-5423

**Chief Scientist**

Rating and salary range: GM-15, $54,907 to $71,377 per annum

The Chief Scientist is responsible for the development and coordination of the center's multi- and interdisciplinary research program in chemistry, physics, toxicology and biotechnology, and serves as interface with academia, industrial and governmental laboratories. Ph.D. or equivalent in the physical or life sciences is desired, and demonstrated experience in the performance and management of research programs.

Please send resume to: Civilian Personnel Office, Recruitment and Placement Division (Attention: Beverly Badnick), Aberdeen Proving Ground, MD 21005-5001.

An Equal Opportunity Employer.

**Director, Radioimmunoassay Core**

**Diabetes Endocrinology Research Center, University of Washington**

Division of Endocrinology/Metabolism, Seattle, Washington. This position is a research faculty position with rank dependent upon experience. The applicant should have a Ph.D. degree and a strong background in peptide chemistry and diagnostic hormone radioimmunoassays. The major responsibility will be directing the Core laboratory which processes routine radioimmunoassays, and development of new assays as required by the Affiliate Investigators of the Center. Approximately 50% of time will be available for independent research, and independent grant support is highly desirable. Training, expertise, interest in diabetes, endocrinology and metabolism research is desired. For further information please contact: Dr. Leslie J. Klafl, Acting Director, Radioimmunoassay Core, Diabetes Endocrinology Research Center, Quarters 8, Pacific Medical Center, 1200-12th Avenue South, Seattle, WA 98144; Telephone: 206-341-6481. The University of Washington is an Equal Opportunity Employer.

**Chair—Microbiology and Immunology**

The Oregon Health Sciences University School of Medicine invites candidates to apply for the position of Chair of the Department of Microbiology and Immunology. The faculty of this university-based department are engaged in research and in the teaching of medical and graduate students and fellows. The position requires strong scientific, organizational and administrative skills. Submit curriculum vitae and references to: Bruce Magness, Chair, Search Committee, Microbiology Search Committee, L 215, Oregon Health Sciences University, Portland, OR 97201. An Affirmative Action/Equal Opportunity Employer.

**DEPUTY LABORATORY DIRECTOR**

ERL-Corvallis conducts in-house and extramural research in the areas of aquatic toxicology, pollution and biodiversity, and is interested in a strong, dynamic, and innovative long-term commitment to suspect and resolve our problems in the environment. The Deputy Laboratory Director is responsible for the management of the laboratory, including personnel, finance, and operations, as well as providing departmental leadership for the Laboratory. This position is a permanent appointment which is designed as a career development assignment. The individual selected can expect, after approximately two years, reassignment to another research management position, possibly at another geographical location. Requirements include significant research program management experience in the environmental sciences. The position is available immediately with a salary of $54,907 per year in Corvallis, Oregon. Applicants must be U.S. citizens.

**Chief, Watershed Branch**

The Watershed Branch of ERL-Corvallis conducts in-house and extramural research on the effects of pollutants and other human activities on aquatic ecosystems, and is interested in a long-term commitment to suspect and resolve our problems in the environment. The Branch Chief is responsible for the management of the Branch laboratory, including personnel, finance, and operations, as well as providing departmental leadership for the Branch. This position is a permanent appointment which is designed as a career development assignment. The individual selected can expect, after approximately two years, reassignment to another research management position, possibly at another geographical location. Requirements include significant research program management experience in the environmental sciences. The position is available immediately with a salary of $54,907 per year in Corvallis, Oregon. Applicants must be U.S. citizens.

**Director, Wisconsin Regional Primate Center**

The University of Wisconsin-Madison announces a search for the Director of the Wisconsin Regional Primate Center (WRPC) to lead development of strong research programs involving University Faculty and Staff and outstanding visiting researchers in important biomedical areas in which the non-human primate offers unique opportunities for metabolic, developmental, reproductive and behavioral research relevant to human health. The Director will: develop and maintain the Center as a major resource for the University community and beyond; hire, train and manage a full-time staff of laboratory and support personnel; manage an annual budget of $2.5 million, to include endowment funds; coordinate, market and provide primate services to researchers and other interested groups; and, when appropriate, engage in research. Submit curriculum vitae and the names of three references to: University of Wisconsin-Madison, Search Committee, C/O Human Resources, 1151 Engineering Drive, Madison, WI 53706. An Equal Opportunity/Affirmative Action Employer.

**Director of Research and Development**

A progressive and rapidly growing biomedical company located in the southeastern United States is searching for an individual to lead the Company's product development programs in diagnostics, immunoposposes and topical drug delivery technologies. The position reports to the President and requires:

(i) Demonstrated success as an R&D executive in a pharmaceutical and/or biotechnology environment with significant experience and knowledge in the areas of recombinant DNA technology, drug formulation and drug delivery technologies (specifically in the autoimmune and cancer areas) in addition to FDA and regulatory matters.

(ii) A Ph.D. in biochemistry (pharmacology, toxicology, chemistry, microbiology, pharmaceutical chemistry or related areas).

The Company offers an outstanding growth opportunity with a competitive salary, stock options and benefits package. Please forward your resume and salary history in confidence to:

Lipogen, Inc., 1015 Research Drive, Knoxville, TN 37932

**UNIVERSITY OF PITTSBURGH**

**DIRECTOR OF THE UNIVERSITY LIBRARY SYSTEM**

The University of Pittsburgh invites nominations and applications for the position of Director of the University Library System. The University Library System includes 18 libraries plus 7 affiliated libraries. The Director is the chief spokesperson for general University library needs, and is responsible for the planning, policies and coordination for the activities of all University libraries through the Coordinating Committee for University Libraries. The combined libraries represent a total collection of 2,003,631 volumes and 2,258,240 microforms, and are staffed by 93 professional librarians. The libraries serve 34,000 graduate and undergraduate students, and 2,540 faculty.

Qualifications for this position include:

- A clear understanding of the role of an academic research library, the possibilities of resource sharing, and the issues facing research librarianship and higher education in general;
- Ability to establish and maintain effective communications and relationships with library staff, faculty, administrators and students;
- Knowledge of library automation and new library technologies;
- Appreciation for library administrative experience and educational background.

Salary is commensurate with experience. Nominations and/or applications, including current résumé and references, should be submitted no later than November 15, 1989 to: Dr. Donald M. Henderson, Vice Provost, University of Pittsburgh, 826 Cathedral of Learning, Pittsburgh, PA 15260.

ENDOCRINOLOGY AND METABOLISM—Two positions (Ph.D.or M.D.) to join a multidisciplinary research group in diabetes and obesity are available immediately. Interest could include in vitro metabolism of adipocyte and muscle cells; insulin signals; insulin receptors' structure and function; assessment in vivo insulin action and metabolism in rodent models; and the use of genetic techniques to the etiology and pathogenesis of diabetes. Please send curriculum vitae to: Jose F. Caro, M.D., Department of Medicine/Endocrinology, East Carolina University School of Medicine, Greenville, NC 27855. An Equal Opportunity/Affirmative Action Employer. Federal law requires proper documentation of identity and employability at the time of employment. It is requested that this documentation be included with your application.
Our Worldwide Influence Starts
With Advanced Research

G.D. Searle is recognized worldwide for high caliber professionals and respected products. With research as a top priority in our ongoing commitment to increased growth and industry influence, we now offer exceptional opportunity within our Central Nervous System Drug Research area.

ASSOCIATE DIRECTOR—NEUROPHARMACOLOGY

The successful candidate will manage, coordinate and provide scientific leadership to a strong, multidisciplinary group of scientists, and should have experience and expertise in neurochemical research and behavioral research, as well as analgesic testing. Within this important scientific management position, the qualified individual will contribute to the choosing of research directions, in addition to managing related activities. The position involves close liaison and cooperative activities with colleagues in chemistry and molecular biology. We seek a productive individual with a strong scientific reputation and a significant record of supervisory, as well as research achievement. The player-manager concept is encouraged, and therefore, the successful candidate could maintain a laboratory with postdoctoral assistance. We require a Ph.D. in Neuropharmacology or related discipline and postdoctoral training.

RESEARCH SCIENTIST—NEUROPHARMACOLOGY

While playing an important role in drug discovery, the selected candidate will supervise several junior scientists and have the opportunity to work with other CNSDR biologists, chemists, molecular biologists, development scientists, and clinicians. We seek a productive Ph.D. scientist with postdoctoral experience and knowledge of neuroscience/neuropharmacology. Several years of research experience and a publication record in a number of related neuropharmacological areas, including opioid/non-opioid analgesic research are essential.

G.D. Searle provides a stimulating scientific environment, with career challenges to match your abilities. In addition, we offer excellent compensation and benefits. For consideration, send your resume to: G.D. Searle & Co., Human Resources Dept. HY2, 4901 Searle Parkway, Skokie, IL 60077. Equal Opportunity Employer M/F.

Postdoctoral Scientist
Molecular Genetics/
Respiratory Pharmacology

Smith Kline & French Laboratories, a leader in pharmaceutical research, is seeking additional Postdoctoral Scientists to expand its current research programs. These are excellent opportunities for innovative interdisciplinary research in our new and superbly equipped Research and Development Center in suburban Philadelphia near Valley Forge, PA.

We offer an excellent compensation, benefits, and relocation package as well as opportunities for personal and professional growth. Publication of research results is encouraged and supported.

Molecular Genetics

The Department of Molecular Genetics is seeking outstanding Ph.D. scientists to pursue research on the molecular genetics of yeast (S. cerevisiae and C. albicans).

THE SUCCESSFUL CANDIDATE WILL HAVE:

• Ph.D. in Biological Science.
• Experience in recombinant DNA techniques.
• Experience in molecular genetics of yeast and protein purification is highly desirable.

Please refer to job # S0065.

Respiratory Pharmacology

The Department of Pharmacology is seeking outstanding Ph.D. scientists to pursue research on cellular mechanisms of pulmonary inflammation.

THE SUCCESSFUL CANDIDATE WILL HAVE:

• Ph.D. in Pharmacology, Immunology or Biochemistry.
• Experience with second messenger and/or signal transduction mechanisms.
• Knowledge of biochemical regulation of inflammatory cell function highly desirable.

Please refer to job # 50066.

For confidential review, qualified candidates should forward your C.V. and names of three references to Barbara J. Schwartz, Job # Employment Administrator, Smith Kline & French Laboratories, P.O.Box 1539, King of Prussia, PA. 19406-0939. We are an Equal Opportunity Employer. M/F/H/V.
POSITIONS OPEN

DIRECTOR OF CLINICAL OPERATIONS

OCLASSENCHEMICALS, a leading edge company, developing new drugs in the areas of dermatology and virology is in need of a director of clinical operations.

The successful candidate’s responsibilities will include: designing clinical research programs, overseeing protocol and data analysis, evaluation, and reporting of investigator, data base construction and final medical/statistical report generation.

The ideal candidate will have a minimum of 5 years of clinical research experience in the pharmaceutical industry, strong knowledge of FDA requirements for clinical trials with a project management focus and excellent verbal and written communication skills. A background in dermatology or infectious diseases is a plus. M.D., Ph.D., or Pharm D. ideal.

In this unique opportunity to receive a competitive base salary and equity participation with a company whose top management has an outstanding record for developing and profitably marketing dermatology and antiviral products. For immediate consideration please call or send your résumé to: Oclassenchemicals, c/o Sullivan Research West, 253 Millino Drive, San Francisco, CA 94105. Telephone: 415-587-2904. Equal Opportunity Employer.

EDUCATION—BIOCHEMIST—West Chester Uni

University’s ACS-approved chemistry department invites applications for a tenure-track assistant professor position to begin September 1989. Ph.D. in biochemistry required and postdoctoral experience preferred; all areas of research will be considered. Preference will be given to candidates with a background in molecular biology. Commitment to Master’s and undergraduate level teaching and research required. Send curriculum vitae, undergraduate and graduate transcripts, a complete outline of research interests and teaching philosophy, and three letters of recommendation by 16 January 1989 to: Dr. Jamil Ghoroghchian, Chemistry Department, West Chester University, West Chester, PA 19383. Affirmative Action/Equal Opportunity Employer.

Penn State FACULTY POSITION PROTEIN-X RAY CRYSTALLOGRAPHY

Applications are invited for a tenure-track faculty position at any level in the area of protein x-ray crystallography. The position will be available in either the Department of Chemistry, the Department of Molecular and Cell Biology, or as a joint appointment in these departments or with Penn State’s Biotechnology Institute. Applicants, with a Ph.D., degree, should have the background, motivation, and ability to develop a productive research program and to be excellent teachers. Include a detailed position description of research interests and a curriculum vitae. For receipt of applications by 15 March 1989, or until a suitable candidate is found. An Affirmative Action/Equal Opportunity Employer. Women and minorities encouraged to apply.

FACULTY POSITIONS IN MOLECULAR GENETICS

Applications are invited for several tenure-track positions in an interdisciplinary program in Molecular Genetics at the Wake Forest University Medical Center. Preference will be given to candidates whose research involves studies in one or more general areas of regulation of gene expression and genetic approaches to studying protein structure/function relationships. Opportunities exist for interaction with ongoing research programs in protein structure, membrane biology, immune regulation, neuroscience, developmental biology, lipoprotein and arterial lipid metabolism. Experience in cloning, expression, regulation, diagnosis, manipulation, and pathogenesis by infectious agents. Academic rank for these appointments will be commensurate with the experience of the candidate. Send curriculum vitae, a description of research interests, and names of three references to: Dr. Moseley Waite, Chairman, Molecular Genetics Steering Committee, Wake Forest University Medical Center, Winston-Salem, NC 27103.

Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN BIOCHEMISTRY AT THE UNIVERSITY OF NEBRASKA MEDICAL CENTER

The Department of Biochemistry of the University of Nebraska Medical Center at Omaha is seeking a qualified individual to fill a faculty position. All applicants should hold a Ph.D. in biochemistry or a related discipline and should have postdoctoral experience with a strong structural biochemistry background. Interested applicants should submit a letter of application, a detailed curriculum vitae including teaching and research experience, and three letters of recommendation by 31 December 1989 to: Dr. Samuel Silverstein, c/o Department of Microbiology, Columbia University, 701 West 168th Street, New York, NY 10032.

Emory University, Department of Radiology, seeks a Ph.D. or M.D. with either NMR spectroscopy or imaging experience for a full-time FACULTY POSITION.

The candidate must be able to originate funded research projects using NMR and collaborate with other faculty members (in or out of radiology) on NMR research. Experience in magnetic resonance imaging, spectroscopy, and/or methods of data analysis as well as a research background in clinical or preclinical imaging is desirable. Salary is commensurate with experience and skills. Two 1-meter clinical imagers operating at 0.5 and 1.5 T and a 300-MHz instrument fully programable, will be available. The department is part of an 80-bed tertiary care complex giving ample opportunity for collaboration with clinical medical, surgical and medical, biology, biochemistry, analog electronics, and computer science are useful skills.

Send your résumé and a letter of interest to: Dr. Thomas Dixon, Director. FAX: 404-727-7600. Emory University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION IN IMMUNOLOGY

ASSISTANT PROFESSOR, TENURE-TRACK

Requires postdoctoral experience and demonstrated research capability. Will be expected to establish an independent, externally-funded research program focusing on a significant problem in immunology, using molecular or genetic approaches. Teaching responsibilities might include an undergraduate/graduate course in immunology or a graduate-level course in area of interest. Position available for Fall 1989. Send curriculum vitae, statement of current and future research interests, and three letters of reference to: Dr. Dwane Wylie, Immunology Search Committee, School of Biological Sciences, Purdue University, West Lafayette, IN 47906-1218. Applications will be reviewed by 30 January 1989, but will be accepted until a suitable candidate is found.

Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN MUTAGENESIS/CARCINOGENESIS/GENETIC TOXICOLOGY

at Oregon State University. The Oregon State University Environmental Health Sciences Center and Department of Agricultural Chemistry jointly seek an individual with postdoctoral experience to fill an assistant professor position available July 1989. The primary responsibility will be to develop a strong research program focused on mechanistic aspects of mutagenesis and carcinogenesis, probably with an emphasis in molecular biology.

Emphasis on mammalian processes is desirable, but not mandatory. Interaction with molecular biologists and other faculty in the Department of Agricultural Chemistry and the Center for Gene Research, and with the facilities of the Environmental Health Sciences Center and the graduate Toxicology Program is encouraged.

There will be an initial period of supervision by Ph.D. students and to participate in graduate and undergraduate course education, but no formal teaching requirements for 3 years. Send curriculum vitae, a description of research interests, and a list of at least three references by 1 February 1989 to: Genotoxicology Search Committee, Department of Agricultural Chemistry, Oregon State University, Corvallis, OR 97331.

Ohio State University is an Affirmative Action/Eual Opportunity Employer. Women and minorities are encouraged to apply.

FRUIT ENTOMOLOGIST

Applications and nominations are invited for a tenure-track assistant professor position in fruit insect entomology at Michigan State University. The position is responsible for research and extension programs on the biology and management of insect pests of tree fruit, and Coordinator of the Trevor Nichols Research Station. Involvement with ongoing interdisciplinary projects at the MSU campus and research stations throughout Michigan is encouraged. Solicitation of external resources for research and graduate student support is expected. Teaching opportunities in courses such as agricultural entomology and other areas of the individual’s posting are possible. Qualifications: Ph.D. in entomology with emphasis in insect pest management or applied ecology. Strong skills in working with Cooperative Extension Service agents, growers, private industry, and other disciplines for development of tree fruit insect management programs. Experience in tree fruit and extension desirable but not required.

Send résumé, reprints, statement of career goals, and three letters of recommendation to: Dr. G. W. Bird, Chair of Search Committee, Department of Entomology, Michigan State University, East Lansing, MI 48824-1188. Screening of applicants will begin in mid-December 1988. Review of applications will continue until the position is filled. Michigan State University is an Affirmative Action/Equal Opportunity Institution.
Plant Scientist

Applications are invited for a staff position in the area of plant cell biology, molecular biology or genetics. Applicants should have a Ph.D. or equivalent degree and relevant postdoctoral training. The selected candidate will be expected to develop an independent and creative program on a biologically important topic relevant to higher plants.

Protein Biochemist

Applications are invited for a staff position in the area of protein biochemistry, structure and function. Applicants should have a Ph.D. or equivalent degree, relevant postdoctoral training and research interests that complement existing programs. The selected candidate will assume the direction of an operational facility for protein microsequencing.

- The Biology Department has strong programs in molecular genetics, structural biology, DNA damage and repair, virology, and plant molecular biology.
- Offers include excellent start up funding and facilities, a competitive salary, and a comprehensive benefits package.

Those responding should indicate the position desired and submit a curriculum vitae, a list of at least three professional references, and a brief statement of research interests to: H.Z. Kondratuk, Biology Department, Brookhaven National Laboratory, Associated Universities, Inc., Upton, L.I., New York 11973. Deadline for applications is January 15, 1989. Equal Opportunity Employer m/f.

Assay Development Scientist

Baxter Healthcare Corporation, MicroScan Division, develops and manufactures computer controlled electronic instrumentation and disposables used in the clinical laboratory. Research involves systems dealing with rapid identification and susceptibility testing.

We are seeking an individual with a Ph.D. in Microbiology, Molecular Biology, Chemistry or a related field with required exposure to nucleic acid assay development and sample processing.

Baxter Healthcare Corporation, MicroScan Division, is a leader in the healthcare industry and we offer excellent salaries and benefits to the individuals who qualify for our positions. If you feel that you have the skills we need, send your resume, stating current salary, to: Vice President of Human Resources, Baxter Healthcare Corporation, MicroScan Division, 1584 Enterprise Blvd., West Sacramento, California 95691. We are an equal opportunity employer m/f/h/v.

MicroScan Division

Baxter

AUSTRALIA

CHIEF OF DIVISION
DIVISION OF MATERIALS SCIENCE AND TECHNOLOGY

Minimum $A75K plus benefits

Following the appointment of the Foundation Chief, Dr. C.M. Adam, to the position of Director, Institute of Industrial Technologies, we are seeking a scientific with a commitment to research management, a distinguished record of research achievement, and preferably with knowledge of the Australian materials manufacturing and processing industries, to lead and manage the Division of Materials Science and Technology.

The Division’s objective is to aid the creation or further development of industries based on materials science and technology. The Division has a strong core of research in the strategic areas of ceramics, alloys, catalysis, solid state science, and scientific instrumentation. It collaborates with industry in the development and commercialisation of its work. The Division has 160 staff of whom 85 are professional scientists or engineers, with a budget in 1988/89 of $12M. The Division has a well-equipped laboratory located in Clayton, Victoria. Its equipment includes a Bruker MSL 400 NMR spectrometer, various electron spectroscopic instruments, high resolution electron microscopy, advanced X-ray equipment, a laboratory scale HIP facility and a modern workshop.

The Chief will be responsible for the leadership, scientific direction and integration of the Division’s research programs, the effective management of the Division’s operations, and for the transfer of research results to industry.

We invite applications for this position, and would also like to hear from people in this field who may wish to suggest possible candidates.

Further information on this appointment can be obtained from Dr C.M. Adam, who can be contacted in Melbourne on telephone 61 3 542 2897.

Applications (including the names of at least two professional referees) should be addressed to Dr. J.R. Yates, Manager (Human Resources and Finance), whose postal address is:

CSIRO
Institute of Industrial Technologies
PO Box 325
DICKSON ACT 2602
AUSTRALIA

Closing date for applications is 31 December 1988.

CSIRO IS AN EQUAL OPPORTUNITY EMPLOYER
FOSSIL ENERGY POSTGRADUATE RESEARCH PROGRAM—Opportunities at Energy Technology Division, Morgantown, West Virginia, and Pittsburgh. Available research positions in the areas of physical sciences, engineering, and microbiology available. Degree requirements are a Ph.D. or M.S. If you have a Ph.D. in a discipline involving a multidisciplinary program directed toward the molecular characterization, detection, and control of human cancers. Joint appointments in other departments as appropriate. Please send curriculum vitae and three references to: Dr. Matthew M. Ames, Ames Research Committee, Department of Oncology, Mayo Clinic, Jacksonville, FL 32224. An Equal Opportunity/Affirmative Action Institution.

GEOTECHNICAL ENGINEER Position involves soil foundation investigations, computer analysis of slope stability problems (writing/running programs in FORTRAN), remedial solutions to settlement problems, particularly emphasis is placed on offshore foundation design and analysis of properties of offshore sediments, design and analysis of offshore structures. Requires a Ph.D., postdoctoral training, laboratory testing and classification of soil samples; triaxial and consolidated triaxial testing; construction monitoring and observaton; field exposure and reporting; client presentations and marketing; marketing analysis and report writing. Requires Master's in engineering with a major in geotechnical engineering. Experience not required but must have had a course in foundation for ocean structures, offshore soil mechanics, physical oceanography, and finite element analysis. Must have Master's research or thesis on triaxial testing (monotonic and cyclic loading). Salary: $27,560 per year, 40 hours per week, 2 to 4 hours per week overtime (salaried-position-exempt from overtime pay), 7 a.m. to 3:30 p.m., Monday to Friday. Send resume to: Illinois Department of Employment Security, 401 South State Street, 3-South, Chicago, IL 60606. For more information call Robert Felton, Ref. #8270-F. An Employer Paid Ad.

HEAD OF THE DEPARTMENT OF BIOLOGICAL SCIENCES, Clemson University invites applications for the position of Head of the Department of Biological Sciences. The Department of Biological Sciences at Clemson University offers programs in biochemistry, biology, biochemistry, microbiology, and molecular biology. The successful candidate will have a Ph.D. in a relevant discipline and a minimum of five years of experience in teaching and research at the university level. Salary is negotiable and will be commensurate with qualifications and experience. The position is open on July 1, 1989. The search committee will continue to screen applications until the position is filled. Please send a letter of interest and a current CV to: Dr. J. W. Mc spree, Department of Biological Sciences, Clemson University, Box 20354, Clemson, SC 29633. The University is an Equal Opportunity/Affirmative Action Employer.

HUMAN BEHAVIORAL PHARMACOLOGY Postdoctoral research fellowship available for laboratory studies in human behavioral pharmacology at Johns Hopkins Medical School. Study of benzodiazepine and caffeine pharmacology, drug discrimination, drug self-administration and performance effects. Suitable for pharmacologist, psychologist or psychiatrist. Two-year duration with possibility of renewal. Send curriculum vitae and letter of interest to: Dr. Roland R. Griffiths, Ph.D., D-S-West, Psychiatry, Johns Hopkins Key Medical Center, 4900 Eastern Avenue, Baltimore, MD 21224.

INORGANIC CHEMIST, Hamilton College is seeking an inorganic chemist for a tenure-track position beginning in the 1989 to 1990 academic year. All areas of expertise will be considered. Applicants should have a strong interest in teaching and research at the undergraduate level. Teaching responsibilities include sharing responsibility for the junior level laboratory course and an upper level course in the area of expertise. The position is renewable. Salary is commensurate with experience. Please send a letter of interest and a current CV to: Dr. J. W. Mc spree, Department of Biological Sciences, Clemson University, Box 20354, Clemson, SC 29633. The University is an Equal Opportunity/Affirmative Action Employer, and women and minority candidates are encouraged to apply.

MARINE SCIENTIST Williams College is seeking applications for a scientist to teach marine biology and marine ecology in its undergraduate Marine Studies Program. The position is open as of July 1989. Facilities are at Mystic Seaport, Mystic, Connecticut, and the college will provide major support for the program. The successful candidate will teach marine biology and marine ecology to undergraduates and three or more of the following courses: marine biology, animal ecology, and introductory marine biology. The position is available as of July 1989. The teaching load is three courses per year. Salary, based on qualifications, is competitive. The position is open to U.S. citizens. Applications will be accepted through May 1, 1989. Send a letter of application and three letters of recommendation to: Dr. J. W. Mc spree, Department of Biological Sciences, Clemson University, Box 20354, Clemson, SC 29633. The University is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGY The Department of Biology at the University of Alabama, Tuscaloosa, AL 35487, invites applications for a position as an Associate or Full Professor level. Candidates at all levels are encouraged to apply. The successful candidate must have a demonstrated record of publication in the area of interest and research. Salary is competitive. The position is available as of July 1989. The position is open to U.S. citizens. Applications will be accepted through May 1, 1989. Send a letter of application and three letters of recommendation to: Dr. J. W. Mc spree, Department of Biological Sciences, Clemson University, Box 20354, Clemson, SC 29633. The University is an Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGY The Department of Biology, The University of Alabama, invites applications for a position at the Associate or Full Professor level. Candidates at all levels are encouraged to apply. The successful candidate must have a demonstrated record of publication and teaching in the area of interest and research. The position is open to U.S. citizens. Applications will be accepted through May 1, 1989. Send a letter of application and three letters of recommendation to: Dr. J. W. Mc spree, Department of Biological Sciences, Clemson University, Box 20354, Clemson, SC 29633. The University is an Equal Opportunity/Affirmative Action Employer.
DISTINGUISHED RESEARCH FELLOWSHIPS

The Medical Radioisotopes Research Program is seeking outstanding recent PhD recipients for the postdoctoral fellowships described below. All positions require responsibility for planning, initiation and implementation of independent research, presentation of research results, and the ability to work as part of a team. Compensation of $33,640 - $35,445 per annum provided; possible renewal for a second year.

Cell Biologist or Tumor Biologist to investigate the mechanisms of radon-induced lung cancer in uranium miners. The successful applicant will collaborate with a multidisciplinary research team to develop radiopharmaceuticals for the detection and treatment of radon-induced lung cancer. Experience in tumor biology, molecular biology, immunology and the medical use of radioisotopes is desirable.

Biochemist, Medicinal Chemist or Organic Chemist to develop methods to label antibodies using linkers to achieve high levels of attachment of chelating agents to antibodies. Synthesize linker-chelate conjugates to covalently attach to antibodies at a site remote from the antigen-binding sites. Determine the stability, affinity, immunoreactivity and cytotoxicity of labeled antibodies. Experience in protein modification or immunological methods is desirable.

- Candidates interested in the Cell Biologist or Tumor Biologist position should send a resume to Dr. Dean A. Cole, INC-11, MS H809, Los Alamos National Laboratory, Los Alamos, NM 87545, (505) 665-0832.

- Candidates interested in the Biochemist, Medicinal Chemist or Organic Chemist position should send a resume to Dr. Janet Mercer-Smith, INC-11, MS JS14, Los Alamos National Laboratory, Los Alamos, NM 87545, (505) 667-2646.

To formally apply, send a resume, bibliography, three letters of reference, graduate and undergraduate transcripts to Carol M. Rich (MS P290), Human Resources Development Division PD-88-041, Los Alamos National Laboratory, Los Alamos, NM 87545.

Affirmative Action/Equal Opportunity Employer

U.S. Citizenship Required
INTERNAL MEDICINE Positions as ASSISTANT, ASSOCIATE OR PROFESSOR level available in Departments of Endocrinology/Metabolism, Nephrology, Hematology/Oncology, and Epidemiology/AIDS. Locations: Los Angeles County/Martin Luther King Hospital/Charles R. Drew University of Medicine and Science/UCLA School of Medicine. Applicants must be eligible for California license and have demonstrated academic excellence. Please send curriculum vitae and three references to: Dr. Joseph J. Napolitani, M.D., Associate Dean for Medical Affairs, Martin Luther King Hospital, 123 W. 120th St., Los Angeles, CA 90037. Applications are due by September 30. A small stipend is available for relocating in the Los Angeles area.

PAPILLOMAVIRUS RESEARCHER

Georgetown University School of Medicine, Lombardi Cancer Research Center, together with the Departments of Microbiology and Gynecology, seek a highly qualified scientist with a background in the study of human papillomavirus. The position requires experience in basic research in virology, molecular biology, and cell biology. A Ph.D. degree is required. Send curriculum vitae, three letters of recommendation, and a statement of research interests to: Dr. Robert C. Colby, Assistant Professor, Department of Microbiology and Immunology, Georgetown University Medical Center, 3900 Reservoir Road, N.W., Washington, D.C. 20007

MUSCLE BIOLOGY

POSTDOCTORAL POSITIONS are available to study the mechanisms of gene expression and regulation with emphasis on the role of DNA sequences that are involved in the expression of muscle genes. Applicants interested in the field of muscle biology should send curriculum vitae, three letters of reference, and a statement of research interests to: Dr. William B. Levy, Department of Neurology, University of Virginia School of Medicine, Charlottesville, VA 22908.

MICROBIOLOGY

ASSOCIATE OR FULL Professorship level available in the Department of Microbiology and Immunology, University of Medicine and Dentistry of New Jersey, New Brunswick, NJ 08903. Please send three letters of reference to: Dr. Robert E. Glass, Chair, Department of Microbiology and Immunology, University of Medicine and Dentistry of New Jersey, New Brunswick, NJ 08903.
**TRACE ELEMENT NUTRITIONIST**

To work as part of a small research group specializing in infant nutrition and studying the bioavailability of nutrients for infant and hospital foods and other food products.

Our collaborator will be assigned the following tasks:

- Studies in human subjects using stable isotopes to determine the influence of dietary factors on the absorption and utilization of iron, zinc and selenium,
- Nutritional evaluation of newly-developed food products and novel ingredients.

The successful candidate will have a PhD. in nutrition and a good knowledge of food science.

Kindly send your application to Mrs. M. Germanier Audrin, Personnel Services, Research Centre Nestle, P.O. Box 353, CH-1800 Vevey, "SWITZERLAND"
POSTDOCTORAL FELLOW/Molecular Biology of Growth Factor Receptors. A position is available for the study of growth factor receptor biology related to the mechanisms of signal transduction. (For more information see J. Biol. Chem. 262, 16041; 263, 5319; 265, 5267, 7450; and 263, 9642.) A strong background in molecular biology or protein chemistry is desirable. Send curriculum vitae and the names of three references to: Dr. Roger J. Davis, Department of Biochemistry, Massachusetts General Hospital School, 55 Lake Avenue North, Worcester, MA 01655. UMMC is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOW, Division of Biochemistry and Molecular Biology, The John Curtin School of Medical Research, The Australian National University. A postdoctoral fellow is sought to be a member of a group involved with studies on the reactions catalyzed by dihydrofolate reductase from various sources. The aims of the present investigations are to determine the kinetic and chemical mechanisms of the reactions as well as the mechanisms of the inhibition of the enzymes by classical and slow-binding inhibitors. For this purpose a wide range of steady-state kinetic techniques is being utilized. Applicants should have experience in the field of biochemistry and be familiar with the principles of enzyme kinetics. Enquiries to: Dr. J. F. Morrison (062) 492030/492499. Appointment will be for 2 years, with a 3 month period of trial. Salary: $15,000 to $19,000 per annum. Applications should be submitted to: The Registrar, The Australian National University, Box 4, Canberra ACT 2601, quoting reference number and including curriculum vitae, list of publications and names of at least three referees. The University reserves the right to make an appointment or to appoint by invitation at any time. Further information is available from the Registrar.

The University is an Equal Opportunity Employer.

UNIVERSITY OF CALIFORNIA AT IRVINE POSTDOCTORAL FELLOWSHIPS IN MATHEMATICAL SCIENCES The Irvine Research Unit (IRU) in Mathematical Behavioral Sciences invites applications for postdoctoral fellowships during the 1989 to 1990 academic year for research in mathematical applications to the behavioral sciences. The faculty associated with the IRU spans the following substantive disciplines: anthropology, economics, geography, political science, psychology, and sociology. Candidates should have advanced training in both mathematics and one of these substantive disciplines and should provide evidence, preferably in the form of research papers, of some experience in melding the two. In addition to a statement of accomplishments and interests, the application should include curriculum vitae and the names of at least three references (do not solicit letters; we will). The application should be submitted to: R. Duncan Luce, Director of the IRU, Social Science Tower, University of California, Irvine, CA 92717. To ensure consideration, apply before 28 February 1989. UCI is an Affirmative Action/Equal Opportunity Employer. Women and minorities are urged to apply.

POSTDOCTORAL POSITION STRUCTURAL IMMUNOLOGY A position is available immediately to investigate the structural basis of the maturation of an immune response. The research project combines a crystallographic analysis of Fab fragment:hapten complexes with a molecular and genetic analysis of the role of somatic mutations in modulating the specificity of the project. Enquiries to: Dr. Thomas L. Lealby et al., J. Mol. Biol. 203, 829–830 (1988). Knowledge of crystallographic, molecular immunology or molecular biology methods is desirable. Send inquiries and curriculum vitae with the name and address of three references to: Dr. Robert O. Fox, Howard Hughes Medical Institute, Department of Molecular Biophysics and Biochemistry, Yale University, 260 Whitney Avenue, New Haven, CT 06511.

POSTDOCTORAL POSITION Electron Microscopy and Image Analysis of Biological Macromolecules A postdoctoral position is available immediately to work on high-resolution electron microscopy and image analysis studies of biological macromolecules. Applicants must either have a solid background in the examination of biological specimens by transmission electron microscopy or extensive experience in computer image analysis and electron microscopy. Salary is commensurate with experience or training. Send curriculum vitae and names of three references to: Dr. Kenneth O. Lloyd, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. An Equal Opportunity Employer, M/F/H/V.

POSTDOCTORAL POSITION available immediately for Ph.D. or M.D. to study human tumor antigens with emphasis on cancer studies using VLA, an integrin molecule, and breast- or ovarian-related tumor antigens. Experience in the chemistry, immunochemistry, or molecular biology of glycolipids or glycoproteins and crystallographic studies. Experience and names of references to: Dr. Kenneth O. Lloyd, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. An Equal Opportunity Employer, M/F/H/V.

POSTDOCTORAL POSITION available immediately. Project involves identification, isolation, characterization, and expression of hormonally regulated gene products during cell differentiation and gene–cellular interaction to determine. Send curriculum vitae and three letters of reference to: Dr. B. Sanbond, Department of Biochemistry and Molecular Biology, University of Texas Health Science Center Houston, P.O. Box 20708, Houston, TX 77025. The University of Texas is an Equal Opportunity Employer. Minorities and women are encouraged to apply.

POSTDOCTORAL POSITION available to study protein kinases during mitosis in marine eggs. Emphasis is on calcium-calmodulin dependent kinases but will extend to other kinases as necessary. Studies will involve protein chemistry, immunolocalization, microinjection and structure determination using molecular biological and chemical hybridization techniques. The salary will be Negotiable. Send curriculum vitae and names of three references to: Dr. L. M. Reuben, Department of Biology, Gilmer Hall, University of Virginia, Charlottesville, VA 22901. Equal Opportunity/Affirmative Action.

POSTDOCTORAL POSITION, Ph.D. or M.D., immediately available for physiological studies on mechanisms of renal control of vasopressin release and diabetes insipidus in the rat and other mammals. Send curriculum vitae and names of three references to: Dr. B. D. Woodson, Department of Medicine, University of Wisconsin, Madison, WI 53792. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION AVAILABLE The Huntington Medical Research Institutes has a postdoctoral position available in its division of magnetic resonance spectroscopy. Applicants should have experience in NMR spectroscopy. The research group has interests in parallel magnetic resonance spectroscopy and heart research. Equipment available includes a 4.7T, 33-cm bore "CSI" spectrometer/ imager, other high field spectrometers, a Diasonics 0.35T, 21-cm bore imager and a Diasonics 2T Spectroscopy a 2T Diasonics and (shortly) 1.5T G.E. Signa. The successful applicant can work in any of these areas and will be expected to develop his/her own special interests. Huntington Medical Research Institutes is a privately funded institution but its MR program has close links with The California Institute of Technology. The salary is negotiable, starting as soon as possible. For more information call: 818-397-2871. Equal Opportunity/Affirmative Action. Please send curriculum vitae and the names and addresses of three references to: Brian Ross, M.D., Ph.D., FRCS, Director of Magnetic Resonance Spectroscopy and Imaging, Huntington Medical Research Institutes, 660 South Fair Oaks, Pasadena, CA 91105.

FOX CHASE CANCER CENTER POSTDOCTORAL POSITIONS Postdoctoral positions are available in the coming year to study various aspects of the molecular biology of retroviruses, a topic of significant scientific interest, as well as practical relevance to human diseases such as AIDS. Areas include viral RNA and protein processing, and DNA integration. These are excellent opportunities for bright, motivated scientists to join an active and productive group of one of the country's outstanding research centers. Interested individuals should send curriculum vitae and three letters of reference to: Dr. A. M. Skalka, Director, Institute for Cancer Research, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. We are an Equal Opportunity Employer.

POSTDOCTORAL POSITION ELECTRON MICROSCOPY AND IMAGE ANALYSIS OF BIOLOGICAL MACROMOLECULES A postdoctoral position is available immediately to work on high-resolution electron microscopy and image analysis studies of biological macromolecules. Applicants must either have a solid background in the examination of biological specimens by transmission electron microscopy or extensive experience in computer image analysis and electron microscopy. Salary is commensurate with experience or training. Send curriculum vitae and names of three references to: Dr. Kenneth O. Lloyd, Sloan-Kettering Institute, 1275 York Avenue, New York, NY 10021. An Equal Opportunity Employer, M/F/H/V.

POSTDOCTORAL POSITION Harvard Medical School Available immediately. Organic chemist will synthesize radionuclide carrier molecules as part of a multidisciplinary program studying the toxic effects of internal emitters in cancer chemotherapy. Salary contingent on experience (NRSAGuidelines). U.S. citizenship or permanent residency status required. Please contact: Dr. A. L. Kaspar, Harvard Medical School, 2184 Binney Street, Boston, MA 02115. Telephone: 617-732-2184. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION—Available in commercial laboratory and research business to develop several new products for immunomodulation. Experience with hematopoietic colony assays, stem cell cultures, bone marrow and cellular cryopreservation techniques and cytogenetics would be extremely helpful. Salary is competitive with postdoctoral positions available at NIH, located one block from the Children's Hospital. Send inquiries and curriculum vitae to: Dr. Debra Saxe, Molecular Medicine, Inc., 5606 Shields Drive, Bethesda, MD 20817.

POSTDOCTORAL POSITIONS X-RAY CRYSTALLOGRAPHY AND MOLECULAR BIOLOGY OF AMINOPEPTIDASES Seeking two postdoctoral fellows to participate in the mutagenesis and expression of eukaryotic aminopeptidases. Experience in x-ray diffraction and an interest in exploiting molecular biology to answer fundamental questions about protein structure is required. These positions are available immediately and are part of an ongoing collaboration with Professor Michael James of the University of Alberta. It is anticipated that the majority of the time will be spent at Harvard Medical School with an opportunity to spend considerable time in Alberta. Please send a résumé and names of three references to: Dr. John A. Smith, Department of Molecular Biology, MGH, Boston, MA 02114. Telephone: 617-726-5954.

POSTDOCTORAL RESEARCH on the Effect of Mutations at an Enzyme Active Site on Function. A position is available for a candidate with research experience in enzymology or biochemical chemistry to join a research group active in this area (see J. Biol. Chem. 263, 9187 and 10304 (1988). Training will be provided in methods for studying ligand binding, conformational equilibria, and kinetics for the study of transient state kinetics. Starting salary $22,000 or higher depending on relevant experience. To apply send curriculum vitae and three references to: Dr. R. L. Blakey, Department of Biochemical and Clinical Pharmacology, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. An Equal Opportunity Employer.
Sterling Research Group, the worldwide pharmaceutical research and development organization of Sterling Drug, announces an opening for a Research Scientist in the Department of Analytical Biochemistry at its new Great Valley research facility, near Philadelphia.

Responsibilities associated with the position include: developing, validating and writing methodologies for the analysis of proteinaceous drug substances and drug products; and assisting in the isolation and characterization of peptides and proteins using modern analytical instrumentation.

Candidates should possess a BS or MS in Biochemistry, Chemistry, Pharmaceutical Science, or the equivalent, with a minimum of two years experience in analytical or pharmaceutical chemistry, or protein/peptide characterization. Experience with analytical techniques, including gel electrophoresis and chromatography methods, is essential. Familiarity with enzyme assays is desirable. Good technical writing and oral communication skills are required.

We offer competitive salaries and a full range of benefits, together with outstanding opportunities for professional and personal growth. For confidential consideration, interested candidates should send their resumes with salary history/requirements and the names of three references to:

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STERLING RESEARCH GROUP
A Division of Sterling Drug Inc.
9 Great Valley Parkway, Malvern, PA 19355
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Boston University
Dean, College of Engineering

Boston University, the nation's fifth largest independent University, invites nominations and applications for the Deanship of its College of Engineering. The position is available September 1, 1989.

The College of Engineering is organized into four departments: Electrical, Computer and Systems Engineering; Biomedical Engineering; Aerospace and Mechanical Engineering; Manufacturing Engineering. Over 2,400 students are enrolled in programs leading to bachelor's and master's degrees in the College. The Ph.D. is awarded through the Division of Engineering and Applied Sciences of the Graduate School.

The College, rapidly growing in graduate enrollment and sponsored research, has recently completed a research building as part of the University's $150 million investment in science and engineering facilities.

The Dean of the College is responsible for all programs in instruction and research, administers the unrestricted operating budget, and reports to the Provost. The Dean must have the vision to further the development of an excellent teaching and research program in one of the nation's most active high technology regions.

Nominations and applications should include a curriculum vitae and the names and addresses of three references. The University encourages applications from women and minority candidates. Send by January 31, 1989 to: Dr. Dennis D. Berkey, Provost, Boston University, 145 Bay State Road, Boston, MA 02215.

BOSTON UNIVERSITY
An equal opportunity, affirmative action employer
POSTDOCTORAL POSITION now available for collaborative studies of growth factor synthesis and function in hormone responsive breast cancer cells. Molecular studies of hormonal regulation of gene expression and biochemical studies of growth factor function will be pursued with Dr. Sydney A. Shain. Candidates must have strong background and laboratory experience in cell biology and/or molecular biology. Appointments are for 1-year periods up to 3 years. Send curriculum vitae and the names and telephone numbers of three references to: Personel Director (847), Southwest Foundation for Biomedical Research, P.O. Box 28147, San Antonio, TX 78284.

Equal Opportunity Employer M/F.

POSTDOCTORAL RESEARCH ASSOCIATE

The U.S. Department of Agriculture, Agricultural Research Service, Mississippi State, Mississippi, seeks a plant pathologist or microbiologist, GS11/12, ($32,852 to $34,580 per year) for a 2-year position to characterize a soybean dwarf-like hutterite and produce monoclonal antibody and c DNA probes. Refer to announcement no. 9-5002 when applying. Send application (SF171), college transcripts, one-page abstract of Ph.D. dissertation, list of publications, and qualifications summary by 13 January 1989 to Dr. M. R. McLaughlin, P.O. Box 5367, Mississippi State, MS 39762-5367.

For information call: Darlene Fowler, 301-344-1508.

GS-11/12 is an Equal Opportunity Employer.

POSTDOCTORAL RESEARCH ASSOCIATE

Position available immediately to investigate mecha-

nisms of acute lung injury and strategies for prevention.
Laboratory investigates lung injury utilizing small animal models, cell culture techniques, neutrophil signal transduction pathway biochemistry, patch-clamping, and re-

ceptor interaction studies. This position will have some supervisory responsibility. Approximate annual salary is $32,000. Please send curriculum vitae, names of three references, and brief description of interests, experience and mastered investigative techniques to: Dr. Thomas A. Kaffin, M.D., Acting Chief, Division of Respira-
tory Medicine, Room C536, Stanford, CA 94305.

PROFESSIONAL OPPORTUNITIES

POSITIONS OPEN

POSTDOCTORAL POSITION to study pharma-

cological and protein phosphorylation regulation of ion channels. Experience with phosphorylation research is desirable but not essential. Familiarity with intracellular recording, voltage- or patch-clamp techniques necessary. The position is available beginning 1 January 1989 and will extend for a minimum of 2 years. Salary: $21,000 to $24,000 plus benefits. Send curriculum vitae and names of three references to: T. Farley, Program in Neural Science, New York University, 40 University Pl., New York, NY 10003.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available 1 January 1989 for a qualified individual interested in a project involving viral gene transfer and immunotherapy. Demonstrated research experience in basic techniques of mammalian molecular biology required. Some cellular immunology experience would be helpful. Applicants should be either citizens or permanent residents of the United States. Send curriculum vitae and letters of interest to either: Dr. Eli Gilboa or Dr. David Emanuel, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE POSITION available 1 January 1989 for a qualified individual interested in a project involving viral gene transfer and immunotherapy. Demonstrated research experience in basic techniques of mammalian molecular biology required. Some cellular immunology experience would be helpful. Applicants should be either citizens or permanent residents of the United States. Send curriculum vitae and letters of interest to either: Dr. Eli Gilboa or Dr. David Emanuel, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

POSTDOCTORAL SCIENTIST, Retroviral Research Laboratory, Cancer Research Center of Hawaii. A federally funded program beginning 1 February 1989 to conduct clinical and epidemiological studies of HTLV-I sequences in patients. The project will use clinical, tissue diagnostic and production methods to detect and follow HTLV-I associated disease. The position is available immediately. Minimum requirements: Ph.D. in an appropriate discipline, or an M.D., with research experience in molecular biology. To apply send curriculum vitae with names, addresses, and telephone numbers of four refer-


POSITIONS OPEN

POSTDOCTORAL POSITION available 1 January 1989 for a qualified individual interested in a project involving viral gene transfer and immunotherapy. Demonstrated research experience in basic techniques of mammalian molecular biology required. Some cellular immunology experience would be helpful. Applicants should be either citizens or permanent residents of the United States. Send curriculum vitae and letters of interest to either: Dr. Eli Gilboa or Dr. David Emanuel, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering Cancer Center is an Equal Opportunity Employer.

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RESEARCH ASSOCIATE—IMMUNOLOGY Position available January 1989 for Ph.D. immunolo-
gist to participate in research projects dealing with pathogenesis of AIDS as related to number and function of the T cell and to date the first AIDS virus in 1988.

The position requires a 3-year commitment to the development of a research career, with teaching experience as necessary. Send curriculum vitae and three references to: J. M. Margolick, M.D., Ph.D., Department of Environmental Health Sciences, Johns Hopkins School of Public Health, 615 North Wolfe Street, Baltimore, MD 21205. Johns Hopkins is an Affirmative Action/Equal Opportunity Employer.

OREGON HEALTH SCIENCES UNIVERSITY ANNOUNCEMENT Pre- and Post-Doctoral Training in Immunology

The Immunology Training Program at Oregon Health Sciences University invites applications and nominations for the position of Pre-Doctoral Fellow for Academic Affairs. The Pre-Doctoral position reports to the Vice President for Academic Affairs, the University's chief academic officer, and the position is responsible for the development, implementation and monitoring of University policies on curriculum, education, training, research and other academic affairs.

Applications are invited from Ph.D., M.D., or D.O. candidates with education, training, or experience in immunology. Preference will be given to Ph.D. candidates with a background in basic or clinical immunology.

The University, Oregon's only academic health center, is part of the State System of Higher Education and includes the Schools of Dentistry, Medicine and Nursing; Vollum Institute for Advanced Biomedical Research; the Biomedical Information Communication Center; the Center for Disease Research; the Child Development and Rehabilitation Center; and University Hospital.

The Vice President is responsible for academic programs of the Schools, the Vollum Institute and the Center for Occupational Disease Research. The Vice President coordinates interdisciplinary institutes, centers and programs as they are established. The Vice President for Academic Affairs is also responsible for administration of student and academic support activities, and serves as the University liaison with student and faculty organizations.

Qualifications include evidence of outstanding teaching, scholarship and professional accomplishments, an earned doctorate, experience with academic administration, a dedication to academic excellence, the ability to provide leadership and to work closely with faculty, students and administrative colleagues, background in health education, ability to effectively promote the mission of the University, ability to effectively interact with all segments of the University community, and a commitment to affirmative action and equal opportunity in the recruitment of students, faculty and staff.


An Affirmative Action/Equal Opportunity Employer
RESEARCH SCIENTISTS
Protein Biochemistry
Molecular Biology
Enzymology

Committed to Scientific Excellence

The Sterling Group, the worldwide pharmaceutical research and development organization of Sterling Drug, announces openings for Research Scientists at our Great Valley, PA facility near Philadelphia.

Openings are in the recently established Departments of Protein Biochemistry/ Molecular Biology and Enzymology. The Protein Biochemistry/Molecular Biology group needs scientists to isolate genes, generate recombinant vectors, transfect DNA into a variety of systems, express recombinant proteins, and to synthesize, purify and characterize proteins. The Enzymology group is interested in enzyme isolation and the development of enzyme assays.

Candidates should have experience in several of these areas and interest in learning others. A B.S. or M.S. degree in chemistry, biology, or one of the life sciences with at least one year experience is required. Since this is an excellent opportunity for a scientist to diversify and become involved in several phases of projects, other qualifications, for these positions include creativity, flexibility, the ability to do independent work and good communication skills.

Sterling Drug offers competitive salaries and a comprehensive benefits program, along with outstanding career opportunities for professional growth. For confidential consideration please forward your resume and the name of three references to:

Employee Relations, Department PSMM

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Assistant Professor Biochemistry/Molecular Biology
Boston University

As part of a $110-million expansion in the natural science and engineering programs at Boston University, the Department of Chemistry invites applications for a tenure-track position at the Assistant Professor level to start in September 1989. Candidates must have demonstrated ability in research which emphasizes chemical approaches to fundamental problems in biochemistry or molecular biology. We particularly seek applicants with interests in enzyme structure and mechanism, protein X-ray crystallography, protein folding or other aspects of protein or nucleic acid structure and function. The successful candidate will join a core faculty of twelve biochemists, molecular biologists and biophysicists in the Departments of Chemistry, Biology and Physics who have similar interests.

Applicants should send their resume and a description of research interests, and have three letters of recommendation sent to Faculty Development Committee, Department of Chemistry, Boston University, 590 Commonwealth Avenue, Boston, Massachusetts 02215. Boston University is an affirmative action/equal opportunity employer.
POSTDOCTORAL POSITIONS available to study transcriptional and post-transcriptional regulation of protein function in mammalian cells. Experience in flow cytometry, protein synthesis, autoradiography, and biochemistry. Ph.D. in molecular biology or biochemistry. Send curriculum vitae and three references to: Dr. Leonard J. Farmer, Chairman, Department of Physiology, Tufts University School of Medicine, Boston, MA 02111.

RESEARCH ASSISTANT PROFESSOR/FACULTY POSITION—Electron microscopy of cryoprepared cells and tissues using rapid cryofixation, molecular distillation drying, freeze-fracture, freeze-substitution, immunocytochemistry, autoradiography, and hybridization histochemistry. Ph.D. in anatomy, cell biology, or biochemistry, and experience in ultrastructure preferred. Send curriculum vitae and three references to: Cryobiology Research Center, University of Texas Health Science Center at Houston, 3606A Research Forest Drive, The Woodlands, TX 77381. The University of Texas is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

RESEARCH ASSOCIATE/MICROBIOLOGIST
The Agricultural Research Service, Northern Regional Research Center, 1815 North University Street, Peoria, IL 61604, is seeking a postdoctoral research associate to study hydrolytic enzymes from entomogenous fungi. Candidates should have knowledge of enzyme purification and characterization. Salary will be commensurate with experience. Send curriculum vitae, references, and salary requirements to: D.T. Leathers at the above address. Telephone: 309-685-4011. Applications in response to this advertisement must be submitted by September 15, 1989. University of Illinois at Chicago, Eye Center (MC C48) 1855 West Taylor Chicago, IL 60612 UIC is an Affirmative Action/Equal Opportunity Employer.

RISK ASSESSMENT/ENVIRONMENTAL CHEMISTRY EnviroScope Company has opportunities in its national headquarters in Northern New Jersey for candidates with an advanced degree in public health, toxicology, or environmental chemistry plus experience in field, fate, transport and/or exposure assessment for hazardous chemicals.

GCMS AND AA/ICP ANALYSTS Positions are also available in our subsidiary laboratory Finnigan-Elseco, Columbus, Maryland for GC/MS and AA/ICP Analysts. GCMS candidates, with minimum of 2 years of GCMS experience, must operate and maintain Hewlett-Packard GC/MS systems, perform data reduction and interpret mass spectra, EPA CLP format desirable. AA/ICP applicants, with 1 year of minimum experience, including knowledge of ICP methods, requirements, must operate and maintain PE AA and ICP systems measuring trace levels of metals in environmental samples.

QUANTITATIVE BIOLOGY/COMPUTER SCIENCE EnviroScope Company also has opportunities in Northern New Jersey for experienced professionals in environmental base management, statistics, and/or math modeling of populations, ecosystems, fate and transport of toxic substances and natural resources/hazardous waste assessments. Degree preferred.

EnviroScope offers competitive salaries and a comprehensive benefits package. Please send résumé to: theres a A. Capan, EnviroScope, Inc. 160 Chubb Avenue, Lyndhurst, NJ 07071.

RESEARCH ASSOCIATE AND RESEARCH ASSISTANT POSITIONS. Available immediately to study the molecular microbiology of oral streptococci. Experience in recombinant DNA techniques, sequencing and in vitro mutagenesis is desired. Salary negotiable based on experience. Send curriculum vitae, copies of representative publications and names of three references to: Dr. My Lien Dao, Department of Pediatrics, University of South Florida, Children’s Hospital, 801 6th Street South, St. Petersburg, FL 33714. Affirmative Action/Equal Opportunity Employer.

RESEARCH OPPORTUNITIES at the National Center for Toxicological Research (NCTR)—Opportunities for faculty and postgraduates to conduct collaborative research at NCTR, a Food and Drug Administration laboratory in central Arkansas. Research efforts focus on testing the assumption used in assessing risks posed by toxic chemicals emphasizing studies in biomarkers, modulators of toxicity, and extrapolation/risk assessment. U.S. citizenship or permanent resident status required. For more information contact: Research Participation Program at NCTR, University Programs Division, Oak Ridge Associated Universities, P.O. Box 137, Oak Ridge, TN 37831-0117, telephone: 615-576-3190. Please indicate if interested in faculty and/or postgraduate program.

SENIOR ENVIRONMENTAL SCIENTIST: 50% to 60% of position to be filled. Environmental Studies and Toxicology (BEST) of the National Research Council (NRC) is seeking a 50% time senior professional in environmental science, biochemistry, or related field. Will serve as a senior staff officer for a 6-month study on conservation of sea turtles. Works with and provides intellectual leadership and guidance for a committee of experts. A Ph.D. or equivalent required with at least 10 years of experience with environmental issues, ability to understand the utilization of scientific information in decision making and functioning from a wide variety of disciplines. Please submit in confidence curriculum vitae, a recent publication or writing sample, and names and addresses of references to: NRC/BESTOP, 1530 Eye Drive, Washington, D.C. 20418.

SENIOR FELLOW, Western Psychiatric Institute and Clinic, a division of the University of Pittsburgh, has an immediate opening for an Academic Senior Fellow to provide professional expertise in a neurochemistry and psychopharmacology laboratory. The incumbent will study neuronal phospholipids in a well equipped laboratory. This position is funded on a NIH grant with a 2-year commitment. A Ph.D. in lipid biochemistry with training in phospholipids metabolism is preferred. This position offers a starting salary and a liberal benefit package including a 100% immediately vested retirement program. Interested candidates should submit their curriculum vitae to: Dr. Jeffrey K. Yao, Director, Neurochemistry and Psychopharmacology Laboratory, Psychiatric Services, 1166 VAMC, Highland Drive, Pittsburgh PA 15206. Telephone: 1-412-363-4900, extension 465. An Equal Opportunity Employer.

MOLECULAR VACCINES, INC.
Molecular Vaccines, Inc., a young and dynamic biotechnology company located in a suburb of Washington, D.C. is committed to the discovery and application of novel molecular and immunologic approaches toward the development of vaccines and therapeutic agents for infectious diseases. SENIOR LEVEL INDIVIDUALS are sought to lead Protein Chemistry Laboratory and Immunology Laboratory.

RESEARCH SCIENTISTS and ASSOCIATES are also needed with expertise in protein biochemistry, molecular biology, and immunology. Successful candidates will have strong research experience and a demonstrable record of scientific productivity. This is a unique opportunity to join an exciting organization and contribute to the growth. Applicants should submit curriculum vitae, statement of research interests, and references to: Human Resources, Molecular Vaccines, Inc., 19 Firstfield Road, Gaithersburg, MD 20878.

SENIOR PROFESSOR IN THE SPACE SCIENCES UNIVERSITY OF CALIFORNIA, LOS ANGELES UCLA seeks an outstanding scientist, theoretical or experimental, in the space sciences, broadly construed as any physical science dependent upon, or stimulated by, data collected by space techniques. The appointment may be in any one of the Departments of Astronomy, Atmospheric Sciences, Chemistry, Earth and Space Sciences, or Physics, but the main criteria will be interest and capability in the space sciences. Emphasis is on theoretical, observational and/or space science research. A Ph.D. is required. Those interested in applying should contact: Professor William K. Kaula, Department of Earth and Space Sciences, University of California, Los Angeles, CA, 90024-1567. Telephone: 213-825-4363. UCLA is an Affirmative Action/Equal Opportunity Employer.

SENIOR SCIENTIST/ LABORATORY GROUP LEADER IN MOLECULAR BIOLOGY
The W. Alton Jones Cell Science Center, Inc., is seeking an individual to lead a core molecular biology lab group. The group is expected to interface with the cell biology groups for consultation, collaboration, and application for transfer of molecular biological technology. In addition, develop an independent research program in molecular cell biology. The group will be responsible for a fully equipped DNA sequence facility. Requirements include a doctoral degree and several years of postdoctoral experience in molecular biology. Experience in cell biology and cell culture techniques will be essential. Salary and curriculum vitae to: The Personnel Office, W. Alton Jones Cell Science Center, Inc., 10 Old Barn Road, Lake Placid, NY 12946. Please refer to job 88-23. Affirmative Action/Equal Employment Opportunity.

The Research Institute of The Hospital for Sick Children offers a STAFF POSITION in its Division of Biochemistry Research. A major biomedical research organization, the Institute has over 150 Principal Investigators and 200 training programs that range from basic to clinical studies. Initial appointments are for 3-year periods, moving to 4-year renewable appointments. The Institute is based at a major teaching facility. It's research is exciting, collaborative, and is supported by a full range of services. There is the potential for a long-term appointment to the University of Toronto.

We are seeking a Ph.D. with at least 3 years of postdoctoral experience in the application of modern techniques of physical biochemistry to protein structure and function. The applicant should be prepared to develop a strong independent research program. Applicant should forward curriculum vitae and an outline of research goals, and should arrange for three letters of reference, all to be sent to: Dr. H. Schachter, Head, Division of Biochemistry Research, The Hospital for Sick Children, 655 University Avenue, Toronto, Ontario, M5G 1X8.

STAFF TOXICOLOGIST
California Department of Food and Agriculture seeks staff toxicologists in its pesticide regulatory program. Incumbent will evaluate new and present chemical pest control risks. Doctorate in toxicology or closely related biological field followed by 3 years of relevant experience is required. Salary $32,990 per month. Submit résumés by 6 January 1989 to: Department of Food and Agriculture Examinations Unit 12 4th Street, Ste. 164 Sacramento, CA 94271-0001

1608 SCIENCE, VOL. 242
**SPECIALISTS IN PLANT/SOIL RELATIONS AND IN NITROGEN CYCLING**

Extension of application deadline

CIAT is an international agricultural research and training center with programs in Beans, Cassava, Rice, Tropical Pastures and Training and Communications, working closely with national agricultural research programs.

In the Tropical Pastures Program, with a staff of 17 senior scientists, a team is working on adaptation of grasses and legumes to acid soils, including management practices. Two experienced scientists are sought to join an ecophysiologist and a pasture management specialist. Candidates should have knowledge of tropical pastures and/or tropical agriculture and the ability to work in small teams. Proficiency in English is essential and some fluency in Spanish highly desirable.

**SPECIALIST IN PLANT/SOIL RELATIONS**

To understand the mechanisms of adaptation of grasses and legumes to acid and infertile soils in low-input pasture systems in the tropics. Using prototype grass-legume pastures, grown in contrasting soils and climates, his/her work will concentrate on the uptake and utilization of P, K, Mg, and S to assist the search for adapted germplasm. He/she will also contribute to studies of nutrient cycling in grazed pastures to define the interaction between fertilizer practice and management.

Ph.D. in plant/soil relations or related discipline with at least 5 years research in relevant aspects of plant nutrition, plant physiology and soil science.

**SPECIALIST IN NITROGEN CYCLING**

To conduct on-farm research on N nutrition of grazed pastures on acid and infertile tropical soils. Research will be conducted on the nitrogen cycle (fixation, immobilization, and mineralization) in pure grass and grass-legume pastures, to determine pool sizes and rates of nitrogen losses and gains, emphasizing biological N fixation. He/she will also maintain the rhizobium collection and identify effective legume-rhizobium combinations, and will collaborate to develop screening methods for the International Network of Tropical Pasture Evaluation.

Ph.D. in soils/plant nutrition, ecology, soil microbiology, or other relevant discipline, with at least 5 years' research experience.

Applications

Both will be stationed at CIAT Headquarters near Cali-Colombia. Salary and benefits are comparable to other international organizations, level depending on qualifications and relevant experience.

Applications closing date 15th January 1989 or until a suitable candidate is identified. Submit curriculum vitae including names and addresses of three references to: Dr. Filemón Torres, Deputy Director General, CIAT. Apartado Aéreo 6713, Cali - Colombia.

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**GRADUATE PROGRAM CELL AND MOLECULAR BIOLOGY (MULTI-DEPARTMENTAL)**

- Gene Regulation
- Molecular Genetics
- Developmental Biology
- Oncogenes and Growth Factors
- Structural Biology
- Neurobiology
- Molecular Virology and Immunology

The Graduate School at BAYLOR COLLEGE OF MEDICINE has recently created a graduate program in CELL AND MOLECULAR BIOLOGY stressing basic research in the above areas. Students accepted for studies leading to the Ph.D. degree will receive financial support. For further information contact:

Dr. Savio Woo, Director
Graduate Program in Cell and Molecular Biology
Baylor College of Medicine, Room 185A
One Baylor Plaza
Houston, Texas 77030
Phone: (713) 799-6557

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**Medical Staff Fellowship in Molecular Genetics at NIH**

The Molecular Genetics Section of the Genetics and Biochemistry Branch, National Institute of Diabetes, and Digestive and Kidney Diseases, National Institutes of Health, is offering a Medical Staff Fellowship in Molecular Genetics. Applications are invited from individuals of the highest caliber with the M.D. or M.D., Ph.D. degrees. Applicants should have two years of clinical experience and research experience is preferred. Applications are being accepted now for appointments which begin July 1989. The appointment is for two years and can be extended for a third year. Medical Staff Fellows receive an initial salary of $32,000, with increments of $2,000 per year.

The Medical Staff Fellow may participate in the NIH Intramural Medical Genetics Program as well as carry out research in basic molecular genetics. Current research interests include the biochemistry of eukaryotic recombination, cell-free systems for the study of immunoglobulin rearrangements, the study of mutants defective in genetic recombination, gene targeting and gene disruption in mammalian cells and the molecular biology of Tay-Sachs disease.

Interested candidates should submit their curriculum vitae and bibliography to:

Dr. R. Daniel Camerini-Otero
Chief, Genetics and Biochemistry Branch
National Institute of Diabetes and Digestive and Kidney Diseases
Building 10, Room 9D-15
National Institutes of Health
9000 Rockville Pike
Bethesda, Maryland 20892

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Sponsor: Annette A. C. Tsang, The Scripps Research Institute, La Jolla, 92037. 25 August 1989.
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FELLOWSHIPS

POSTDOCTORAL FELLOW
OPHTHALMIC MOLECULAR GENETICS
Postdoctoral fellowship positions available for 2 to 3 years beginning on 1 July 1989 or sooner to study diseases affecting the eye using recombinant DNA techniques. Background in protein chemistry and experience in molecular biology is desirable. Send curriculum vitae: J. B. Bronwyn Bateman, Jules Stein Eye Institute, Los Angeles, CA 90024. UCLA is an Equal Opportunity/Affirmative Action Employer. The University of California, Los Angeles, CA 90024. UCLA is an Equal Opportunity/Affirmative Action Employer.

PREDOCTORAL FELLOWSHIPS
Are you interested in a career devoted to solving health problems associated with chemical pollution of the environment? Perhaps you should consider earning a Ph.D. in environmental toxicology in The Joint Graduate Program in Toxicology of Rutgers, The State University of New Jersey and The University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School. The program is sponsored by The Environmental and Occupational Health Sciences Institute which also contains the newest National Institutes of Health Environmental Health Center. We are conducting a national search for scholars who wish to earn the M.S. and/or Ph.D. in Toxicology. Our internationally recognized faculty will provide an opportunity for you to conduct research in cellular/molecular toxicology, immunotoxicology, hepatotoxicology, solvent toxicity, carcinogenesis, inhalation/respiratory toxicity, neurotoxicology, environmental and aquatic toxicology, and metabolism of environmental chemicals. Sources of graduate student support include a N.I.E.H.S training grant, graduate U.S. citizen or resident. Send curriculum vitae: Douglas Kerr, M.D., Ph.D., Rainbow Babies and Childrens Hospital, 2074 Abington Road, Cleveland, OH 44106.

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How To Choose The Right Low Pressure LC System Even If It Isn't Ours

To simplify choosing the right peristaltic pump, detector and fraction collector for your LC System, review these guidelines and send for our free Low Pressure System Selection Worksheet:

1 Identify your separation goals.
- Know the characteristics of your sample. What mass will you load on your column? What flow rate will you need to achieve optimal speed and resolution? At which wavelengths does your sample exhibit maximum absorbance? What size fractions will you collect? Are you interested in collecting peaks?

2 Examine the components' specs.
- After you've identified the key operating parameters, take a look at the pump, detector and fraction collector specifications to be sure they meet your needs. To illustrate, let's look at specifications for components in the Gilson Low Pressure System.

The most important criteria used to select a peristaltic pump are smooth, stable flow and usable flow rate range. The Gilson system uses the new Minipuls 3 Pump. Stepper-motor drive and proven pump head design ensure smooth flow from 1 ul to 50 ml/min. A high flow head allows flow rates from 50 ml to 220 ml/min. Interchangeable pump heads with 1-, 2-, 4-, or 8 channels are available.

Wavelength specificity and ease-of-use are key considerations when choosing a detector. The Gilson 112 UV/VIS fixed-wavelength detector allows selection of wavelengths from 214 nm to 640 nm. A choice of five flow cells accommodates a wide range of flow rates and sample concentrations. A large digital readout and convenient autozero and event mark functions keep detector operation easy.

Select a fraction collector according to your collection mode, fraction volume, and multiple column collection needs.

Gilson's FC 203 fraction collector allows drop, time, or peak collection modes with up to ten collection windows in each mode. The widest range of racks available—capable of handling as many as 128 fractions—makes the FC 203 suitable for almost any application.

3 Check for compatibility of components with each other and with your future needs.
- At this point, you've identified components to meet basic needs, but also look at the components as a system. Were they designed to work together? Or will you need to buy complicated adapters and special plumbing?

Working with a single supplier avoids the service and support problems often associated with a system assembled piece-by-piece. You should also assess your future needs. An LC system may work fine for your current application. But will you need to change detection wavelengths or collection volumes later? Is an upgrade to HPLC a possibility? If so, consider modular equipment that adapts to your changing needs easily and inexpensively.

4 Look at each supplier's record of reliability, service and support.
- After identifying suitable components, you narrow your choice by looking at each supplier's track record for reliable equipment and efficient service.

To evaluate the Gilson Low Pressure System, consider our reputation for fraction collectors and detectors. Gilson has a proven track record that began more than 35 years ago. More than 1000 FC 203s—introduced just 16 months ago—continue to display dependable, trouble-free operation.

The Minipuls 2, the reliable predecessor to our new Minipuls 3, has earned spaces on more than 24,000 lab benches worldwide, making it the best-selling peristaltic pump.

5 Use our free Low Pressure LC System Selection Worksheet to gather and compare your options.
- For the final step in choosing your system, compare the information you've gathered. To help, we've put together a selection worksheet to simplify the process.

This free worksheet lists major criteria to use in your comparisons. We've filled in information about the Gilson Low Pressure System and have left space for you to fill in specs from other suppliers.

Why do we encourage this comparison? Because it's the best way to buy a system matched to your needs. Plus, we're confident that in most cases your low pressure system will be a Gilson Low Pressure System.

So, for your free Low Pressure System Selection Worksheet, simply circle the magazine's reader service number or call us toll free at 800-445-7667. We'll see that you get your worksheet fast.

Gilson Medical Electronics, Inc., Box 27, 3000 W. Beltline Hwy., Middleton, WI 53562 USA. Tel: (608) 836-1551 Telex: 26-5478
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