

(Continued from page 44)

eral, there was praise for the program's accomplishments. Past courses have not only contributed significantly to the professional development of science faculty, but also have been a rich source of materials useful in courses they were teaching. Interim projects carried out between the fall and spring sessions of each course have been a valuable vehicle for interaction among peers; judging from the comments of the meeting participants, they are a very strong point of the short courses.

One question that evoked discussion involved the mix of social science versus "hard-core" science courses in the program. Some deans expressed a preference for more courses that emphasize scientific content. Others maintained that the social aspects of science are extremely important issues, particularly in light of the number of non-science students on their campuses. "We should not sterilize the short courses from these social aspects," was the way one participant put it.

Suggestions for the content of short courses were varied—reviews of the "state of the art" of specific disciplines, new technologies, courses more directly applicable to rural settings, and more courses which deal with the environment, ecology, and pollution were among the recommendations for course content. There was a call to continue offering courses which focus on specialties within a discipline. Some administrators from 2-year colleges suggested that courses which focus either on science content or how to teach were more useful for their faculties than interdisciplinary courses.

A number of deans reported that travel budgets for faculty are miniscule and hence, travel support is desirable. NSF and AAAS should consider extending the sites of the courses to additional college and university locales. It also was suggested that several courses could be held simultaneously so that several faculty from the same institution would be able to "car pool" to the field center.

JOSEPH M. DASBACH
Office of Science Education

For more information about the activities and publications described in "AAAS News," write to the appropriate office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036, unless otherwise indicated.

Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate among applicants on the basis of race, sex, religion, age, color, or national origin.

Positions Wanted: 40¢ per word; \$4 extra for use of box number. \$10 minimum charge, per insertion. Prepayment required. Rate available only to individuals; personnel agencies, companies, colleges, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): \$5.80 per millimeter; \$145 minimum (covers 25 millimeters on single column; 25 millimeters equals 10 lines of 50 spaces per line), per insertion. No charge for use of box number. Rates net. No agency commission for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

SCIENCE is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and display ads under 5 inches to:

SCIENCE, Room 207
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc.
1515 Broadway
New York, N.Y. 10036
Telephone: 212-730-1050

Blind Ad replies should be addressed as follows:

Box (give number)
SCIENCE
1515 Massachusetts Ave., NW
Washington, D.C. 20005

POSITIONS WANTED

Biochemist. Ph.D. 1966. Background: biogenic amines/CNS; needs position immediately. Jourdain, 252 Washington Boulevard, Oak Park, Illinois 60302. Home telephone: 312-524-1756. X

Cardiovascular Physiologist. Ph.D. 1975; experience in studying regional blood flow with radiolabeled microspheres, surgery for chronic instrumentation, microvascular catheterization, pulmonary mechanics. Prime interest in studies in chronically instrumented animals. Seeking faculty/research/administrative position in coastal regions. Box 1, SCIENCE. X

Psychopharmacologist. Ph.D., needs position change. Highly motivated and productive. Main interests include antiparkinsonism drugs, narcotics, psychotropic drugs, neurochemical correlates. Many publications; many exciting ideas. Also enthusiastic about organizing a new CNS research laboratory. Box 445, SCIENCE. 1/6, 20; 2/3

Veterinarian-Biochemist. D.V.M., Ph.D.; ECFVG certificate, Ohio license. Research and teaching experience. Excellent publications. Looking for research, industrial, or teaching position. Contact Dr. P. K. Saini, 518 Coy Drive, Xenia, Ohio 45385. X

Virologist-Cell Biologist. Ph.D. 1971, postdoctoral, publications, extensive experience RNA tumor viruses, somatic cell hybridization; seeks mix of research and teaching or administration in academic setting. Box 2, SCIENCE. X

POSITIONS OPEN

ACADEMIC SURGICAL PATHOLOGIST
The University of Chicago, Department of Pathology, is seeking a Board-certified (or eligible) surgical pathologist at a junior level to join an active and progressive laboratory. The applicant will participate in diagnostic surgical pathology and medical student and resident instruction. Ample time is available for research. Send inquiries and curriculum vitae to: Dr. W. H. Kirsten, Professor and Chairman, Department of Pathology, The University of Chicago, 950 East 59 Street, Chicago, Illinois 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

ALGAL PHYSIOLOGIST/OCEANOGRAPHER

The City College of the City University of New York has possible September 1978 opening for algal physiologist with strong background in biological oceanography. To teach, on a rotating basis, part of an undergraduate course in biology and oceanography, an undergraduate course in plant physiology, and a graduate course in phytoplankton. The candidate is expected to be an active researcher and have the ability to direct the research of Ph.D. and M.A. students in his/her field. Opening at assistant professor level. Ph.D. required, postdoctoral experience preferred. Send curriculum vitae and names of at least three referees to: Professor James Organ, Chairman, Biology Department, The City College of the City University of New York, New York, N.Y. 10031, not later than 15 February 1978.

An Equal Opportunity/Affirmative Action Employer

MOLECULAR BIOLOGIST/ VIROLOGIST/IMMUNOLOGIST

The City College of the City University of New York has possible September 1978 opening for a molecular biologist/virologist/immunologist to share in and develop elective courses in these areas on both the graduate and undergraduate levels and to teach a course in microbiology for nursing students. Opening at assistant professor level. Ph.D. required, postdoctoral experience preferred. Send curriculum vitae and names of at least three referees to: Professor James Organ, Chairman, Biology Department, The City College of the City University of New York, New York, N.Y. 10031, not later than 15 February 1978.

An Equal Opportunity/Affirmative Action Employer

ANATOMY

Applications are invited for a position as assistant professor, salary dependent upon previous experience. In the first instance, the position is for a 1-year term to replace a staff member on study leave for the period 1 July 1978 to 30 June 1979, but may lead to a permanent appointment. Experience in gross anatomy and/or histology an advantage. Please send curriculum vitae to: the Chairman, Department of Anatomy, University of Alberta, Edmonton, Alberta, Canada T6G 2H7, by 1 March 1978.

ANATOMIST. Position available for 1 July 1978 for experienced human gross anatomist. Rank and salary open. Successful candidate must demonstrate marked probability of achieving extramural funding in developmental or neurobiochemistry complementary to on-going departmental research. Send curriculum vitae and names of three references to: Chairman, Department of Anatomy, THOMAS JEFFERSON UNIVERSITY, 1020 Locust Street, Philadelphia, Pa. 19107. Affirmative Action/Equal Opportunity Employer.

AQUATIC ECOSYSTEM SCIENTISTS. Argonne National Laboratory, Environmental Impact Studies Division. Two positions. Exceptional opportunities at the assistant professor level for Ph.D.'s with expertise in applied aquatic ecology including freshwater benthic invertebrates, phytoplankton (eutrophication and water quality), zooplankton, fish and ichthyoplankton, ecosystem health, and water quality. Knowledge of data analysis and report preparation, and familiarity with federal and state regulations desirable. Projects are energy related (for example, coal, oil, uranium, power facilities, and energy storage) and there will be participation in programs identifying the regional and generic impact of energy technologies on freshwater resources. Responsibilities will include preparing independent environmental assessments, writing environmental impact statements, and acting as expert witnesses at federal hearings. Some research opportunities available. Salaries are fully commensurate and benefits are excellent. Apply by sending résumé to: Walter McFall, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Ill. 60439. An Equal Opportunity Employer, M/F/Handicapped.

ASSISTANT PROFESSOR—BIOCHEMISTRY

Regular tenure-track position in the Department of Chemistry beginning fall 1978. Well-equipped research laboratory available. Research interest in the structure and chemistry of proteins, glycoproteins, or polysaccharides preferred, but other research areas considered. Postdoctoral experience required. Send curriculum vitae and one letter of reference to: Robley J. Light, Department of Chemistry, Florida State University, Tallahassee, Florida 32306. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

The Department of Mathematics, Texas A & M University, College Station, Texas 77843, is accepting applications for assistant professorships. Those who have earned the Ph.D. in mathematics by fall 1978 will be considered. Applicants should show outstanding research promise and ability in teaching. Some preference will be shown to analysts and applied mathematicians. *Texas A & M is an Equal Opportunity/Affirmative Action Employer.*

ASSISTANT PROFESSOR. Williams College Biology Department has two positions for fall 1978: a **comparative animal physiologist** and a **cellular plant physiologist**. Teaching duties for the comparative physiology position include courses in endocrinology and comparative physiology, and instruction in an advanced tutorial for senior biology majors. Teaching duties for the plant physiology position include a course in general biochemistry, a course in plant physiology that will alternate every other year with an introductory plant biology course, and instruction in an advanced tutorial for senior biology majors. Both appointments are for 3 years at the assistant professor level and require a Ph.D. in the area of the appointment. Completed application must contain résumé, description of research interests, and three letters of recommendation to: **Dr. W. DeWitt, Chairman, Biology Department, Williams College, Williamstown, Mass. 01267.** Application deadline: 15 February.

Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR. The Cooperative General Science Program (CGSP) of the four undergraduate colleges (Clark, Morehouse, Morris Brown, Spelman) invites applications for a position in the field of physical science to teach nonscience majors in a large classroom setting. Send applications to: **Dr. O. P. Puri, Director, CGSP, Clark College, Atlanta, Georgia 30314.** An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOCHEMISTRY AND BIOPHYSICS UNIVERSITY OF PENNSYLVANIA

The Department of Biochemistry and Biophysics invites applications for the position of assistant professor. Applicants should have research interests in biochemistry or biophysics and a commitment to excellence in research and teaching. Please forward curriculum vitae, representative reprints, and a summary statement of background and interests. In addition, please have three or more letters of reference sent directly to us. These should include an evaluation of the specific research contributions made by the applicant and her/his capabilities for independent research. Address communications to:

S. W. Englander
Assistant Professor Recruitment Committee
Biochemistry and Biophysics
University of Pennsylvania
Philadelphia, Pa. 19104

Equal Opportunity/Affirmative Action Employer

DIVISION OF SCIENCE, UNIVERSITY OF NEW BRUNSWICK, SAINT JOHN CAMPUS

Applications are invited for two positions of **ASSISTANT PROFESSOR OF BIOLOGY**, effective, subject to budgetary approval, 1 July 1978 or later. Applicants should possess a doctorate in the appropriate area and should apply to: **Dr. R. B. Kelly, Chairman, Division of Sciences, University of New Brunswick, P.O. Box 5050, Saint John, New Brunswick, Canada E2L 4L5.** Applications should be accompanied by a curriculum vitae and copies of publications. Applicants should arrange for three letters of reference to be sent directly to Dr. Kelly.

POSITION 1 MARINE VERTEBRATE BIOLOGIST

The successful applicant will be expected to teach undergraduate courses in animal diversity structure and function, the biology of vertebrates, physiology of marine vertebrates and marine fisheries, and to develop an active research program.

POSITION 2 MARINE ECOLOGIST

The successful applicant will be expected to teach undergraduate courses in phytoplankton biology, aquatic production dynamics, estuarine biology and marine field biology, and to develop an active research program.

Note re both above positions: the ability to teach an introductory course in biochemistry will be an advantage.

POSITIONS OPEN

ASSISTANT OR ASSOCIATE PROFESSOR OF BIOCHEMISTRY. Position available 1 July 1978 for candidates with interests and postdoctoral research experience in areas related to biochemistry of membranes or cell surfaces. Departmental instructional programs serve medical students, graduate students, and undergraduates. Send curriculum vitae and names of three references to: **R. L. Lester, Department of Biochemistry, University of Kentucky, Lexington, Kentucky 40506.** (Closing date: 10 February 1978.) An Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY

To teach undergraduate courses in general biology, bacteriology, microbial metabolism, and a graduate course in area of expertise, starting February 1978. Applicant should have teaching and postdoctoral experience, preferably in virology. Send résumé, three references, and statement of aspirations to: **Dr. Dennis M. Curley, Chairman, Department of Biology, Long Island University/The Brooklyn Center, University Plaza, Brooklyn, N.Y. 11201.** An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSORSHIPS OF COMPUTER SCIENCE MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

The MIT Department of Electrical Engineering and Computer Science has several positions available starting September 1978 or earlier, for superior candidates interested in teaching and research. Candidates from all areas of specialization within computer science will be considered. The department has special interest in candidates in the hardware and computer systems areas. Research would probably be performed within the Laboratory for Computer Science (formerly Project MAC), the Artificial Intelligence Laboratory, or the Research Laboratory for Electronics.

Applications should include a curriculum vitae, and names and addresses of three or more references; non-U.S. citizens should include an explanation of visa status. Additional material describing the applicant's work, such as papers or technical reports, and a one-paragraph statement of future research plans would be helpful. Send applications to:

Professor Albert R. Meyer
Chairman, Computer Science Search Committee
545 Technology Square, MIT Room 515,
Cambridge, Mass. 02139

MIT is an Equal Opportunity/Affirmative Action Employer and actively solicits applications from women and minority group candidates.

The Department of Physiology has an **ASSISTANT PROFESSORSHIP** available in an area of mathematical or physical analysis in physiology. Position provides opportunities for teaching, research, and collaboration with colleagues. Department has a PDP 11/45 computer. Applicants should have a significant experimental program in physiology with doctoral training in physics or mathematics. Please write to: **Department of Physiology, Box 31, State University of New York, Downstate Medical Center, 450 Clarkson Avenue, Brooklyn, New York 11203.** Equal Opportunity/Affirmative Action Employer.

The Department of Psychology, Washington University, anticipates having tenure-track openings at the level of **ASSISTANT PROFESSOR** in two of the following three areas:

- 1) **Perception and Psychophysics**, preferably with emphasis on vision, cognition, or information processing;
- 2) **Animal Behavior**, preferably with specialties in one or more of the following areas: comparative psychology, behavior genetics, learning, or social communication; and
- 3) **Social/Organizational Psychology**, preferably with emphasis in motivation, group dynamics, systems analysis, or program evaluation.

All candidates must have a Ph.D. in psychology and should provide evidence of excellence in research and teaching. Applications from candidates with interests bridging two or more areas are especially invited. Applicants should send résumé, sample publications, and three letters of recommendation to: **the Search Committee, Department of Psychology, Washington University, St. Louis, Missouri, 63130.** The position being applied for should be clearly stated by each applicant. *Washington University is an Equal Opportunity/Affirmative Action Employer.* All materials should be received by 15 February.

POSITIONS OPEN

BOSTON UNIVERSITY has two openings for **assistant professors of computer science**. Ph.D. required. Specialization in MIS and in operating systems/systems programming preferred, but all qualified applicants will be considered. Please forward résumés in complete confidence to: **Chris Seashore, Administrative Assistant, Mathematics Department, BOSTON UNIVERSITY, 264 Bay State Road, Boston, Mass. 02215.** Boston University is an Equal Opportunity Employer.

ASSISTANT PROFESSOR, ENDOCRINOLOGY

Responsibilities include teaching of clinical endocrinology and general internal medicine, care of patients with endocrine disorders, and participation in an active research group in endocrinology. Applicants should be trained in internal medicine and clinical endocrinology, have some experience in endocrine research, and should be interested in an academic career in clinical and research endocrinology. Inquiries should be directed to: **Dr. A. Louis Southren, Professor of Medicine and Chief of Endocrinology, New York Medical College, Fifth Avenue at 106th Street, New York, New York 10029.** An Equal Opportunity Employer.

ASSOCIATE PROFESSOR OF ENGINEERING THERMODYNAMICS, TRANSFER PROCESSES, FLUID MECHANICS DARTMOUTH COLLEGE

Applications are invited from outstanding individuals with an interest in, and commitment to, high-quality undergraduate as well as graduate teaching and research in a small interdisciplinary engineering school. Experience should include the fundamental thermal and fluid sciences and their application to engineering problems. We have a growing interest in energy-oriented studies with ongoing projects in solar energy, two-phase flows in nuclear reactors, conversion of biomass into liquid field fuels, and large-scale energy systems and policies. The candidate should be capable of initiating and supervising substantial, externally funded, research projects with a strong experimental and/or hardware component. Preference will be given to candidates with energy-oriented research interests and experience, but other relevant areas in the thermal and fluid sciences are not excluded. Doctorate required. Industrial experience desirable.

Applicants are requested to submit a complete résumé, including a list of publications, a summary of grant support, a brief statement outlining present and projected teaching and research, and four letters of reference. Apply before 13 February 1978, to: **Professor B. Sonnerup, Thayer School of Engineering, Dartmouth College, Hanover, N.H. 03755.**

Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR IN-RESIDENCE

The University of California, Irvine, Department of Pathology, is recruiting for a faculty position at the assistant professor level. Required: M.D., Board-eligible in clinical pathology. Duties: service and administrative responsibilities in blood banking and cellular immunology, teaching medical students and house staff, and research. *All qualified candidates welcome; minorities and women encouraged to apply.* Send curriculum vitae and references to: **Dr. Edward R. Arquilla, University of California, Irvine, Department of Pathology, 101 City Drive South, Orange, Calif. 92668** by 31 January 1978.

TEXAS A & M COLLEGE OF MEDICINE ASSISTANT PROFESSOR OF PHARMACOLOGY

Invites applications for one tenure-track position beginning June 1978. Preferably the candidate should have a Ph.D. in pharmacology, postdoctoral experience, and have demonstrated potential for excellence in research and teaching. Responsibilities include participation in the medical school and graduate school curricula as well as the development and the conduction of an independent research program. The exact area of research preference is open. Candidates should submit a curriculum vitae, a summary of research and teaching interests, names of three references, reprints of publications, and a brief statement of research objectives by 8 March 1978 to:

Dr. George Barnes
Chairman, Search Committee
Department of Medical Pharmacology and Toxicology
Texas A & M College of Medicine
College Station, Texas 77843

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

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSIOLOGY

Applications are invited from individuals with at least 4 years of postdoctoral experience. Demonstrated independent research productivity and strong commitment to teaching are essential. Experience in renal, respiratory, or cardiovascular physiology is helpful but not essential. Send curriculum vitae to:

John J. Spitzer, M.D., Professor and Head
Department of Physiology
Louisiana State University Medical Center
1542 Tulane Avenue
New Orleans, La. 70112

ASSISTANT PROFESSOR POSTDOCTORAL FELLOW

Laboratory of Cellular Pathobiology seeking cell biologists with experience in electronmicroscopy and cell fractionation to study structural and functional relationships of subcellular organelles in lipid metabolism and/or connective tissue synthesis. Assistant professor and postdoctoral fellowship appointments available. Write to: **Dr. S. Goldfischer, Department of Pathology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, N.Y. 10461.** *Equal Opportunity Employer.*

ASSISTANT RESEARCH PROFESSOR. The Section of Radiopharmaceutical Chemistry of the George Washington University has one faculty position available immediately for an individual whose research interests are in the area of radiochemistry and the development of radiopharmaceuticals. Applicants should have a Ph.D. in radiochemistry or a related area.

Applications which should include a curriculum vitae should be sent to: **William C. Eckelman, Ph.D., George Washington University, Radiopharmaceutical Chemistry, Ross Hall, 2300 Eye Street, NW, Washington, D.C. 20037.**

An Equal Opportunity/Affirmative Action Employer.

ASSOCIATE CHIEF OF STAFF FOR EDUCATION to direct the Office of Education in a 1591-bed teaching hospital for the VA and for the University of California, Irvine-California College of Medicine. The appointee will also serve as director of the Southwest Regional Medical Education Center based at the VA Hospital, Long Beach, Calif. Qualifications must include M.D. degree, Board-certification in a specialty, strong academic credentials, and administrative experience. The physician selected will be appointed to the faculty in his/her discipline. *Equal Opportunity—women and minorities invited to apply.* Please contact: **Chief of Staff and Assistant Dean, University of California, Irvine-California College of Medicine, 5901 East 7th Street, Long Beach, Calif. 90822.**

ASSOCIATE DIRECTOR FOR VETERINARY PATHOLOGY AND RESEARCH,

Division of Pathology, Bureau of Foods, U.S. Food and Drug Administration, Washington, D.C. (Civil Service Position.)

The responsibilities of the position include: (i) supervision of the day-to-day in-house pathology studies including leadership of the gross necropsy team; (ii) input into the selection of pathology projects and their design; (iii) service as consulting expert pathologist to scientific and regulatory personnel including membership on Bureau of Foods committees and special task groups; (iv) supervision of histopathology evaluations and reports of staff pathologists; and (v) completion of pathology projects of interest as time permits.

Qualifications for the position require a D.V.M. or M.D. degree with substantial postgraduate training and experience in diagnostic tissue pathology and oncogenesis. Experience in toxicological pathology and Board-certification are highly desirable but not essential. Salary range is from \$30,750 to \$47,025 (GS-14 or -15) depending upon applicant's qualifications.

U.S. CITIZENSHIP REQUIRED

For further information regarding the position, telephone or write to: **Morris A. Weinberger, M.D., Director, Division of Pathology, HFF-130, 200 C Street, SW, Washington, D.C. 20204; telephone: 202-245-1123.**

This is a Civil Service position.
FDA/An Equal Opportunity Employer

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSICS. To teach courses and conduct research in physics and physical science. Ph.D. degree in physics and college teaching experience required. Statement of interest, résumé, and three letters of reference by 15 February 1977 to: **Dr. Joe B. Davis, Chairman, Department of Chemistry and Physics, Winthrop College, Rock Hill, S.C. 29733.**

Affirmative Action/Equal Opportunity Employer

ASSISTANT/ASSOCIATE PROFESSOR. A position in physiology starting 1 September 1978. To teach lecture-laboratory course in introductory human physiology, develop graduate courses/research program. Research interest in regulatory physiology preferred. Ph.D. or equivalent required; postdoctoral experience preferred. Send résumé and three letters of reference by 1 February 1978, to: **Robert B. Hill, Department of Physiology, University of Rhode Island, Kingston, R.I. 02881.** *Affirmative Action/Equal Opportunity Employer.*

ASSOCIATE SCIENTIST

Position available for M.D. and/or Ph.D. with graduate training in biochemistry and molecular biology. Experience in nucleic acid hybridization, restriction enzyme analysis, and somatic cell genetics. Strong interest in cancer research. Applicant should intend to develop his/her own ongoing research.

Submit replies to: **Box 4, SCIENCE.**

ASTRONOMY-GEOLOGY. Lake Erie College is seeking an individual to teach astronomy, geology, and physical environmental science. Candidates must possess a doctoral degree and have a strong desire to teach in a liberal arts setting at the undergraduate level. Send curriculum vitae and three letters of reference by 15 February 1978 to: **Dr. Betty Gibbins, Lake Erie College, Painesville, Ohio 44077.** *Equal Opportunity Employer.*

BIOCHEMIST

Entry-level appointment available to person with Ph.D., trained in biochemistry-molecular biology. Individual should have knowledge/experience in protein chemistry-enzymology to study interactions of viral proteins with nucleic acids.

Qualified candidates should submit résumé with the names of three references to:

**M. L. Knill, Recruitment
Position #816
FREDERICK CANCER RESEARCH CENTER
Lifton Bionetics, Inc.
P.O. Box B
Frederick, Maryland 21701
*An Equal Opportunity Employer, M/F***

BIOLOGY. Two positions for 1978. Required: Ph.D.; strong background in cellular or subcellular biology; teaching experience. Liberal arts college background preferred. Courses include introductory cell biology, microbiology, biochemistry, molecular genetics; advanced courses such as cell physiology, molecular biology, endocrinology, immunology, cellular or molecular neurophysiology, and membrane physiology. Rank and salary open. Submit curriculum vitae by 1 February 1978 to: **Laurence E. Wilson, Chairman, Biology Search Committee, Kalamazoo College, Kalamazoo, Michigan 49007.** *Equal Opportunity/Affirmative Action Employer.*

BIOMEDICAL ENGINEER

A biomedical engineer is required for a faculty position in the Kinesiology Department at Simon Fraser University. The appointee will be required to work in an interdisciplinary environment with biochemists, biologists, physiologists, physicians, psychologists, and biomechanics faculty on research problems related to human movement and human performance. The appointee should be able to teach courses at the undergraduate and graduate level on systems theory and biomedical instrumentation and to participate in team-taught physiology and human factors courses taking particular responsibility for neurophysiology.

The appointment, which is subject to the availability of funds and to approval by the Canadian immigration authorities, will probably be made at the assistant professor level with salary dependent on qualifications. Applications with the names of three referees should be sent to: **Dr. E. W. Banister, Chairman, Department of Kinesiology, Simon Fraser University, Burnaby 2, British Columbia, Canada V5A 1S6.**

POSITIONS OPEN

CARDIOLOGIST. The Division of Cardiovascular Disease of the Department of Medicine and the Cardiovascular Research and Training Center at the University of Alabama in Birmingham has available a position at the professor level. This position is open to qualified individuals at a senior level fulfilling three criteria. First, the individual must have expertise in the care and management of patients with cardiovascular disease, particularly hypertension. Second, the individual must have a firm commitment to teaching programs oriented to medical students, graduate students, house officers, and fellows. Finally, the individual should have a hypertension research background with capabilities for studying control of the peripheral circulation. Apply to: **Division of Cardiovascular Disease, Department of Medicine, University of Alabama Medical Center, Birmingham, Alabama 35294 (Attention: Ms. Norma McSweeney, Administrative Officer); telephone: 205-934-3285.** *An Equal Opportunity/Affirmative Action Employer.* Expiration date for receipt of applications: 31 January 1978.

CELL BIOLOGIST—BIOPHYSICIST

The Department of Radiology, University of Utah, has an immediate opening for a research associate (postdoctoral fellow) with research interests in flow cytometry. The position requires service, that is, running the flow cytometer 50 percent of time, with the other 50 percent devoted to research projects of personal interest. However, such research projects should be compatible with ongoing work which includes: experimental combined-modality research (that is, adriamycin plus x-irradiation, hyperthermia plus x-irradiation) as well as research on the effects of hyperthermia and x-irradiation as single agents. These studies range from the molecular level (chromatin, macromolecular turnover) through the cellular (CHO and HeLa), to intact tissue and whole animal (C3H mouse mammary tumors, intestine, and bone marrow) effects. Three years; salary negotiable. Send résumé to: **Dr. Lyle A. Dethlefsen, Department of Radiology, University of Utah, Salt Lake City, Utah 84132.** *Equal Opportunity/Affirmative Action Employer.*

CHAIRPERSON DEPARTMENT OF GEOSCIENCES

Purdue University is seeking a nationally known scholar as head of the Department of Geosciences. Applicants must have demonstrated scientific excellence in one of the areas of geoscience and have attained an academic or professional level comparable to the rank of senior associate or full professor. Salary is open and competitive.

The Department of Geosciences is a growing department with 22 full-time faculty members participating in undergraduate and graduate degree programs in atmospheric science, geology, geochemistry, geophysics, engineering geology, and coastal dynamics.

Interested applicants should send their résumé and the names and addresses of three references to: **Dr. William L. Wood, Chairperson, Search Committee, Department of Geosciences, Purdue University, West Lafayette, Indiana 47907.** *Purdue University is an Equal Opportunity/Equal Access University.*

CHAIRPERSON DEPARTMENT OF BIOCHEMISTRY

The Albany Medical College of Union University seeks a highly qualified individual for the position of chairperson and professor of biochemistry. Ph.D. and/or M.D. required. A commitment to teaching and a record of accomplishment in research essential.

Applicants should send curriculum vitae, bibliography, and names of three references to:

**Dr. Lawrence A. Caliguiri, Chairman
Biochemistry Search Committee
Albany Medical College of Union University
Albany, New York 12208**

An Equal Opportunity/Affirmative Action Employer

University of Vermont. Department of Chemistry, invites applications for the position of **CHAIRPERSON.** Applicants should be outstanding scientists with a genuine interest in graduate and undergraduate education, and have demonstrated leadership capabilities. Appointment will begin fall 1978. Applicants should send curriculum vitae and names of at least three references to: **Dr. L. M. Lambert, Chairman, Search Committee, Cook Physical Sciences Building, University of Vermont, Burlington, Vermont 05401.**

An Affirmative Action Employer

THE RISKS OF NUCLEAR POWER REACTORS

A Review of the NRC Reactor Safety Study WASH-1400 (NUREG-75/014)

A review and revision of the U.S. Atomic Energy Commission's "Reactor Safety Study" released by the Nuclear Regulatory Commission in 1975. The Review was carried out over a two year period by thirteen experts under the auspices of the Union of Concerned Scientists.

210 pages, 7 figures, 10 tables, with complete documentation, \$5.95. Price includes postage. All orders must be prepaid. Information on other UCS publications available upon request.

Write to: UNION OF CONCERNED SCIENTISTS
1208 Massachusetts Avenue
Cambridge, Massachusetts 02138
Attn: Publications Department

The National Cancer Institute (NCI), National Institutes of Health (NIH), is interested in contracting for the following projects:

IMMUNOTHERAPY

Reference No. NCI-CB-84246. **MECHANISMS OF SUCCESSFUL IMMUNOTHERAPY IN ANIMALS.** Proposals are sought to evaluate the mechanisms whereby successful immunotherapy or immunochemotherapy causes the observed effect. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84247. **ADOPTIVE CELLULAR IMMUNOTHERAPY IN ANIMALS.** Proposals are sought to evaluate the ability of syngeneic, allogeneic, or xenogeneic immune cells with specificity for tumor associated antigens to cause regression of established tumors when transferred into animals other than man. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84248. **INTRALESIONAL IMMUNOTHERAPY OF TUMORS OF OUTBRED ANIMALS.** Proposals are sought to evaluate the efficacy of intralesional injection of adjuvant material(s) in the treatment of spontaneously occurring tumors of outbred animals. The immunoadjuvant material such as BCG cell walls or BCG cell wall skeletons will be selected and supplied by the National Cancer Institute. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84249. **USEFULNESS OF TISSUE SPECIFIC IMMUNE RESPONSES IN TREATING TUMORS OF NON-VITAL ORGANS IN ANIMALS.** Proposals are sought to evaluate the usefulness of tissue specific immunity as a means of destroying tumors occurring in non-vital organs in animals other than man. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84250. **PRODUCTION OF MONOSPECIFIC ANTIBODIES AGAINST TUMOR ASSOCIATED ANTIGENS.** Proposals are sought to produce xenogeneic monospecific antibodies against human or other animal tumor associated antigens. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84251. **CHARACTERIZATION OF FACTORS CAUSING INHIBITION OF MACROPHAGE FUNCTION OR INFLAMMATORY RESPONSES.** Proposals are sought to functionally characterize factors produced by and/or induced by tumors, which impair macrophage function and/or inflammatory responses. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

Reference No. NCI-CB-84252. **IMMUNOTHERAPY: NEW APPROACHES TO IMMUNOTHERAPY.** Proposals are sought for creative approaches in the use of the immune system for cancer therapy. Both animal and human studies are acceptable. Animal work should be relevant to application in man. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 6 March 1978.

A request for proposal for each project listed above is available on or after 9 December 1977, by written request to: **Contracting Officer, CBDCS, Tumor Immunology, Research Contracts Branch, National Cancer Institute, Landow Building, Room C-425, National Institutes of Health, Bethesda, Maryland 20014.** Request for RFP must cite the reference number(s) of the desired project(s) as shown above. Requests or inquiries must be in writing.

REQUESTS FOR PROPOSAL—TUMOR IMMUNOLOGY

The National Cancer Institute (NCI), National Institutes of Health (NIH), is interested in contracting for the following projects:

IMMUNODIAGNOSIS

Reference No. NCI-CB-84255-31. **TYPING OF HLA ANTIGENS ON HUMAN TISSUE CULTURE CELL LINES.** NCI seeks laboratories to type HLA antigens on the surface of widely used human tumor tissue culture lines. An inhibition method with lymphocyte targets is preferred. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84256-31. **EVALUATION AND FURTHER DEVELOPMENT OF LEUKOCYTE ADHERENCE INHIBITION ASSAY FOR MALIGNANT DISEASE.** NCI seeks laboratories to evaluate the clinical usefulness of the LAI test to further refine the test. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84257-31. **IMMUNOHISTOCHEMICAL STUDIES OF TUMOR ASSOCIATED ANTIGENS.** NCI seeks laboratories to search for cancer-related markers in or on tumor cells by immunohistochemical techniques and to use them for the discrimination of neoplastic cells from normal cells. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84258-31. **MAINTENANCE OF A SERUM BANK FOR THE RAPID EVALUATION OF IMMUNODIAGNOSTIC TESTS FOR CANCER.** NCI seeks proposals for maintenance of an extensive bank of sera collected from cancer patients (before, during, and after therapy) as well as from benign disease patients and normal controls. Extensive storage facilities and data management are required. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84259-31. **PURIFICATION OF HUMAN TUMOR ASSOCIATED ANTIGENS.** NCI seeks laboratories to purify, isolate, and identify TAA's for use in immunodiagnostic assays. Experience in protein chemistry and immunology are required. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84260-31. **IMMUNE ASSAYS FOR ENZYMES AND ISOZYMES IN CANCER.** NCI seeks laboratories experienced in enzyme work to develop immunologic assays using the enzyme (isozyme) as an antigen, and to evaluate their clinical usefulness. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84261-31. **STUDIES OF ORGAN ASSOCIATED ANTIGENS AND OTHER MARKERS IN HUMAN TUMORS WHICH MAY BE USEFUL FOR THE DIAGNOSIS OF MALIGNANT DISEASES.** NCI seeks laboratories to perform detailed studies on fetal, differentiation, tissue or hematopoietic cell markers associated with human tumors to determine their relationship to cancer and to evaluate their clinical usefulness. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84262-31. **DETECTION AND CHARACTERIZATION OF SOLUBLE ANTIGEN-ANTIBODY COMPLEXES IN THE CIRCULATION.** NCI seeks laboratories to assay and isolate ag-ab complexes in the circulation of cancer patients, and to isolate, identify, and characterize molecular constituents of the complexes. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

Reference No. NCI-CB-84263-31. **DEVELOPMENT OF DIRECT ASSAY FOR LYMPHOKINES.** NCI seeks laboratories to develop more effective methods to assay lymphokines (L.K.). Assays are sought that are relatively quantitative, rapid, simple, and sensitive to detect hypoproduction of L.K. or production of L.K. in response to TAA's. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 22 March 1978.

A request for proposal for each project listed above is available on or after 22 December 1977, by written request to: **Contracting Officer, CBDCS, Tumor Immunology, Research Contracts Branch, National Cancer Institute, Landow Building, Room C-425, National Institutes of Health, Bethesda, Maryland 20014.** Request for RFP must cite the reference number(s) of the desired project(s) as shown above. Requests or inquiries must be in writing.

IMMUNOBIOLOGY

Reference No. NCI-CB-84268-31. **DEVELOPMENT OF NEW REAGENTS FOR CHARACTERIZATION OF SUBPOPULATIONS OF HUMAN CELLS IMPORTANT TO THE IMMUNE RESPONSE.** NCI seeks laboratories to develop new reagents for characterization of subpopulations of human cells important to the immune response as well as reagents for characterization of new subpopulations of these cells. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 15 March 1978.

Reference No. NCI-CB-84269-31. **STUDY OF T-CELL MACROPHAGE CO-OPERATION RESULTING IN MACROPHAGE ACTIVATION.** NCI seeks laboratories for studies of those interactions of T-cells or their products with macrophages that lead to activation of macrophages for reaction against tumor cells (specific or non-specific tumor cell cytotoxicity of cytostasis). Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 15 March 1978.

Reference No. NCI-CB-84270-31. **EXAMINATION OF THE RELATIVE SENSITIVITY OF NORMAL AND TUMOR TARGETS TO CYTOTOXIC ACTIVATED MACROPHAGES.** NCI seeks laboratories to study the relative sensitivities of normal and tumor targets to cytotoxic or cytostatic activated macrophages. First selective cytotoxicity must be clearly demonstrated and then mechanisms are to be studied. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 15 March 1978.

Reference No. NCI-CB-84271-31. **DEVELOPMENT OF METHODS FOR IN VIVO DESTRUCTION OF MONONUCLEAR PHAGOCYTES.** NCI seeks laboratories to develop methods for selective in vivo destruction or sustained functional inactivation of mononuclear phagocytes. These methods should be more specific and have fewer in vivo side effects than silica or carrageenan. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 15 March 1978.

Reference No. NCI-CB-84272-31. **MECHANISMS THAT OPERATE IN THE LOCAL SITE OF TUMOR DEVELOPMENT OR PROLIFERATION WHEREBY TUMOR CELLS ESCAPE DESTRUCTION IN THE FACE OF SPECIFIC IMMUNITY.** NCI seeks laboratories to study mechanisms whereby tumor cells escape destruction in the face of specific immunity. Local factors such as tumor products, genetic defects, local pH conditions, presence of passenger viruses and others can be studied. Deadline for receipt of proposals is 5 p.m., Bethesda, Maryland time, on 15 March 1978.

A request for proposal for each project listed above is available on or after 23 December 1977, by written request to: **Contracting Officer, CBDCS, Tumor Immunology, Research Contracts Branch, National Cancer Institute, Landow Building, Room C-425, National Institutes of Health, Bethesda, Maryland 20014.** Request for RFP must cite the reference number(s) of the desired project(s) as shown above. Requests or inquiries must be in writing.

POSITIONS OPEN

CHAIRMAN, DEPARTMENT OF PHYSIOLOGY AND BIOPHYSICS

The University of Alabama in Birmingham is seeking candidates for this position. The successful candidate should have a terminal degree, a firm commitment to academic excellence, and a genuine enthusiasm for teaching and talent in administration. This position provides an opportunity to organize and develop a department which is responsive to the teaching and research needs of medical, dental, and other health professional schools and their students in a growing health sciences center. Any application should be accompanied by a curriculum vitae, including bibliography and any other relevant material, and be submitted to the chairman of the search committee:

Dr. Thomas N. James
Department of Medicine
University of Alabama Medical Center
Birmingham, Alabama 35294

University of Alabama in Birmingham is an Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON, Department of Biology, offering undergraduate and masters programs. Candidates should have doctorate, a record of teaching excellence, research and administrative experience, and an interest in program development. Send résumé and names of three references by 15 February to: **Laurel Tryforos, College of Arts and Sciences, Roosevelt University, 430 South Michigan Avenue, Chicago, Illinois 60605.**

An Equal Opportunity University

DEAN—SCHOOL OF MEDICINE

The Louisiana State University Medical Center is seeking applicants or nomination of candidates for the position of dean of the School of Medicine in New Orleans. The medical school is part of one of the largest medical complexes in the country and currently enrolls almost 700 students.

Applicants must have a M.D. degree, experience in medical education and clinical medicine, and demonstrated administrative abilities.

Letters of application or nomination should be sent to: **Dr. Joseph L. Biundo, Jr., Chief of Section of Rheumatology and Rehabilitation, Louisiana State University Medical Center, 1542 Tulane Avenue, New Orleans, Louisiana 70112.**

Equal Opportunity/Affirmative Action Employer

SUNY-PLATTSBURGH STATE UNIVERSITY OF NEW YORK DEAN, GRADUATE STUDIES & RESEARCH

Plattsburgh invites nominations and applications for the position of dean, Graduate Studies and Research.

The dean is responsible for coordination of campus research activities and assists faculty in obtaining external support for research. The dean aids in the preparation of grant proposals, development of budgets, and exploration of funding sources. The dean acts as liaison with the SUNY Washington Office and the Research Foundation of the State of New York.

The dean is responsible for coordinating graduate offerings, assisting in the development of policies affecting graduate programs, maintaining graduate records, and serving as liaison with graduate agencies and organizations.

Candidates for this position should possess an earned doctorate. In addition to academic experience or equivalent, for example, in foundations or agencies and administrative experience, candidates should present evidence of research ability as demonstrated by publication, grant preparation, and grant administration and funding.

The anticipated date of appointment is 1 July 1978. Applications with current résumés should be received by 17 February 1978 to:

Dr. Ann C. Hasting, Secretary
Search Committee
State University College, Box 1000
Plattsburgh, New York 12901

Equal Opportunity/Affirmative Action Employer

POSITIONS OPEN

CHEMICAL OCEANOGRAPHER

Faculty position open at the assistant or associate professor level for a chemical oceanographer/marine geochemist in the Department of Oceanography, Florida State University. Some preference will be given to candidates with experience and interest in the chemistry of the water column or organic geochemistry in order to complement existing research programs in marine and atmospheric chemistry. Send inquiries to: **Dr. John W. Winchester, Search Committee Chairman, Department of Oceanography, Florida State University, Tallahassee, Florida 32306. Telephone: 904-644-6700. Florida State University is an Equal Opportunity/Affirmative Action Employer.**

CHEMIST/NEUROBIOLOGIST

Postdoctoral position available immediately for a synthetic organic/photochemist interested in learning neurobiology. Our electrophysiological experiments employ photosensitive compounds as probes for the molecular pharmacology of biological membranes. For further information refer to H. A. Lester, *Sci. Am.* 236 (No. 2), 106-118 (February 1977). Send curriculum vitae and references to: **Dr. H. A. Lester, Division of Biology 156-29, California Institute of Technology, Pasadena, Calif. 91125. An Equal Opportunity/Affirmative Action Employer, M/F/H.**

CLINICAL PHARMACOLOGIST. The University of Illinois, College of Veterinary Medicine, is seeking a clinical pharmacologist. Applicants must have the D.M.V. degree or its equivalent and have advanced training and experience in clinical pharmacology. The person selected will be involved in professional and graduate training and will be expected to develop or continue an active research program.

This position is permanently funded. Rank/salary are negotiable and commensurate with experience. Interested parties should forward a résumé of their professional activities and the names of three references to: **Dr. William B. Buck, Room 235, College of Veterinary Medicine, University of Illinois, Urbana, Ill. 61801.** Deadline for applications or nominations is 28 February 1978, or until position is filled. Starting date is negotiable. *The University of Illinois is an Affirmative Action/Equal Opportunity Employer.*

DEAN SCHOOL OF SCIENCE RENSSELAER POLYTECHNIC INSTITUTE

Rensselaer is a private, coeducational, nondenominational, technological university with Schools of Architecture, Engineering, Humanities and Social Sciences, Management, and Science. The School of Science contains Departments of Biology, Chemistry, Geology, Mathematical Sciences, and Physics and offers B.S., M.S. and Ph.D. degrees in these fields and in interdisciplinary areas.

The Institute has recently initiated planning for development over the next quarter-century. Vigorous growth of graduate and research activity is an objective for the Institute as a whole and for the School of Science in particular. Dean of science candidates should have a strong background in one or more of the above-mentioned sciences and preferably teaching experience and some administrative experience.

The position will be open as of 1 July 1978. Deadline for applications is 1 March 1978. Please send nominations and applications to:

Dr. Robert G. Loewy, Provost
Rensselaer Polytechnic Institute
Troy, New York 12181

Rensselaer is an Equal Opportunity/Affirmative Action Employer.

ECOLOGIST—ASSOCIATE DIRECTOR, UCLA

Applications are invited from highly qualified ecologists to become chief of Division of Environmental Biology and associate director of the Laboratory of Nuclear Medicine and Radiation Biology. The position carries a joint appointment, presumably at the full professor level, in the Department of Biology, and undergraduate and graduate teaching responsibilities. Research interests should be in quantitative ecology and applicants should be interested in resolving environmental problems related to energy technologies because the Laboratory's research is funded primarily by the Department of Energy (formerly ERDA). Send letters of inquiry or application, including curriculum vitae, description of research and teaching interests, and names and addresses of three references before 15 February 1978 to: **Director's Office, Laboratory of Nuclear Medicine and Radiation Biology, University of California, 900 Veteran Avenue, Los Angeles, California 90024. An Equal Opportunity/Affirmative Action Employer.**

POSITIONS OPEN

DEAN OF THE SCHOOL OF SCIENCE

California State Polytechnic University, Pomona, invites applications for the position of dean of the School of Science. An applicant must have an earned doctorate from programs in astronomy, biological sciences, chemistry, computer science, earth sciences, mathematics, or physics; have clearly demonstrated a record of active research and of administrative leadership; and be prepared to encourage faculty development in teaching and research and to strengthen degree programs for the school's nine B.S. majors and three M.S. programs (biological sciences, chemistry, and mathematics). Compensation currently ranges from \$29,748 to \$35,976.

Applications or letters of intent accompanied by a résumé and letters of reference must be received before 15 February 1978. Address all correspondence to: **Dr. Kenneth H. Anderson, University Dean for Academic Affairs, California State Polytechnic University, Pomona, 3801 West Temple Avenue, Pomona, California 91768, Attention: Katrina Schreib.** *Cal Poly is a member of the California State University and Colleges System and an Affirmative Action/Equal Opportunity Employer.*

DEAN, DENTAL SCHOOL. The University of Louisville is seeking a dean for the School of Dentistry within its Health Sciences Center. Candidates should be leaders in dentistry, holding a D.M.D. or D.D.S. degree and having had significant personal experience in patient dental care. Candidates should also have a record of substantial scholarly achievement and a background of accomplishment in dental education. Knowledge, understanding, and appreciation of the basic sciences are expected. Previous experience should include administrative responsibilities, leadership roles, capability in recruitment and development of faculty and staff, an understanding of the role of dentistry in relation to other components of a major health sciences center, and a record of participation in professional dental organizations. A fundamental component of the school is the education of general dental practitioners. Candidates should be academically qualified for appointment as a professor with tenure. Administrative responsibility is directly to the vice president for health affairs. Salary is competitive with similar appointments in the United States. Submit curriculum vitae to:

Dr. John M. Yancey, Chairman
Dean Search Committee
University of Louisville
School of Dentistry
Health Sciences Center
P.O. Box 35260
Louisville, Kentucky 40232

An Equal Opportunity/Affirmative Action Employer

DEVELOPMENTAL BIOLOGIST. The Department of Biology has an opening for an **ASSISTANT PROFESSOR** with research interests in the cellular and molecular aspects of development. Teaching will include undergraduate animal embryology and undergraduate/graduate developmental biology. Applications are due 1 February 1978. Send curriculum vitae, three letters of reference, transcripts, and a statement of 5-year objectives to: **Dr. Florence L. Juillerat, Department of Biology, Indiana University—Purdue University at Indianapolis, 1201 East 38 Street, Indianapolis, Indiana 46205.**

An Affirmative Action/Equal Opportunity Employer

ENDOCRINOLOGIST. The Department of Zoology, University of Wisconsin, Madison, is re-advertising the opening for a faculty position advertised in *Science*, 4 November 1977. The description should not be interpreted to exclude applicants whose interest includes aspects of reproductive endocrinology. New deadline: 1 February 1978.

The University of Wisconsin is an Equal Opportunity Employer.

EUKARYOTIC CELL BIOLOGIST, assistant professor of biological sciences. Specific area of cellular research not restricted. Applicant should be capable of teaching upper-division graduate course in cell biology or cell psychology, course in research specialty, and lecture course for nonmajors. Requirements: Ph.D. with demonstrated teaching ability and potential for attracting research support. Applicants should send curriculum vitae, including résumé of current and future research interest, plus the names and addresses of three references to: **Dr. Gordon E. Stone, Department of Biological Sciences, University of Denver, University Park, Denver, Colorado 80208.**

DIRECTOR
PROGRAM IN MEDICAL SCIENCES
 Florida State University
 Florida A and M University
 University of Florida College of Medicine

Nominations and applications are invited for the position of director of the Program in Medical Sciences. This innovative, interinstitutional program is responsible for the selection and education of 30 to 35 medical students from Florida State and Florida A and M Universities in Tallahassee in an integrated undergraduate/first-year medical curriculum. The students complete their medical training and receive the M.D. degree from the University of Florida College of Medicine in Gainesville, under whom the program is accredited.

Description: The director of the program also carries the title of assistant dean of the College of Medicine, and an appropriate academic rank in a department at Florida State University where the program is centered. The director is responsible for overall program administration including student affairs, admissions, evaluation and planning, curriculum, budget, clinical relations and relation to the three institutions.

Qualifications: (i) an earned M.D. and/or Ph.D. degree, (ii) achievement and scholarship in a recognized academic area, preferably related to the basic medical sciences or clinical sciences, (iii) experience in medical education, (iv) administrative experience at the college or university level, (v) the ability to relate to a variety of faculties and administrators on three campuses as well as practicing physicians and health care professionals in the community, (vi) a commitment to the program philosophy of the selection and education of medical students with a high propensity for primary care practice in medically underserved areas, and (vii) a strong commitment to Equal Opportunity and Affirmative Action.

Salary: commensurate with qualifications and experience. **Beginning date:** September 1978. Letters of application or nomination with appropriate supporting materials should be mailed to: Dr. Lloyd M. Beidler, Chairman, Search Committee for Director, Program in Medical Sciences, Room 239, Biology Unit I, Florida State University, Tallahassee, Florida 32306.

Application deadline: 15 February 1978.

**DEPARTMENT OF HEALTH,
 EDUCATION, AND WELFARE
 FOOD AND DRUG ADMINISTRATION
 (FDA) BUREAU OF FOODS
 WASHINGTON, D.C.**

SCIENTIFIC POSITIONS: Civil Service openings for pathologists with a degree in veterinary medicine and postgraduate training in tissue pathology to fill the position of **petition review pathologist**.

Experience in the practice of pathology is desirable. Principle responsibilities will be the review of scientific data contained in petitions filed for food additive, color additive, investigational new animal drug applications, generally recognized as safe (GRAS) petitions, contaminant data review, and the like. Special emphasis will be on the gross and histopathology findings with procurement and review of slides when appropriate. These activities will consume approximately two-thirds of the professional time; one-third will be concerned with participation in the in-house toxicologic-pathology program involving gross necropsies, histopathology study, and preparation of pathology reports.

Salary range is approximately \$21,883 to \$33,825 (GS-12 and -13) depending upon qualifications.

U.S. CITIZENSHIP REQUIRED

Send curriculum vitae or Standard Form 171 (Personal Qualifications Statement), bibliography, and transcript or listing of college and university courses to:

**DHEW/Food and Drug Administration
 Division of Personnel Management,
 Room 1825
 Personnel Operations Branch (HFA-410)
 200 C Street, SW
 Washington, D.C. 20204
 Attention: E. J. Echols**

This is a Civil Service position. *FDA/An Equal Opportunity Employer.*

**CONFERENCE ON
 CARBONACEOUS
 PARTICLES
 IN THE ATMOSPHERE
 March 20-22, 1978**

Sponsored by

**National Science Foundation
 & Lawrence Berkeley Laboratory**

To be held at

**Lawrence Berkeley Laboratory
 University of California**

This discussion oriented conference will provide a forum for reviewing current research on atmospheric particulate carbonaceous matter. Presentations are solicited on (but not limited to) the following topics: formation of particulate carbon; reactions involving particulate carbon; atmospheric behavior of particulate carbon; analysis, chemical characterization, and speciation of particulate carbon; environmental impacts of carbon; sources of particulate carbon; optical properties of carbon; role of particulate carbon in nucleation, adsorption, and related phenomena; and biological and physiological effects of particulate carbon.

Abstracts of proposed presentations should be submitted by February 1, 1978. Persons wishing to participate in the discussions or present papers should contact

**T. Novakov
 Bldg. 73
 Lawrence Berkeley Laboratory
 University of California
 Berkeley, CA 94720
 415-843-2740, ext. 5319**

**Coming
 Soon**

the tool for
 selecting all your
 science books

**Science
 Booklist
 Supplement
 1970-1977**



**DEAN OF THE
 COLLEGE OF ARTS AND SCIENCES**

**UNIVERSITY
 OF HARTFORD**

Applications and nominations are invited for the position of **dean**, College of Arts and Sciences, University of Hartford.

The University of Hartford is an independent, coeducational, nonsectarian, urban university with approximately 3700 full-time undergraduate students, and an FTE of 6000, located on a 200-acre campus in West Hartford, Connecticut. Founded in 1877, it consists of eight schools and colleges of which the College of Arts and Sciences is the largest.

Candidates should possess Ph.D. or equivalent qualification in the arts and sciences, a substantial reputation as a scholar, teacher, and administrator, and be deeply committed to the ideals of a liberal arts education.

Duties for the new dean will begin on 1 July 1978; deadline for receipt of written applications with curriculum vitae is 15 January 1978.

We are keen to hear from suitable minority and/or women candidates.

Please address correspondence to:

**Dr. H. L. Leonhardt, Chairman
 Arts and Sciences Dean Search Committee
 Dana Hall
 University of Hartford
 West Hartford, Connecticut 06117**

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

Applications and nominations are invited for the position of

**VICE PRESIDENT FOR RESEARCH AT
 MONTANA STATE UNIVERSITY**

RESPONSIBILITY: reporting directly to the president, this administrator is charged with developing, coordinating, and supervising the university's research and creative activity programs in conjunction with private, state, federal, and international funding organizations. This includes the supervision of the operations of the university's Grants and Contracts Administration Office (annual volume of \$8.5 million) as well as assistance to faculty in developing proposals for grant and contract procurement.

QUALIFICATIONS: terminal degree in a professional discipline; established reputation for creativity in that field; knowledge of broad research trends and current developments; experience in applying for, securing, and utilizing grants in the sciences or humanities; and demonstrable leadership and administrative capabilities.

MONTANA STATE UNIVERSITY, located on a 1170-acre campus in Bozeman, is the state's land-grant institution and has an enrollment of 9800 students. It is a multifaceted university, conferring doctoral degrees in 19 fields and master's degrees in 34 fields of the arts, humanities, and sciences, in addition to functioning as the agricultural, scientific, and technological center of a six-unit state university system.

APPOINTMENT: fiscal year.

SALARY: negotiable.

APPLICATION: submit letter of interest, résumé, and names and addresses of three references to:

**Professor James McMillan, Chairman
 Vice President for Research Search Committee
 310 Lewis Hall
 Montana State University
 Bozeman, Montana 59717**

DEADLINE: 1 February 1978.

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

POSITIONS OPEN

The Department of Psychology at Cornell University expects to have an opening for a new faculty member in the area of **DEVELOPMENTAL PSYCHOLOGY**, beginning in fall 1978. The appointment will probably be at the level of **assistant professor**.

The department welcomes applications from persons with teaching skills and with active research interests in any aspect of developmental psychology. Applicants working in infant development or cognitive development are particularly welcome. Possible research interests appropriate for this position might include, but are not limited to: perceptual or cognitive aspects of infancy, physiological commitments of the early development of human behavior, development of cognitive and/or interpersonal skills in social contexts, individual or group (for example, ethnic or cross cultural) differences in patterns of development, development and predictability of competence, the origins of self-control, development of perception, memory or attention.

Interested applicants should submit a complete curriculum vitae, reprints or preprints of completed research, and letters of recommendation sent directly from three referees to:

Search Committee in Developmental Psychology
Department of Psychology
Uris Hall
Cornell University
Ithaca, N.Y. 14853

Cornell University is an Equal Opportunity/Affirmative Action Employer. Minority and women candidates are urged to apply.

DIRECTOR, SCHOOL OF PHYSICS

Applications and nominations are solicited for the position of director of the School of Physics at the Georgia Institute of Technology, starting September 1978. The department, with 30 faculty members, 10 postdoctoral and research scientists, 55 graduate students, and 200 undergraduate majors, conducts an extensive program of graduate and undergraduate instruction and research. Applicants must have an excellent academic reputation in research and teaching, with some administrative experience, and must qualify for the rank of full professor. Curriculum vitae and a list of publications should be sent to: **Dr. R. F. Fox, Chairman, Search Committee, School of Physics, Georgia Institute of Technology, Atlanta, Georgia 30332. Telephone: 404-894-5260. Georgia Tech is an Equal Education and Employment Opportunity Institution.**

DIRECTOR OF BOTANICAL GARDEN UNIVERSITY OF GEORGIA

Effective date: 1 July 1978.

Salary: Commensurate with ability and experience.
Qualifications: Ph.D. in plant science or a terminal degree in a related discipline is required. Candidate must meet requirements for tenured rank in an appropriate university department. Preference will be given to those applicants with successful administrative experience and/or skills and those who possess special technical knowledge of plant sciences and botanical gardens. Director is responsible for the management of the Botanical Garden, the direction of appropriate research and educational activities, the preparation of budgets for state funds and for providing leadership in seeking outside funds from agencies, private foundations, and individuals. Applications received through 1 February 1978 or thereafter until a suitable candidate is found. Submit applications and nominations to: **Dr. Albert F. Ike, Chairman, Search and Screen Committee, 307 Old College, University of Georgia, Athens, Georgia 30602. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.**

EDITOR FOR SCIENCE AND MEDICINE HARVARD UNIVERSITY PRESS

You are invited to apply for a most demanding and exhilarating position; continuing the program of specialist and more general volumes (many in the biological sciences) at the high level that has characterized our list.

Titles recently published include: *Sociobiology* by Wilson; *The Horizons of Health* by Wechsler, Gurin and Cahill; *Behavior of Communicating* by Smith; and *Ontogeny and Phylogeny* by Gould.

This is an opportunity to join a press that will market your books as energetically as the successful applicant will acquire and edit them. Reply, in confidence if you wish, with a letter and résumé to: **Arthur J. Rosenthal, Director, Harvard University Press, 79 Garden Street, Cambridge, Mass. 02138.**

An Equal Opportunity Employer

POSITIONS OPEN

FACULTY POSITION: associate professor to full professor. Opening available in mechanical design beginning 1 July 1978. Doctorate in mechanical engineering required with research interests in design and related areas such as materials, dynamics, and vibrations, computer-aided design and numerical methods. Professional status is required as evidenced by the P.E. license or appropriate professional experience. Responsibilities include undergraduate and graduate teaching, directing undergraduate and graduate students, and conducting funded research. Applications must be received by 1 February 1978. Send curriculum vitae to: **Professor G. S. Samuels, School of Engineering, University of California, Irvine, Calif. 92717. The University of California is an Equal Opportunity Employer; women and minority candidates are encouraged to apply.**

FACULTY sought for permanent positions in interdisciplinary Bioengineering Program at the University of Illinois at Urbana-Champaign starting August 1978. Appointments will be made jointly with one of the existing departments in engineering, life sciences, or veterinary medicine. Rank preferably assistant professor with commensurate salary. Candidate must have Ph.D. in appropriate field and interest in developing collaborative research efforts and educational program. Preference given to the fields of biomedical instrumentation, implant materials and devices, biothermal applications, and radiations. Send complete résumé, summary of current research, future plans, and three names of references to: **Professor John C. Chato, Chairman, Executive Committee, Bioengineering Faculty, 164-C M.E.B., University of Illinois, Urbana, Ill. 61801; telephone: 217-333-0623, by 20 February 1978, for full consideration. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.**

FACULTY OPENING—NUTRITION

Assistant or associate professor of nutrition. Candidates should have strong training in experimental nutrition or nutritional biochemistry and be prepared to undertake teaching and research on the metabolic aspects of ruminant nutrition. Send curriculum vitae, list of publications, and names of three referees to: **Dr. H. H. Draper, Chairman, Department of Nutrition, College of Biological Science, University of Guelph, Guelph, Ontario, Canada N1G 2W1.**

FACULTY POSITION: Department of Medicine, Columbia University. For research associate with a Ph.D. degree and an interest and background in lipid and/or lipoprotein biochemistry. The position will involve use of animal models to study intestinal lipoprotein formation and metabolism. Send résumé and list of three references to: **Dr. Peter R. Holt, St. Luke's Hospital Center, 114th Street and Amsterdam Avenue, New York, N.Y. 10025. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION IN BIOCHEMISTRY. Tenurable appointment as assistant professor to commence September 1978. Qualifications include Ph.D. in biochemistry and a primary commitment to quality undergraduate education. Some teaching experience is highly desirable. Teaching duties will include introductory chemistry for allied health majors and a full-year course in biochemistry. Supervision of undergraduate research projects is expected. Send résumé, transcripts, and three letters of recommendation by 1 March 1978 to: **Dr. Roger W. Armstrong, Chairman, Department of Chemistry, Russell Sage College, Troy, New York, 12180. An Equal Opportunity/Affirmative Action Employer.**

FACULTY POSITION IN CELL BIOLOGY

The Department of Zoology at Oregon State University invites applications from highly qualified individuals for a tenure-track assistant professorship in cell biology starting fall 1978. The successful applicant will be expected to establish a vigorous research program and to provide quality undergraduate and graduate instruction. A Ph.D. is required. Preference will be given to individuals having postdoctoral experience and with a research interest in cellular differentiation, developmental genetics, or comparative immunology. Applications consisting of a curriculum vitae, representative reprints, and three letters of reference should be directed to: **Cell Biology Search Committee, Department of Zoology, Oregon State University, Corvallis, Oregon 97331 prior to 15 February 1978.**

Oregon State University is an Affirmative Action/Equal Opportunity Employer, and complies with Section 504 of the Rehabilitation Act of 1973.

POSITIONS OPEN

FACULTY POSITIONS

Two tenure-track positions, one in **analytical chemistry** and one in **biochemistry** at the assistant professor level beginning fall 1978. Applicants must have the Ph.D. degree and postdoctoral experience. Teaching experience desirable. Deadline for applications: 10 February 1978. Application materials must include curriculum vitae, academic transcripts, reprints of representative publications, a brief statement of proposed research program contemplated, and three letters of recommendation. Send applications to: **Dr. Andrew P. Stefani, Chairman, Department of Chemistry, The University of Mississippi, University, Miss. 38677. The University of Mississippi is an Equal Opportunity Employer.**

FACULTY POSITION IN THE DEPARTMENT OF ASTRONOMY, HARVARD UNIVERSITY

The Department of Astronomy at Harvard University plans to make one or two appointments to the position of assistant professor to begin in summer or fall 1978. The department invites applications for these positions, which will have a term of 5 years. The department wishes to consider applications from highly qualified persons in any area of astronomy and astrophysics, and it particularly encourages applicants in the areas of solar physics (including solar plasma physics) and observational optical astronomy. The successful applicant will be expected to participate actively in teaching activities within the Department of Astronomy, and it is also expected that they will spend a significant fraction of their time in research activities at the Center for Astrophysics.

Letters of application should be accompanied by a résumé of experience in teaching and research, a statement of research interests, and a bibliography. The applicant should request three astronomers or physicists to write directly to: **Professor A. G. W. Cameron, Chairman**, giving their evaluation of the applicant's abilities. Applicants are expected to have received their Ph.D. at least 1 year before taking up this post.

Harvard University is an Equal Opportunity Employer with an Affirmative Action Program, and it encourages applications from women and members of minority groups.

Send applications to: **Department of Astronomy, Harvard University, 60 Garden Street, Cambridge, Massachusetts 02138** for receipt by 1 February 1978.

DEPARTMENT OF NUTRITION AND FOOD SCIENCE MASSACHUSETTS INSTITUTE OF TECHNOLOGY FACULTY POSITION

The department, a large multidisciplinary teaching and research unit with activities in all principal areas of nutrition and food science, is seeking an applicant to fill the following faculty position:

An M.D., with research training and preferably with a Ph.D. degree, and experience and a major interest in human and clinical nutrition. The appointee will be expected to teach graduate level courses concerned with human and clinical nutrition, to develop a vigorous research program, and become actively involved in the research programs of the MIT Clinical Research Center.

The appointment will be at the assistant or associate professor rank, depending upon the qualifications of the successful applicant.

Curriculum vitae, together with representative publications, and the names of five referees should be submitted before 1 February 1978 to: **Dr. V. R. Young, Chairman, Search Committee, Room 56-331, Massachusetts Institute of Technology, Cambridge, Mass. 02139.**

MIT is an Equal Opportunity Employer. Representatives of minority groups are urged to apply.

FACULTY POSITION. Physiologist or biophysicist candidates with research interests in neurophysiology, cybernetic, endocrine, cardiovascular, or respiratory control will be given preference. Appointment will be at the assistant or associate professor level beginning July 1978. Teaching duties may include medical, paramedical, and graduate student courses. The applicants should hold a M.D. and/or Ph.D. degree and have had postdoctoral training. Send curriculum vitae and names of three references to: **Dr. G. A. Klassen, Head, Department of Physiology and Biophysics, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H7.**

**GRIFFITH UNIVERSITY
SCHOOL OF AUSTRALIAN
ENVIRONMENTAL STUDIES**

LECTURER — TWO POSITIONS

Applications are invited from suitably qualified persons to fill faculty staff appointments for 1978 in the School of Australian Environmental Studies.

**LECTURER IN ECOLOGY—
REFERENCE L.16**

The appointee will be expected to contribute to undergraduate and postgraduate programmes already in operation in the school. In particular, involvement may be sought in the courses: environmental biology and ecosystems and community ecology; and in the honours programme.

Applicants are sought with backgrounds in one or more of the following areas: plant ecology, aquatic ecology, vertebrate ecology, and human ecology.

**LECTURER IN ENVIRONMENTAL
PHYSICAL SCIENCE—REFERENCE L.17**

An environmental scientist is required with training and experimental experience in the physical sciences, with interests in the application of these skills to environmental studies. The school's interests include the environmental management of soils, environmental chemistry, air and water pollution, and the application of physical measurement in the natural and social sciences.

Salary range: lecturer: \$14,632 to \$19,262.

Appointment date for one position will be 1 February 1978 and the remaining position 1 July 1978 or as soon as possible after these dates. Application forms and further information on the school's teaching and research activities are available from: **The School Administrator, School of Australian Environmental Studies, Griffith University, Nathan, 4111 Queensland, Australia**, to whom applications should also be forwarded.

Closing date for applications will be 31 January 1978.

**IAN MACGREGOR
PRESIDENTIAL PROFESSORSHIP
COLORADO SCHOOL OF MINES**

The Colorado School of Mines, a world leader in teaching, research, and service in the fields of energy and minerals, desires to appoint an outstanding interdisciplinary scholar to be the Ian MacGregor Presidential Professor. The school invites applications and nominations for this distinguished, limited-term position. The objectives of the presidential professorship are to stimulate scholarship, intellectual excitement, and widespread interest in intercultural areas linked to but not in the technical mainstream of earth science and engineering. Personal precept and example and participation in a full program of guest lectureships, fellowships, assistantships are all required. The activities of the professorship will contribute to the intellectual life of the Denver metropolitan area, one of the major energy materials and minerals centers of the nation.

The person appointed must exhibit at a minimum all of the following qualifications: (i) a solid record of achievement in a recognized academic discipline: history, philosophy, literature, art, economics, political science, and so forth, (ii) evidence of growth in-to and significant achievement in one or more disciplines outside the base discipline but linked to it in a scholarly and professional way, (iii) demonstrated ability and continuing desire to lead and inspire undergraduate and graduate students in the full range of interactive situations from the lecture hall to individual discussion, and (iv) demonstrated ability and intent to participate vigorously in a full program of intellectual activity involving guest lecturers, seminars, visiting fellows, and so forth.

The MacGregor Presidential Professorship is fully funded from nonpublic sources. Generous salary and funds for adequate secretarial and technical support will be provided. The term of appointment is subject to mutual agreement with one academic year minimum. The initial date of appointment is at the reasonable convenience of the appointee but not later than September 1978. Closing date for nominations and applications in detail to be received at the following address is 16 January 1978: **MacGregor Professorship Committee, President's Office, Colorado School of Mines, Golden, Colorado 80401**. *The Colorado School of Mines complies with all the applicable nondiscrimination statutes and regulations.*

FACULTY POSITIONS

**College of Medicine, King Faisal University
Dammam, Saudi Arabia**

Applications invited from qualified men and women in:

Biology	Biochemistry
Chemistry	Hematology
Physics	Biostatistics
Anatomy	Microbiology
Human Physiology	Parasitology
Pathology	Pharmacology
Epidemiology	General Surgery
Community Medicine	Internal Medicine

Doctorate or equivalent degree required. Language of instruction is English. Positions available starting September 1978; interviews scheduled with the dean in the United States and Great Britain early in 1978.

Salary ranges (monthly salary in Saudi riyals or approximate annual equivalent in U.S. dollars)—professor: SR6,000 to 6,600 or \$20,300 to \$22,300; associate professor: SR4,800 to 5,800 or \$16,300 to \$19,600; and assistant professor: SR3,600 to 4,600 or \$12,200 to \$15,600.

(M.D. degree commands a higher salary, up to 50 percent if a clinical as well as academic appointment held.)

Free furnished accommodations. Airfare to and from Saudi Arabia once a year plus a 45- to 60-day holiday. No Saudi income tax.

Send complete curriculum vitae plus addresses and telephone numbers of three references to:

**Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
c/o Saudi Arabian Educational Mission
2223 West Loop South, Suite 400
Houston, Texas 77027**

**Mohammed T. Altorki, M.D., MRCP
Dean of the Medical Faculty
King Faisal University
P.O. Box 9
Isleworth, Middlesex TW7 4LZ
England**

Specify dates of teaching appointments and availability.

**INTERNATIONAL LABORATORY FOR
RESEARCH ON ANIMAL DISEASES (ILRAD)**

The International Laboratory for Research on Animal Diseases, an internationally funded research institute in Nairobi, Kenya, involved in research on *Trypanosomiasis* and *Theileriosis*, invites applications for the following position:

TRAINING OFFICER

The successful candidate will have the following duties: (i) coordinate, supervise, and assist in planning ILRAD training activities, which include training of graduate students, seminars, courses, and conferences, (ii) supervise supporting staff involved in the above activities, (iii) carry out training activities in relevant disciplines as part of ILRAD programme including identification and coordination of trainer participation, and (iv) correspond with institutions and serve as liaison with appropriate officials in developing countries.

Training and experience—A university degree in science is required. Applicants with veterinary or human medicine background will have an advantage. Five years of teaching experience in lecture/laboratory course in a scientific field, with demonstrable high competence at the university level are required. She/he should have the ability to work with trainees of different nationalities, and of different levels of training and background. African experience will be advantageous. Competence in both English and French is essential. The successful candidate must be self-starting in an area that needs complete development.

This position is available immediately. The salary attached to this position will be commensurate with the training and experience of the individual filling it. Perquisites include housing allowance, group insurance, and retirement benefits. Written applications giving details of curriculum vitae and names of three referees should be sent to:

**The Chief Personnel Officer
International Laboratory for Research
on Animal Diseases
P.O. Box 30709, Nairobi, Kenya**

TOXICOLOGIST

Armour-Dial's Research Center in Scottsdale, Arizona, has an opportunity for an ambitious, alert scientist with managerial potential to spearhead a broad range of product safety activities.

If you have a Ph.D. in Toxicology, Pharmacology, or Physiology, with up to three years experience in product safety testing or research involving small animals, you can contribute to an activity of growing importance in our research and development effort.

The right candidate will help direct our on-going product safety testing program, evaluate results, and participate in management decision making. Accompanying the design of toxicity studies, data evaluation, and report writing will be the supervision of other research programs in our Medical, Regulatory, and Toxicology department.

To explore this opportunity further, write and tell us about your achievements, career goals and salary requirements.

Wanita Zarumba, Group Personnel Manager

ARMOUR-DIAL COMPANY

111 W. Clarendon

Phoenix, AZ 85077

An Equal Opportunity Employer — M/F

POSITIONS OPEN

FACULTY POSITION

The Department of Microbiology and Immunology of the University of Colorado Medical School invites applications for assistant professors. Applicants (M.D. or Ph.D.) should have research experience in molecular aspects of bacterial or viral pathogenesis and would be expected to establish a quality research program and to participate in teaching medical, dental, and graduate student courses. Send curriculum vitae and names of three or more references to: **Dr. L. I. Pizer, Box B175, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver, Colo. 80262.** *The University of Colorado is an Equal Opportunity Employer.*

FACULTY POSITION—ORGANIC CHEMIST

The University of California, Los Angeles, invites applications from well qualified individuals for a faculty position in the Division of Nuclear Medicine, Department of Radiological Sciences and the Laboratory of Nuclear Medicine and Radiation Biology. Would have responsibilities in a multidisciplinary research program which has overall focus for development of noninvasive methods to improve understanding of basic human physiology and the earlier diagnosis of disease. Would be responsible for organizing a strong research program for development of new organic compounds labeled with cyclotron-produced short-lived radioactive emitters. Should be physical organic chemist with good background in synthesis. Knowledge of nuclear chemistry and biochemistry is desirable. Must have demonstrated ability and expertise for innovative independent research. Applications should include full professional résumé and names of five references and be sent to: **Laboratory Personnel Officer, Laboratory of Nuclear Medicine and Radiation Biology, 900 Veteran Avenue, Los Angeles, California 90024.** *An Equal Opportunity/Affirmative Action Employer.* Résumés received prior to 31 January 1978 will be considered.

FACULTY POSITION IN ANATOMY

Applications invited for two positions in the Department of Anatomy. The appointments will be at the assistant and associate professor levels with primary teaching commitment being in the area of human gross anatomy. Demonstrated commitment and excellence in research and teaching are essential and one or more years of experience after the doctorate is required at the associate professor level. Send complete curriculum vitae including a statement of research interests and names of at least three references to:

Dr. Herbert Schapiro
Department of Anatomical Sciences
Eastern Virginia Medical School
P.O. Box 1980
Norfolk, Virginia 23507

Closing date for applications is 1 February 1978. *Eastern Virginia Medical School is an Equal Opportunity Educator and Employer.*

HEALTH PHYSICS FACULTY POSITION. Tenure-track position for assistant professor or above beginning July 1978. Duties: teaching graduate-level courses in basic radiation physics and applied health physics; developing health physics research program; enhancing on-going service program. Minimum requirements are doctoral degree and several years experience in operational health physics and/or teaching. Emphasis on occupational and environmental aspects of radiation protection preferred. Send curriculum vitae to: **Dr. Niel Wald, Chairman, Department of Radiation Health, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pa. 15261.**

IMMUNOLOGIST/ IMMUNOCHEMIST

A full-time faculty position at the level of assistant professor or higher. Applicant must have strong postdoctoral experience in immunology, immunochemistry, and/or immunogenetics and be capable of developing an independent research program. Teaching duties include participation in immunology and immunochemistry courses to medical and graduate students. Send curriculum vitae and three names of references to: **Dr. Gerald D. Shockman, Chairman, Department of Microbiology and Immunology, Temple University School of Medicine, 3401 North Broad Street, Philadelphia 19140.** *Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

GENETICIST with background in microbiology or cytology. Instructor or assistant professor level. A 1-year appointment for a sabbatical replacement, beginning July 1978. A small liberal arts college in south-central Pennsylvania with a student body of about 1600. *An Affirmative Action/Equal Opportunity Employer.* **Dr. Richard M. Lane, Chairman, Department of Biology, Dickinson College, Carlisle, Pennsylvania 17013.**

GEOPHYSICIST. One full-time faculty position at the assistant professor level; starting salary dependent on experience and publications. Ph.D. required by June 1978. Speciality in geophysics with competence in petroleum geology and/or hydrology; applicant should be prepared to teach introductory level geology as well as own specialty. Strong research commitment necessary. Detailed curriculum vitae and list of publications to: **Professor Russell White, Chairman, Department of Geology and Geography, Hunter College, 695 Park Avenue, New York, N.Y. 10021.**

HEMATOLOGY R & D SOUTH FLORIDA

SALARY: LOW to MID \$20,000's

Position requires a Ph.D. or equivalent in life sciences and broad laboratory experience in medical sciences with thorough familiarization in hematology.

Individual will be responsible for managing and developing internal experimental protocols, field test activities, and presenting seminars and workshops to customers.

Excellent benefits.

Please send résumé to:

Box 6, SCIENCE

An Equal Opportunity Employer, M/F

INSECT PEST MANAGEMENT CORNELL UNIVERSITY

Applications invited for position which carries responsibility for developing research program related to pests of field crops (60 percent), teaching (senior/graduate courses, 20 percent) and extension (20 percent). Prefer to fill at assistant professor level. Consideration given to associate rank in cases of exceptional qualifications and experience. Send curriculum vitae and names of five references to: **Dr. E. H. Smith, Department of Entomology, Cornell University, Ithaca, N.Y. 14853.** Deadline for applications is 1 March 1978. *Cornell University is an Equal Opportunity/Affirmative Action Employer.*

INSTRUCTOR—PHYSICAL SCIENCE

One-year position with future possibility of tenure starting January 1978. Masters with specialization in geology, background for other physical science courses. Résumé, transcripts, and letters of reference to: **Dr. Robert Messina, Chairman, NASSAU COMMUNITY COLLEGE, Garden City, N.Y. 11530.** *Equal Opportunity Employer.*

INVERTEBRATE BIOLOGIST/ELECTRON MICROSCOPIST. Tenure-track appointment in the Biology Program at the rank of assistant or associate professor. Primary responsibility will be to teach invertebrate biology and electron microscopy to upper level undergraduate and masters students as well as an advanced biology course. Maintenance of the electron microscope facility will also be a major responsibility. Ph.D. and teaching experience required. Starting date: August 1978 (but a need exists for an individual to teach a summer school course). For more information, send inquiries to: **Dr. John P. Pearson, Biology Program, Sangamon State University, Springfield, Illinois 62708.** Deadline for applications 1 March 1978.

Affirmative Action/Equal Opportunity Employer

JUNIOR FACULTY or POSTDOCTORAL POSITION available 1 January 1978 at the University of Michigan, with collaborative research in Ann Arbor and with Dr. K. Yasunobu at the University of Hawaii, Honolulu, on sequencing cytochrome P-450. Previous experience in protein sequencing essential. Rank and salary dependent upon experience. Send credentials to: **Dr. M. J. Coon, Professor and Chairman, the University of Michigan, Department of Biological Chemistry, Ann Arbor, Mich. 48109.** *An Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

UNIVERSITY OF OTAGO WELLINGTON, NEW ZEALAND

The University of Otago has established a Clinical School of the Faculty of Medicine. Applications invited for following positions in Department of Pathology.

LECTURER OR SENIOR LECTURER IN MEDICAL MICROBIOLOGY A. 77/89.

Applications invited from medically qualified microbiologists, or microbiologists with Ph.D. degree and experience and training in clinical microbiology.

LECTURER OR SENIOR LECTURER IN CHEMICAL PATHOLOGY OR CLINICAL BIOCHEMISTRY A. 77/90.

Applications invited for position of lecturer or senior lecturer in chemical pathology.

Further particulars available from **Secretary-General, Association of Commonwealth Universities (Appointments), 36 Gordon Square, London WC1 0PF, England,** from **D.W. Girvan, Registrar, P.O. Box 56, Dunedin, New Zealand,** or from **The Dean, Wellington Clinical School, Wellington Hospital, Wellington 2, New Zealand.**

Applications quoting reference number close in New Zealand and London on 15 February 1978.

MARINE BIOLOGIST. The Naval Biosciences Laboratory has a research position open in the area of marine biology with emphasis on aquatic pollutants. The candidate should have a Ph.D. (or equivalent) and experience with the effects of marine pollutants such as hydrocarbons and heavy metals on marine organisms. The position, which is open immediately, requires independent and team research and coordination with sponsoring agencies. Salary range: \$18,200 to \$22,900 per year. Send résumé with list of publications and references to: **Director, Naval Biosciences Laboratory, Naval Supply Center, Oakland, California 94725.** *An Equal Opportunity/Affirmative Action Employer. Women and minorities are urged to apply.*

DEPARTMENT OF RADIOLOGICAL SCIENCES UNIVERSITY OF CALIFORNIA, IRVINE

The Department of Radiological Sciences invites applications for the position of **MEDICAL PHYSICIST** in the Radiation Therapy Division. This appointment will be at the assistant or associate professor level. Applicants must have a Ph.D. degree, extensive experience in radiation therapy physics including all aspects of treatment planning, equipment monitoring and record keeping, and the teaching of residents and technologists.

The successful candidate will work closely with clinicians in radiation oncology, will have a major commitment to the teaching program, and will be expected to develop an independent research program and to supervise one or more graduate students in the Radiological Sciences Graduate Program. Remodeling of the radiation therapy facilities is planned and the candidate will have a significant voice in developing these new facilities. *Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.* If you are interested in this position, please write to the address below enclosing a curriculum vitae and autobiographical letter.

Closing date: 15 February 1978.

Eric N. C. Milne, M.B., Ch.B., F.F.R.
Professor and Chairman
Department of Radiological Sciences
University of California, Irvine
College of Medicine
Irvine, California 92717

NEUROSCIENTIST

ASSISTANT/ASSOCIATE PROFESSOR. The College of Medicine and Dentistry of New Jersey—New Jersey School of Osteopathic Medicine, is recruiting an assistant/associate professor to conduct an active research program and to assist in teaching mammalian neuroanatomy and neurophysiology. Doctoral degree required and postdoctoral experience would be desirable. Appointment may be made as early as 1 July 1978. Submit curriculum vitae and a statement of research and teaching interests to:

Chairperson, Anatomy Search Committee
COLLEGE OF MEDICINE AND DENTISTRY
OF NEW JERSEY
New Jersey School of Osteopathic Medicine
P.O. Box 55
Piscataway, New Jersey 08854

An Equal Opportunity/Affirmative Action Employer

TUMOR BIOLOGIST

San Francisco Bay Area

The Lawrence Livermore Laboratory, an applied science R&D laboratory located in the San Francisco Bay Area, is operated by the University of California for the U.S. Department of Energy. The Biomedical Sciences Division has an immediate opening for an experienced Staff Scientist in a growing program to improve cancer therapy. The goals of the program are two-fold: 1) to develop new flow cytometric methods for cell cycle analysis of normal and tumor tissues; and 2) to apply these methods to the optimization of chemotherapeutic strategies using model tumor systems *in vitro* and *in vivo*. This effort is multidisciplinary, involving specialists in biology, biophysics, oncology, mathematics and engineering. We are seeking a scientist to direct the part of the program involving work with model tumors *in vivo* and to contribute substantially to the direction of the project as a whole. Priority consideration will be given to postdoctoral candidates experienced in tumor biology, experimental or clinical oncology, cell kinetics and pharmacology. However, competent persons from related disciplines such as biology and biochemistry will be considered as well.

Interested and qualified candidates should submit their resumes with salary history and requirements to: Ted Wilson, Employment Division, LAWRENCE LIVERMORE LABORATORY P.O. Box 808, Dept. KSC-018, Livermore, CA 94550.

U.S. Citizenship
Required



An Equal
Opportunity
Employer

LAWRENCE LIVERMORE LABORATORY



Biological Writer, Editor

A position for a biologist, preferably an aquatic ecologist, with advanced training and experience in technical writing and editing is now open with Texas Instruments' Hudson River Ecological Study in Buchanan, New York. The successful applicant will be a member of a team assessing the impacts of power plants. Duties include technical writing, editing, and coordinating the production of reports.

Send resumes to: Personnel Administrator/Texas Instruments, Inc./Hudson River Ecological Study/P. O. Box 237/Buchanan, New York 10511.

TEXAS INSTRUMENTS
INCORPORATED

An equal opportunity employer M/F

Neuroscientist

Wyeth Laboratories, a leading pharmaceutical firm located in suburban Philadelphia, is seeking a Ph.D. specialist in neuroanatomy and/or neurochemistry interested in collaborative relationships with biopsychologists and psychopharmacologists. Applicant should have post doctoral experience and capabilities in several methodologies (including histofluorescence, immunohistochemistry, horseradish peroxidase, microdissection or radiotracer assays, receptor assays, extraction and isolation of biogenic amines and neuropeptides).

Wyeth offers an excellent salary commensurate with experience along with a comprehensive benefits plan. Interested individuals should submit curriculum vitae, salary requirements and references to:

Dr. Larry Stein

Wyeth WYETH
LABORATORIES INC.
P.O. Box 8299
Philadelphia, Pa. 19101

Equal Opportunity Employer, M/F/H

DIRECTOR

Division of Cancer Cause and Prevention, National Cancer Institute

The National Cancer Institute is recruiting for a scientist who will direct, coordinate, and conduct:

- *A nationwide program of laboratory, field, biometric, and epidemiologic research on the cause and natural history of cancer and the means for preventing cancer through an intramural and collaborative program.
- *A program that serves as the focal point for the Federal Government on the synthesis of clinical, epidemiological, and experimental data relating to cancer cause and prevention.
- *A program that evaluates mechanisms of cancer induction by viruses, environmental carcinogenic hazards and the natural history of neoplasms.
- *The research work of a professional and support staff of 590 employees.

Candidates for this position should have an advanced professional degree (Ph.D., M.D., or equivalent) in a medical, biological, physical or related health science, and at least three years of professional specialized experience in Biomedical Science administration involving two or more scientific disciplines (e.g. chemistry, biology, microbiology, etc.) The candidate's professional experience must demonstrate the successful program planning, evaluation, and administration of high caliber biomedical research or clinical programs relating to human disease problems, and extensive experience as an independent investigator in clinical, basic, applied, developmental, or epidemiological research activities. Candidates will be evaluated on their scientific leadership and experience, scientific recognition, training and education, and honors and awards. The filling of this position is subject to the approval of the Civil Service Commission.

This is a career Civil Service position at the Supergrade level with liberal government benefits and salary ranging from \$42,423 to \$47,500. Appointment may also be made through the Commissioned Corps of the U.S. Public Health Service.

Submit Curriculum Vitae, Bibliography and Personal Qualifications Statement (SF-171) by February 10, 1978 to: Mrs. Elizabeth W. Stroud, NCI Personnel Office, National Institutes of Health, Public Health Service, 9000 Rockville Pike, Building 31, Room 3A19, Bethesda, Md. 20014. An Equal Opportunity Employer M/F.

**NATIONAL INSTITUTES
OF HEALTH**

POSITIONS OPEN

MICROBIOLOGIST: ASSISTANT PROFESSOR

Available September 1978. Ph.D. required. Applicants should demonstrate a broad background in microbiology. Teaching responsibilities include undergraduate courses in microbiology, a senior seminar in area of specialization, and participation in introductory biology course. Active involvement in research expected. Application deadline: 1 February 1978. Send curriculum vitae and three letters of recommendation to: **Dr. Martin Berlinrood, Chairperson, Department of Biological Sciences, Goucher College, Towson, Maryland 21204.** An Equal Opportunity/Affirmative Action Employer.

MOLECULAR BIOLOGISTS. A postdoctoral and a predoctoral position will be available soon for molecular biologists to investigate the structure and biological activity of DNA from oncogenic primate Herpes viruses. Experience in nucleic acid technology, hybridization, restriction enzymology, or electron microscopy preferred. *Minority and women candidates are especially encouraged to apply.* Send curriculum vitae, list of publications, and references to: **Dr. Carel Nulder, UNIVERSITY OF MASSACHUSETTS MEDICAL SCHOOL, 55 Lake Avenue North, Worcester, Mass. 01605.**

MOLECULAR AND DEVELOPMENTAL BIOLOGY

The Biology Department of Wayne State University invites applications for a faculty position in its division of molecular and developmental biology. The successful candidate will be expected to establish an active research program as well as to participate in the teaching program of the department. Applications should include a curriculum vitae, a description of research interests, and letters from three referees. Submit to: **Dr. A. Siegel, Biology Department, Wayne State University, Detroit, Mich. 48202.**

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

OCEANOGRAPHERS

EG&G, Environmental Consultants Division, is seeking two physical oceanographers or hydrodynamicists for permanent additions to its present staff. Applicants should have a Ph.D. or master's degree, and experience in one or more of the following areas: modeling and analysis of coastal ocean dynamics; analytical or field studies of dispersion in estuarine or coastal areas; thermal plume models or studies; moored and shipboard ocean instrumentation and computing; and studies or models of wave generation and propagation.

The division is engaged in a wide range of coastal and deep water studies for government and industry. The successful candidates will assist with the analysis, interpretation, and reporting of data from ongoing programs. Occasional field work may be required. Salary in the mid-teens to low-twenties range.

Please send résumé to:

**Nikki Gentile
EG&G
Environmental Group
151 Bear Hill Road
Waltham, Mass. 02154**

ORAL PHYSIOLOGIST-PHARMACOLOGIST at the level of assistant professor in a multidisciplinary department. Available 1 July 1978. Requirements include teaching physiology and pharmacology and developing and pursuing active research program. Ph.D. required and interest in one or more of the following areas preferred: oral physiology, neurophysiology, neuropharmacology, and dental therapeutics. Send curriculum vitae and names of three references to: **Dr. W. Sprague, Chairman, Department of Oral Biology, University of Nebraska College of Dentistry, 40th and Holdrege, Lincoln, Nebraska 68583,** by 1 March 1978.

Equal Opportunity/Affirmative Action Employer.

Research specialist position in **PESTICIDE CHEMISTRY** available immediately to study the fate of pesticides in biological systems. Seeking Ph.D. with strong background in chemistry and experience in MS, NMR, IR, and so forth. Position subject to renewal for up to 4 years. Beginning salary \$10,000 to \$14,000 per year depending upon experience. Send curriculum vitae and names of three references to: **Dr. H. W. Dorrough, Department of Entomology, University of Kentucky, Lexington, Kentucky 40506.** An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

PATHOGENIC MICROBIOLOGIST-PLASMID MICROBIOLOGIST

Assistant or associate professor. Start 22 August 1978. Salary competitive, academic year appointment. Ph.D. required with postdoctoral experience or equivalent. Candidate will be expected to develop a strong program in pathogen and/or plasmid research. Teaching responsibilities include introductory microbiology and an upper level course in pathogenic microbiology. Send curriculum vitae and names of three references before 25 February 1978 to: **Dr. E. L. Martin, Chairman, Search Committee, 320 Manter Hall, School of Life Sciences, University of Nebraska, Lincoln, Nebraska 68588.** The University of Nebraska is an Equal Opportunity/Affirmative Action Employer.

PHARMACOLOGISTS with a Ph.D. and/or M.D. degree are invited to apply for a faculty position at the Faculty of Medicine, Memorial University of Newfoundland. The duties will include contributing to the teaching of pharmacology in an integrated medical curriculum as well as some pharmacology teaching to science students and to graduate students. Candidates should have a broad background in general pharmacology with a major interest in drug kinetics, toxicology, drug metabolism, or biochemical pharmacology and will be expected to have or to develop a research program. The Faculty of Medicine has recently moved into a new Health Sciences Complex located on the Memorial University Campus, and will soon be joined by the St. John's General Hospital.

Academic rank and salary will be commensurate with experience and qualifications. The position will be available from September 1978 or by negotiation. The application deadline is 10 March 1978. Application, including curriculum vitae and the names and addresses of three references, should be sent to: **Dr. R. S. Neuman, Chairman, Pharmacology Search Committee, Faculty of Medicine, St. John's, Newfoundland, Canada A1B 3V6.**

PHARMACOLOGIST

Ph.D. level individual with strong background in general pharmacology to conduct bioavailability and pharmacokinetic studies with contraceptive drugs. Experience in radioimmunoassay and radiotracer studies is highly desirable. For more information contact **Dr. R. Naqvi.**

Curriculum vitae together with salary history and requirements should be sent to:

**Personnel Manager
Mason Research Institute
Union Street
Worcester, Mass. 01608**

PHYSIOLOGIST. Ph.D. or M.S. with research experience. Training in biochemistry or pharmacology desirable. Basic and applied research in fish physiology related to uptake, biotransformation, and elimination of chemicals and effects of chemicals on metabolic and physiological functions of fish. Applicants should file SF-171—Application for Federal Employment plus personal qualifications statement, transcripts, and list of publications to: **Director, National Fisheries Research Laboratory, Box 818, La Crosse, Wisconsin 54601.** Telephone: 608-784-9666. An Equal Opportunity Employer

PHYSIOLOGIST

Assistant professor in animal physiology, fall 1978. Teach undergraduate animal/human anatomy, physiology, and general biology. Ph.D. required. Teaching in specialty and directing M.S. degree students possible. Contact 15 hours per week. Research encouraged. Send curriculum vitae, personal letter describing qualifications, all transcripts, and three letters of reference by 30 March 1978 to: **Dr. Keith Hartberg, Search Committee, Department of Biology, Georgia Southern College, Statesboro, Georgia 30458.** An Equal Opportunity/Affirmative Action Employer.

PLANT BREEDER/GENETICIST. Assistant professor, available 1 July 1978. Candidates should be prepared to teach undergraduate plant breeding/genetics, develop a graduate plant genetics course, and establish a research program in his/her area of specialty. Research experience with corn genetics/breeding is described. Applicants should send curriculum vitae, transcripts, and three letters of reference to: **Dr. Hugh Frick, Search Committee Chairman, Plant Science Department, University of Delaware, Newark, Del. 19711** before 1 March 1978. The University of Delaware is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

PLANT PHYSIOLOGIST-HAWAII

Assistant researcher, 11-month appointment in Hawaii Agricultural Experiment Station, full-time research in postharvest physiology. Details available from: **Dr. C. H. Lamoureux, Acting Chairman, Department of Botany, University of Hawaii at Manoa, 3190 Maile Way, Honolulu, Hawaii 96822.** Closing date: 1 February 1978.

An Equal Opportunity/Affirmative Action Employer

PLANT SYSTEMATIST

The Department of Botany of the University of Georgia is seeking qualified applicants for an assistant professor interested in taxonomy of flowering plants. Preference will be given to candidates with expertise in chemosystematics or numerical systematics and broadly trained in taxonomy. Candidates must have a Ph.D. and a strong commitment to research as well as teaching. Duties include developing an independent research program, and teaching at the graduate and undergraduate levels. Applicants should forward their curriculum vitae, reprints, a brief résumé of research plans, and arrange to have four letters of reference sent to: **Systematics Search Committee, Division of Biology, Biological Science Building, University of Georgia, Athens, Georgia 30602.** Deadline for applications is 1 February 1978, or until a qualified applicant is found. The University of Georgia is an Equal Opportunity/Affirmative Action Employer.

SIMON FRASER UNIVERSITY BRITISH COLUMBIA, CANADA DEPARTMENT OF BIOLOGICAL SCIENCES POPULATION GENETICIST

Applications are invited from suitably qualified persons for a tenure-track position in population genetics. The successful candidate will have a Ph.D. in population genetics, preferably with postdoctoral research experience. Duties include the teaching of introductory genetics and upper level course(s) in population genetics and biometry, as well as graduate student teaching and supervision. The appointment will be made at the assistant professor rank with salary commensurate with experience and duties. The position will be available from 1 September 1978, subject to budgetary approval. Letters of application, including curriculum vitae, and the names and addresses of three referees, should be sent to: **Dr. M. Mackauer, Chairman, Department of Biological Sciences, Simon Fraser University, Burnaby, B.C., Canada V5A 1S6.** Closing date for applications will be when the position is filled.

POSTDOCTORAL ASSOCIATES-BIOCHEMISTRY for research on (i) precision of synthesis of proteins [*Biochem. J.* **89**, 82 (1963); **128**, 1353 (1972)], and (ii) mechanism of synthesis of aminoacyl-tRNA [*J. Biol. Chem.* **250**, 3854 (1975); *Biochemistry* **15**, 2533 (1976); *Prog. Nucleic Acid* **12**, 87 (1972)]. Send résumé and names of two references to: **Robert B. Loftfield, Biochemistry Department, University of New Mexico, Albuquerque, N.M. 87131.** An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to study neurophysiological response characteristics of upper airway receptors (including taste buds) in the newborn mammal. Degree in neuroanatomy, neurophysiology, psychobiology, or related field. Beginning salary \$10,000; 1 to 3 years. Send curriculum vitae and three letters of reference to: **Dr. Robert M. Bradley, Department Oral Biology, School of Dentistry, University of Michigan, Ann Arbor, Michigan 48109.** The University of Michigan is a nondiscriminatory, Affirmative Action Employer.

POSTDOCTORAL POSITION available in 1978 in tumor immunology. Previous experience working with tumors is not essential, but applicant should possess a broad knowledge of immunobiology. Campus housing available. Application and references should be sent to:

**Dr. Robert J. North, Director
Trudeau Institute, Inc.
Saranac Lake, New York 12983**
Equal Opportunity/Affirmative Action Employer

POSTDOCTORAL POSITION


Immediate opening for invertebrate zoologist with knowledge of the nutrition of marine species, to develop methods for rearing various aquatic organisms. Send curriculum vitae and names of references to: **Dr. Kenneth Gold, Osborn Laboratories of Marine Sciences, New York Aquarium, Boardwalk and West 8th Street, Brooklyn, N.Y. 11224.**

Neuropharmacologist

Candidates should have a Ph.D. in Pharmacology or Physiology with a major interest or preferably experience in evaluation of analgesics. Primary responsibility is in further development of an established program designed to develop new agents for the treatment of pain and to investigate the site and mechanism of action of these drugs. Secondary responsibility will include contributing to the programs designed to develop better drugs for the treatment of disorders of the nervous system. An interest in the role of peptides in brain function is desirable.

This opportunity is available with Wyeth Laboratories, a leading pharmaceutical firm located in Suburban Philadelphia. We are offering an excellent salary along with a comprehensive benefits plan. If you have an interest and are qualified for this position, please submit your curriculum vitae including salary requirements to:

John W. Pinkerton
PERSONNEL DEPARTMENT

 **WYETH**
LABORATORIES INC.
P.O. Box 8299
Philadelphia, Pa. 19101

Equal Opportunity Employer, M/F/H

MEDICAL RESEARCH COUNCIL BRAIN METABOLISM UNIT

Appointment Of Director (Male Or Female)

The council invites applications for the post of full-time Director at the MRC Brain Metabolism Unit in Edinburgh, following the resignation of Dr. Ashcroft to take up the Chair Of Psychiatry at Aberdeen. The successful applicant will be a person of high scientific standing (with or without a medical qualification), with an established reputation as an original scientific investigator. The unit is at present engaged on experimental and clinical research relevant to psychiatry and neurology. The council wishes the emphasis on the psychiatric interests of the unit to be maintained. The title and programme of the unit will be decided by the council in the light of the research interests of the new Director.

The unit is mainly housed in purpose-built research accommodation of approximately 4,000 sq. ft. (nett). A research team of clinical and non-clinical staff is already in post: the size of the unit will be a matter for discussion between the Director and the Council. The Director will be responsible for maintaining the strong links already existing with the University of Edinburgh.

The salary for a medically-qualified Director, for whom an honorary clinical contract at consultant level will be sought, will be on the MRC clinical scale, equivalent to NHS consultant grade; if an honorary contract is not appropriate, the salary will be within the range for the Council's special appointments grade, which is equivalent to the university professorial range.

Further information may be obtained from Miss R. Withnall, 20 Park Crescent, London W1N 4AL, England. Applications should be submitted to the Secretary of the Council at the same address, not later than 13 February 1978.

IMMUNOTHERAPIST/ CHEMOTHERAPIST

Laboratory of Chemical Pharmacology

The Laboratory of Chemical Pharmacology, Division of Cancer Treatment, National Cancer Institute has an opening for an immunotherapist/chemotherapist to conduct both independent and collaborative research concerning the use of immuno-stimulation and chemotherapeutic agents for treatment and prevention of cancer. Applicants should have a Ph.D. and/or M.D., plus experience and relevant publications in the area of immunology and particularly of immuno-stimulation for treatment of tumors and techniques for evaluation of immuno-suppression by chemotherapeutic agents. The position will be filled at a level and salary commensurate with training and experience of selected candidate, within a salary range of \$19,740-\$35,559 per annum, and may be filled through either the NIH Staff Fellowship Program of competitive Civil Service. Interested applicants should send a Curriculum Vitae and Bibliography, plus three letters of reference by January 20, 1978 to Mrs. Janie R. Lacy, Personnel Management Specialist, National Cancer Institute, National Institutes of Health, Public Health Service, Building 31, Room 3A27, 9000 Rockville Pike, Bethesda, Maryland 20014. An Equal Opportunity Employer.

NATIONAL INSTITUTES OF HEALTH

Senior Biostatistician

The Medical Research Department of Ciba-Geigy has an opening for a Senior Biostatistician who will serve as a Consultant in the design and analysis of clinical studies evaluating new pharmaceutical agents. A Ph.D. in Biostatistics is preferred; however, applicants with a Masters degree and 3 or more years experience will be considered. The individual we are seeking must be capable of overseeing projects through from start to finish.

The nature of the work will be all inclusive—i.e.

- Experimental design
- Development of case reporting forms
- Evaluating data and preparation of reports summarizing the results of clinical studies.

In addition, this individual will be expected to become proficient in research methodology as it applies to clinical research and keep abreast of new statistical techniques applicable to medical investigations.

This position offers broad professional and personal growth potential in the area of clinical research. Compensation will be based on education and background.

For prompt consideration, please send detailed resume with salary history and requirements, in confidence to: Mr. C. R. Grupe, The Pharmaceuticals Division of CIBA-GEIGY Corporation, 556 Morris Avenue, Summit, New Jersey 07901. An equal opportunity employer m/f.

CIBA—GEIGY

POSITIONS OPEN

POSTDOCTORAL POSITION available immediately. Qualified individual with experience in cell biology and/or cell membrane study is required. Send résumé and references to: **J. K. Reddy, M.D., Department of Pathology, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611. An Affirmative Action/Equal Opportunity Employer.**

POSTDOCTORAL POSITION REPRODUCTIVE RESEARCH LABORATORY ST. LUKE'S EPISCOPAL HOSPITAL and DEPARTMENT OF OBSTETRICS AND GYNECOLOGY BAYLOR COLLEGE OF MEDICINE HOUSTON, TEXAS 77030

A Ph.D., D.V.M., or M.D. fellow with a physiology of reproduction background is sought for a 2-year fellowship in the area of reproductive tract receptor research with primary emphasis on the biochemistry of the placenta. Thus, some advanced chemistry and biochemistry courses are essential.

Salary range is in keeping with experience. *We are an Equal Opportunity Employer.* There are currently eight other postdoctoral fellows in the department and 39 residents. This individual joins a research team already active in reproductive research and should send their résumé to **Paige K. Besch, Ph.D., Professor and Director**, at the above address.

POSTDOCTORAL RESEARCH FELLOW to work on localization of purified lung protein with immunologic-microscopic techniques or to study protein synthesis by lung cell culture techniques. Please send curriculum vitae to: **Dr. Barry L. Fanburg, Pulmonary Division, New England Medical Center Hospital, 171 Harrison Avenue, Boston, Mass. 02111.**

POSTDOCTORAL RESEARCH POSITION available immediately for recent Ph.D. or M.D. to study the role of cAMP-dependent plasma membrane phosphorylation in cell differentiation and cell transformation. Experience in the biochemical and functional analysis of eukaryotic cell membranes desirable. Salary: \$14,000. Please send curriculum vitae and names of three references to:

**Dr. Robert E. Scott
Department of Pathology and Anatomy
Mayo Clinic
Rochester, Minnesota 55901**

PROFESSOR OF MOLECULAR BIOLOGY

The Department of Molecular Biology of Vanderbilt University seeks to fill a faculty position at the level of professor or associate professor. Candidates should have a noteworthy research program in the physical or chemical aspects of molecular biology. Please send curriculum vitae, bibliography, a description of research and teaching interests, and names of three references to: **Dr. Oscar Touster, Department of Molecular Biology, Box 1820, Station B, Vanderbilt University, Nashville, Tennessee 37235. An Affirmative Action/Equal Opportunity Employer.**

RESEARCH ASSOCIATES. Three positions available at northeastern United States medical school. Ph.D. required. One requires experience in DNA and RNA nucleotide sequencing. The second requires experience in cell culture, nucleic acid biochemistry, and electron microscopy of nucleic acids. The third requires experience in purification and chemical and functional characterization of outer membrane protein or Gram-negative bacteria. Starting 1 March 1978 at \$11,000 to \$12,500 initially. Send curriculum vitae and list of publications to:

**Box 3, SCIENCE
Affirmative Action/Equal Opportunity
Employer, MIF**

RESEARCH ASSOCIATE to investigate inflammatory cells infiltrating neoplasms of man. Must have demonstrated expertise (publications) in quantifying inflammatory cell types recovered from enzyme-disaggregated neoplasms. Experience in disaggregating human tumors and in the assessment of inflammatory cell functions, as well as prior training in biological chemistry, are desired. Southeastern medical school. Salary negotiable. Please send résumé and salary requirements to: **Box 5, SCIENCE.**

POSITIONS OPEN

CENTER FOR THE STUDY OF DRUG DEVELOPMENT

PROJECT LEADER. Will direct several research projects in the field of drug development and regulation. Educational background: at least a master's (preferably a Ph.D.) in a biomedical discipline. Prior knowledge of pharmacology useful but not essential, provided candidate is willing to learn. Ability to apply scientific approaches to new and unfamiliar areas, to work independently on study designs, data collection, analysis and interpretation, and to write proposals and reports required. Good attention to detail necessary. Can offer unique postdoctoral experience to suitable candidate. Submit curriculum vitae and examples of projects performed and written up to:

**William M. Wardell, M.D., Ph.D.
Department of Pharmacology and Toxicology
University of Rochester School of Medicine
Rochester, New York 14642**

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

UNIVERSITY OF CALIFORNIA, BERKELEY

Position as **research associate and lecturer** (or **visiting professor**) is expected, starting September 1978, in the **Group in Science and Mathematics Education** (interdisciplinary academic unit with Ph.D. program). Applicants should have a Ph.D. degree, and substantial training in the natural, social, or engineering sciences. Their research interests should lie in a field such as applications of technology to education, curriculum development, cognitive psychology, or analysis of problem-solving. For further details, write: **Professor F. Reif, Physics Department, University of California, Berkeley, Calif. 94720.** Applicants should send, by 1 March, a curriculum vitae (including publication list), a description of research interests and teaching experience, and at least three letters of reference. *The University of California is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.*

RESIDENCIES IN ANESTHESIOLOGY, COLUMBIA PRESBYTERIAN MEDICAL CENTER. The Department of Anesthesiology of the Columbia Presbyterian Medical Center is inviting applications for training at all levels from clinical base year through specialized year. For the specialized year we can offer research opportunities as well as training in pediatric anesthesia, obstetrical anesthesia, anesthesia for cardiac surgery, anesthesia for neurosurgery, intensive care, and pain management. *We are particularly interested in attracting applications from among minority and women candidates.* For further information write to: **Henrik H. Bendixen, M.D., Professor and Chairman, Department of Anesthesiology, Columbia Presbyterian Medical Center, 630 West 168th Street, New York, N.Y. 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer in the City of New York.**

QUEENSLAND INSTITUTE OF TECHNOLOGY BRISBANE, QUEENSLAND, AUSTRALIA DEPARTMENT OF MEDICAL TECHNOLOGY SENIOR LECTURER IN PHYSIOLOGY

Applications are invited from medical or science graduates holding suitable higher qualifications for the position of senior lecturer in physiology. The appointee will be expected to exercise leadership in teaching physiology and functional anatomy at the undergraduate and graduate level and to develop the research and investigative activities of the physiology area of the department.

Salary range: senior lecturer I: A\$21,545 to \$22,956; senior lecturer II: A\$19,674 to \$21,081.

Appointment will be made within the above range in accordance with qualifications and experience.

Conditions of service, duty statement, and general information may be obtained from: **the Personnel Officer, Queensland Institute of Technology, G.P.O. Box 2434, Brisbane 4001, Queensland, Australia.**

Applications quoting reference number V.140/77 and containing full particulars of name, address, telephone number, date of birth, marital status, experience, qualifications, and present employment, together with the names and addresses of three referees should be forwarded to **the Personnel Officer** (address above) by 31 January 1978.

POSITIONS OPEN

RESEARCH ASSOCIATE IN NEUROCHEMISTRY

Position available for Ph.D. biochemist or molecular biologist to pursue collaborative research into the molecular differentiation of neuroblastoma in cell culture. Special interests in immunochemical approaches, cell surface glycoprotein changes or transcriptional control of differentiation are encouraged.

We are an Equal Opportunity Employer. Send letter and curriculum vitae to: **Roger N. Rosenberg, M.D., Chairman, Department of Neurology, Laboratory of Molecular Neurobiology, the University of Texas Health Science Center at Dallas, Dallas, Texas 75235.**

STAFF BIOLOGIST-SPECIALIST IN MARINE POPULATION DYNAMICS

Biologist wanted: must possess advanced degree in the population dynamics of living marine resources and have wide and varied field experience in the marine fisheries. Position involves in-depth biological analyses of various resource management options and strategies designed for the conservation and rehabilitation of the living marine resources. Incumbent will report to a senior biologist and will participate in the preparation of, and subsequent monitoring of biological aspects of, the fishery management plans developed by the New England Regional Fishery Management Council. Salary is negotiable, based on training and experience. Work is demanding in nature but is performed in a small congenial group of diversified technical and administrative interests. Our employees have been advised of this advertisement. Qualified individuals should submit a detailed résumé to: **Executive Director, New England Regional Fishery Management Council, 1 Newbury Street, Peabody, Mass. 01960. The Council is an Equal Opportunity Employer.**

STAFF ECONOMIST-SPECIALIST IN LIVING MARINE RESOURCES

Economist wanted: must possess advanced degree in the economics of marine resources and have wide experience in applied fisheries economic research. Position involves preparation of in-depth economic impact analyses of various resource management options and strategies designed for the conservation and rehabilitation of the living marine resources. Incumbent will report to senior economist and will participate in the preparation of, and subsequent monitoring of, economic aspects of the fishery management plans developed by the New England Regional Fishery Management Council. Salary is negotiable, based on training and experience. Work is demanding in nature but is performed in a small congenial group with diversified technical and administrative interests. Our employees have been advised of this advertisement. Qualified individuals should submit a detailed résumé to: **Executive Director, New England Regional Fishery Management Council, 1 Newbury Street, Peabody, Mass. 01960. The Council is an Equal Opportunity Employer.**

STATISTICIAN—MARINE RESOURCES

Bioeconomic statistician wanted: must possess advanced degree in statistics, marine economics, or "quantitative" marine biology and be very knowledgeable about the New England marine commercial and recreational fisheries. Incumbent will be responsible (i) for the acquisition, organization, statistical descriptions, retrieval, and management of large quantities of diversified bioeconomic data located in several data banks, (ii) for the acquisition, installation, and use of standard and sophisticated computerized statistical/analytical programs, and (iii) for the application of statistical principles to the development of complex computerized socio-bioeconomic models as required by colleagues. This is a supervised position; incumbent will work under severe time-constraints and must possess the ability to work effectively with others to achieve assigned goals in a timely fashion. Job requires frequent overnight regional travel for data acquisition and up-dating. Salary is negotiable, based on training and experience. Our employees have been advised as to this advertisement. Direct questions and applications to: **Executive Director, New England Regional Fishery Management Council, Peabody Office Building, 1 Newbury Street, Peabody, Mass. 01960; telephone: 617-535-5450. The Council is an Equal Opportunity Employer.**

SENIOR RESEARCH PHARMACOLOGIST

Merrell Research Center, the domestic ethical pharmaceutical research division of Richardson-Merrell, Inc., has an immediate opening for a Senior Research Pharmacologist in Cardiovascular Research. This position assumes responsibility for overall direction and supervision of the laboratories and advancement of the development program for new products in the areas of Dysrhythmia, Angina, Hypertension and Peripheral Ischemic diseases.

We seek a PhD in pharmacology or physiology with a minimum of 3 and preferably 5 years experience in one or more of the above cardiovascular areas. Direct laboratory involvement will be expected in order to expand the technical abilities of the present group of scientists and to explore alternatives methodological approaches to the evaluation of new products in these areas.

Please direct your inquiry with resume in confidence to:

Dr. J. K. Woodward,
Head, Department of Pharmacology

MERRELL RESEARCH CENTER MERRELL-NATIONAL LABORATORIES

A Division of Richardson-Merrell, Inc.
110 East Amity Road
Cincinnati, Ohio 45215

Merrell

An Equal
Opportunity Employer M/F

ACTA TROPICA

Journal of Biomedical Sciences
Revue de Sciences Biomédicales
Zeitschrift für Biomedizinische Wissenschaften

Published in charge of the Swiss Tropical Institute, Basel

Editorial Board: PD Dr. A. Degrémont, Prof. T. Freyvogel, PD Dr. H. Hecker, PD Dr. L. Jenni, Dr. N. Weiss

Acta Tropica, an international journal of biomedical sciences, gives attention to every aspect of this field relevant to human health, including veterinary medicine and biology in the tropics. The subjects dealt with range from medicine and community health to epidemiology and the biology of parasites and vectors as well as to toxinology. The journal is open to contributions concerning either basic or applied research in disciplines such as taxonomy, morphology, biochemistry, physiology and immunology. Contributions may be in the form of original papers, review articles, or short communications. Text in English, French and German. *Summaries* only in English.

4 issues per year/volume.

Subscriptions may be ordered through any bookseller or directly from the publishers:

SCHWABE & CO., Steinentorstr. 13. CH-4010 Basel, Switzerland.

Price of subscriptions: per year/volume sFr. 140.-, plus postage.

Schwabe & Co • Publishers • Basel / Stuttgart

THE MARINE BIOLOGICAL LABORATORY (MBL) WOODS HOLE, MASSACHUSETTS COURSES, SUMMER 1978

Graduate and advanced undergraduate courses range from 6 to 12 weeks.

NEURAL SYSTEMS AND BEHAVIOR (18 June to 29 July, Formal Course Program; 31 July to 28 August, Post-Course Research): examination of general principles of nervous system function relevant to information processing, control of motor output, and the neural basis of behavior. Subject matter of integrative neurophysiology and behavior will be presented in lectures, seminars, intensive laboratory exercises, and field trips. Staff: A. Gelperin, Princeton University (director of course); J. L. Gould, Princeton University; R. Hoy, Cornell University; W. Kristan, Jr., University of California, San Diego; J. Nicholls, Stanford Medical School; F. Nottebohm, Rockefeller University; D. J. Prior, University of Kentucky; others to be appointed. *A new offering.*

EMBRYOLOGY (19 June to 25 August): the theme will be "Localization, Pattern Formation and Morphogenesis" with a focus on the nature of initial asymmetries in cell or cell groups which appear to direct steps in evolving complexity until definitive adult structures are attained. Laboratory exercises will utilize marine embryos available locally. Staff: T. Humphreys, University of Hawaii; and J. V. Ruderman, Harvard Medical School (co-directors); S. V. Bryant, University of California, Irvine; G. L. Freeman, University of Texas; C. B. Levinthal, Columbia University; E. R. Macagno, Columbia University.

EXPERIMENTAL MARINE BOTANY (11 June to 29 July, Formal Course Program; 31 July to 26 August, Post-Course Research): a tutorial program in "Comparative Biology and Biochemistry of Algae." A series of coordinated seminars in algal physiology, biochemistry, genetics, development, ecology, macro, micro, and molecular morphology, and related subjects with evolution as the unifying concept serves to introduce problems of current importance and future potential. Staff: J. A. Schiff (director), Brandeis University; J. Fiore, Suffolk University; H. Lyman, State University of New York, Stony Brook; D. Mauzerall, Rockefeller University; R. F. Troxler, Boston University School of Medicine.

MARINE ECOLOGY (11 June to 20 July): a lecture, laboratory, and field course on marine populations and ecosystems with emphasis on topics of current interest, from theory to human affairs. Research oriented, the course involves reading original literature, lectures and laboratory on recent methods, field and shipboard work. Staff: I. Valiela, Boston University Marine Program and J. M. Teal, Woods Hole Oceanographic Institution (directors); J. Hobbie and C. A. S. Hall, Marine Biological Laboratory; T. Fenchel, University of Aarhus; W. Odum, University of Virginia; K. Porter and J. Porter, University of Michigan; R. Strickler, Yale University; C. Van Raalte, Hampshire College. Special lecturers.

MICROBIAL ECOLOGY (19 June to 28 July; Post-Program Research, 31 July to 29 August): a Research Training Program, conducted in cooperation with the Woods Hole Oceanographic Institution, will focus on the physiological and biochemical basis of interactions between microorganisms and their natural environment. Staff: H. W. Jannasch, Woods Hole Oceanographic Institution, and E. R. Leadbetter, Amherst College (co-directors); J. Gibson, Cornell University; R. E. Hungate, University of California, Davis; A. Keynan, The Hebrew University, Jerusalem. Visiting instructors: J. S. Poindexter, City University of New York; J. G. Ferry, Virginia Polytechnic Institute, Blacksburg. Consultants: H. O. Halvorson, Brandeis University; J. Hastings and E. O. Wilson, Harvard University; R. Y. Stanier, Institut Pasteur, Paris.

NEUROBIOLOGY (19 June to 26 August): a lecture and laboratory course that will demonstrate both the diversity of experimental preparations used to study the nervous system, and that various techniques can be combined in the approach to research problems. Staff: E. A. Kravitz, Harvard Medical School (director); J. B. Cohen, G. D. Fischbach, E. J. Furchspan, J. G. Hildebrand, S. C. Landis, P. R. MacLeish, M. C. Nelson, and D. D. Potter, all of Harvard Medical School; J. Heuser, San Francisco University Medical School; Paul O'Lague, University of California, Los Angeles; T. S. Reese, NINDS.

PHYSIOLOGY (11 June to 21 July; Post-Course Program, 22 July to 1 September): a lecture and laboratory course centered on the structure and processes of the eukaryotic cell. Physical and chemical techniques will be taught as an integral part of the course. Staff: K. E. Van Holde, Oregon State University (director); R. Stephens, Marine Biological Laboratory; M. Mooseker, Harvard Medical School; J. Brown, University of Virginia; T. Baldwin, University of Illinois; S. Astrid, Institute for Cancer Research, Philadelphia. Special lecturers.

TUITION: \$600 for all except ecology, embryology, and neurobiology; \$250 for post-course research; and \$850 for ecology, embryology, and neurobiology.

ROOM, including **BOARD** for 6 days: from \$47 per week.

SCHOLARSHIP: limited funds are available.

For further information and application forms write to: **Admissions Office, Marine Biological Laboratory, Woods Hole, Mass. 02543.** Deadline for applications is 1 March. *MBL admits students of any race, color, and national or ethnic origin.*

POSITIONS OPEN

PHYSIOLOGIST

DEPARTMENT OF BIOLOGY, UNIVERSITY OF CALIFORNIA, LOS ANGELES, wishes to fill a position in physiology at the assistant professor level beginning 1 July 1978. Applicants should be committed to excellence in undergraduate and graduate teaching and have a record of independent research performance. Postdoctoral experience is desirable. Research and teaching interests should be in the area of cell-cell interactions or organismic physiology. Qualified applicants should send curriculum vitae, names of references, a statement of present and past research activities, and other pertinent information to: **Chairman, Search Committee, Department of Biology, University of California, Los Angeles, Los Angeles, California 90024**. Closing date for application is 31 January 1978.

An Equal Opportunity/Affirmative Action Employer

VERTEBRATE BIOLOGIST. Tenure-track. Biology Department seeks vertebrate physiologist with interest in functional morphology to teach comparative physiology and functional morphology, and share teaching in cell biology and general physiology. Candidate should show evidence of well-defined research interests. Applicants should send curriculum vitae, graduate and undergraduate transcripts, and names of three references to: **Dr. Kenneth R. John, Department of Biology, Franklin and Marshall College, Lancaster, Pa. 17604**.

VERTEBRATE PHYSIOLOGIST with specialization in endocrinology. Assistant professor to teach advanced undergraduate-graduate level courses in vertebrate physiology and in endocrinology and to collaborate in undergraduate course in human physiology. Strong teaching competence and commitment to research required. Curriculum vitae, statement of research plans, and three letters of recommendation must be received by 15 February 1978 by **Dr. W. B. Cosgrove, Physiology Search Committee, Department of Zoology, University of Georgia, Athens, Ga. 30602**. *The University of Georgia is an Equal Opportunity/Affirmative Action Employer.*

VISION SCIENTISTS

The Department of Physiological Optics of the School of Optometry is seeking two faculty members with O.D./Ph.D.'s or Ph.D.'s, working in the area of vision science. One position is open for an individual with a background and interest in the area of color vision and psychophysics. The second position is available for a person working in the area of biochemistry/pharmacology. Responsibilities will include: teaching courses within the physiological optics curriculum to both optometry students and graduate students, and conducting research.

Evidence of scholarly research activities in the form of published articles in refereed journals and papers presented at professional meetings will be heavily weighted, as will evidence of teaching ability. Postdoctoral research experience is desirable.

Rank and salary commensurate with experience. Résumés will be accepted until 15 February 1978. Send curriculum vitae and the names of three professional references to: **Dr. Jerry L. Christensen, Department of Physiological Optics, School of Optometry/The Medical Center, University of Alabama in Birmingham, Birmingham, Alabama 35294**. *Equal Opportunity/Affirmative Action Employer.*

PROGRAMS

SUMMER TRAINING PROGRAM

The Worcester Foundation for Experimental Biology is seeking a limited number of qualified college students to participate in its summer training program to be held from 5 June 1978 through 11 August 1978. Applicants must have completed at least 2 years of college work, have an overall grade point of "B" or better, have had at least three courses in either the life or natural sciences, and be interested in biomedical research. Please have three professors write directly to us concerning you and send a résumé and official transcript of college courses no later than 1 March 1978 to: **Dr. Ashton Gibbons, Director of Summer Training Programs, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Mass. 01545**.

An Equal Opportunity/Affirmative Action Employer

INSTITUTES

ANALYSIS OF VISUAL BEHAVIOR is topic of NATO Advanced Study Institute to be held mid-June 1978 at Brandeis University; 10-day sessions feature noted lecturers on psychophysics, object recognition, visuomotor patterns, and ethology; 35 Ph.D. candidates or postdoctoral students will be awarded travel and living costs. Applications from students from NATO countries should include: (i) curriculum vitae, (ii) reference letter from chief professor, and (iii) 300- to 500-word summary of ongoing research. Send to **Dr. David Ingle, McLean Hospital, Belmont, Mass. 02178** by 15 February 1978.

SUMMER TRAINING INSTITUTE

The Department of Psychobiology at the University of California, Irvine, located 3 miles inland from the coastal resort community of Newport Beach, invites applications from pre- and postdoctoral social scientists for a Summer Training Institute on Neurobiology and Mental Illness. Applicants must be citizens or permanent residents of the United States. The institute, sponsored by the Social Science Research Council and supported by NIMH, will run 6 weeks, 26 June to 4 August 1978. Prior training in biological sciences is not required. Living costs and travel to and from Irvine will be fully subsidized. The institute will include training in basic neurobiology, the neurobiology of mental illness, and clinical applications. Completed applications and supporting documents must be received by 1 April 1978. Application forms and further information may be obtained from: **Dr. Richard F. Thompson, Professor of Psychobiology and Director of the Institute, University of California, Irvine, Irvine, Calif. 92717**; attention: **Sharon Phillips**. *Applications from all qualified candidates are welcome: women and minorities are encouraged to apply.*

COURSES

THE MARINE BIOLOGICAL LABORATORY WOODS HOLE, MASSACHUSETTS

Will conduct a series of short residential laboratory courses during late spring 1978. The course titles, dates, and principal instructors are: **Electron Microscopy in the Biological Sciences**, 23 April to 5 May, Blair Bowers and Morton Maser; **Correlative Optical and Electron Microscopy in Clinical Diagnosis**, 7 to 12 May, Harry Carter; **Stereology, Morphometry and Optical Analysis of Electron Micrographs**, 14 to 19 May, Lee Peachey; **Scanning Electron Microscopy in the Biological Sciences**, 14 to 19 May, Bruce Wetzel; **Freeze-fracture Replication**, 21 to 26 May, Russell Steere; **Computer Reconstruction of Three-Dimensional Biological Structures from Serial Sections**, 28 May to 3 June, Eduardo Macagno and Cyrus Levinthal. Additional information and application materials may be obtained from: **the Director of Admissions, Marine Biological Laboratory, Woods Hole, Mass. 02543**, telephone: 617-548-3705. *MBL admits students of any race, color, and national or ethnic origin.*

GRADUATE STUDY

The Department of Biological Sciences, in cooperation with the basic science faculty of the University of Maryland at Baltimore, provides graduate education toward the M.S. and Ph.D. degrees in the areas of molecular biology and biochemistry; genetics, cell, developmental, organismic, and population biology.

TEACHING ASSISTANTSHIPS and **MINORITY STUDENT FELLOWSHIPS** are available for qualified applicants. For details write to: **Dr. R. C. Gethmann, Department of Biological Sciences, University of Maryland Baltimore County, Catonsville, Maryland 21228**.

ASSISTANTSHIPS

RESEARCH ASSISTANTSHIP CHEMISTRY
Teaching/research assistantship leading to M.S. degree available January 1978. Research in environmental, organic, inorganic, analytical, or biochemistry. Résumés and official transcript should be sent to: **Dr. Donald K. Brandvold, Department of Chemistry, New Mexico Institute of Mining and Technology, Socorro, New Mexico 87801**. *New Mexico Institute of Mining and Technology is an Equal Opportunity/Affirmative Action Educational Institute and Employer.*

FELLOWSHIPS

DOCTOR OF ARTS IN BIOLOGY. Fellowships are available for qualified persons interested in the D.A. degree in biology. Applicants should hold a master's degree in some area of biology. The D.A. degree is designed for the professional preparation of college level teachers. The D.A. program stresses flexibility based upon the individual's experience and interest. The deadline for receipt of application is 1 February 1978. For more information contact: **Dr. Richard G. Bowmer, Chairman, D.A. Committee, Department of Biology, Idaho State University, Pocatello, Idaho 83209**. *An Equal Opportunity Employer.*

POLYMER SCIENCE AND ENGINEERING UNIVERSITY OF MASSACHUSETTS AT AMHERST

Research fellowships will be awarded in 1978-1979 for studies toward a Ph.D. degree in the Polymer Science and Engineering Department.

Each fellowship will pay up to \$5200 per year. The stipends are income-tax-free and include a tuition waiver.

Research and course programs are available in polymer synthesis, characterization, morphology, rheology, physics, and engineering.

Applications by qualified students with a first degree in chemistry, physics, materials science, or engineering should be made to: **Professor Richard J. Farris, Polymer Science and Engineering, University of Massachusetts, Amherst, Massachusetts 01003**. *An Equal Opportunity/Affirmative Action Employer*

POSTDOCTORAL RESEARCH FELLOWSHIPS IN BLOOD BANKING SCIENCES THE NEW YORK BLOOD CENTER

Research opportunities are offered to candidates interested in areas of the biomedical sciences which include: cryobiology, epidemiology, immunogenetics, immunohematology, operations research, protein biochemistry, red cell biochemistry, and virology. Awards are for periods up to 3 years, funded by an NIH Training Grant, effective 1 July 1978. Please send curriculum vitae, three letters of recommendation, and a summary of research interests and career objectives to:

Abraham Mazur, Ph.D.
Associate Director for Research
The Lindsley F. Kimball Research Institute
The New York Blood Center
310 East 67th Street
New York, New York 10021

PRE- AND POSTDOCTORAL FELLOWSHIPS are available for United States citizens and permanent residents for training in molecular biophysics of biocatastrophic processes. The program is concerned with the biological effects of environmental agents, such as chemical carcinogens, ionizing and ultraviolet radiation, and repair inhibition. Research opportunities will consist of studies of changes in biomolecular structure caused by the environmental agents. Training will be offered in a variety of research techniques, such as NMR, ESR, x-ray diffraction, stereo and quantum chemistry, radiation, and photobiology of cells. Stipends will be \$3,900 for predoctoral and \$11,200 for postdoctoral fellows. Write to: **Dr. Robert Rein, Chairman, Admissions Committee, Graduate Biophysics Program, Roswell Park Memorial Institute, Buffalo, N.Y. 14623**.

POSTDOCTORAL FELLOWSHIP available immediately for bioorganic chemist or bio-analytical chemist with background and interest in GC-MS-DS, biochemical genetics. Interdisciplinary research group. Send curriculum vitae to: **Howard Tieckelmann, Department of Chemistry, State University of New York, Buffalo, N.Y. 14214**.

MARKET PLACE

MINIPIGS

For Use in Biomedical Research

Vita Vet Laboratories

Marion, Indiana

Telephone: 317-668-8988

PHARMACEUTICALS

REGIONAL MEDICAL ASSOCIATE PHARMACEUTICAL MARKETING

Unique growth opportunity for an individual to combine scientific expertise and marketing skills. Responsibilities are to establish effective relationships within key medical institutions, providing scientific liaison and in-depth information essential to appropriate use of SK & F's products. Will also have training responsibility at the Representative, Medical Staff, and Pharmacy levels. Chicago based; travel approximately 50%.

Qualifications include PhD in a biological or pharmaceutical discipline. Must possess initiative, ability to communicate, and interest in marketing.

Please send resume and current earnings to:
SMITH KLINE & FRENCH LABORATORIES,
A Division of SMITHKLINE CORPORATION,
1522 Spring Garden St., P.O. Box 7929,
Philadelphia, Pa. 19101. An equal opportunity employer, M/F.

SmithKline
Smith Kline & French
Laboratories

IMMUNOLOGIST

Searle Laboratories, the pharmaceutical division of G.D. Searle & Co., is seeking an experienced Immunologist to explore and develop new, innovative approaches for the identification of improved therapeutic agents for the treatment of inflammation and allergy.

Preference will be given to individuals with the following qualifications:

- Broad graduate training in Immunology;
- Ph.D in Immunology with 3 to 7 years of research experience beyond the Doctorate. Industrial experience preferred.
- Interest in identifying and developing new, efficacious therapeutic agents for the treatment of inflammation and allergies;
- Demonstrated ability to initiate and conduct an effective and productive research program;
- Ability and desire to collaborate with scientists of various disciplines in this research effort.

We offer to the professional who accepts this challenging opportunity an excellent compensation package plus a full range of company benefits. For confidential consideration, please forward your resume and salary history to:

Dr. A. Abelman

SEARLE

G. D. Searle & Co.

P.O. Box 5110
Chicago, Ill 60680

Equal Opportunity M/F . . . A Practice, Not Just a Policy

think...

what do you really know about the President's National Energy Plan?

The Proceedings of the Conference on National Energy Policy, sponsored by AAAS, Carnegie Institution of Washington and the MITRE Corporation, will help you understand the overall impact of the NEP on the economy, on conservation and on the environment. Find out what the country's leading independent experts in the field of energy policy, economics and technology really have to say about President Carter's National Energy Plan as it relates to

- the energy gap
- international implications
- governmental responsibility
- import limitation strategy

For your copy of

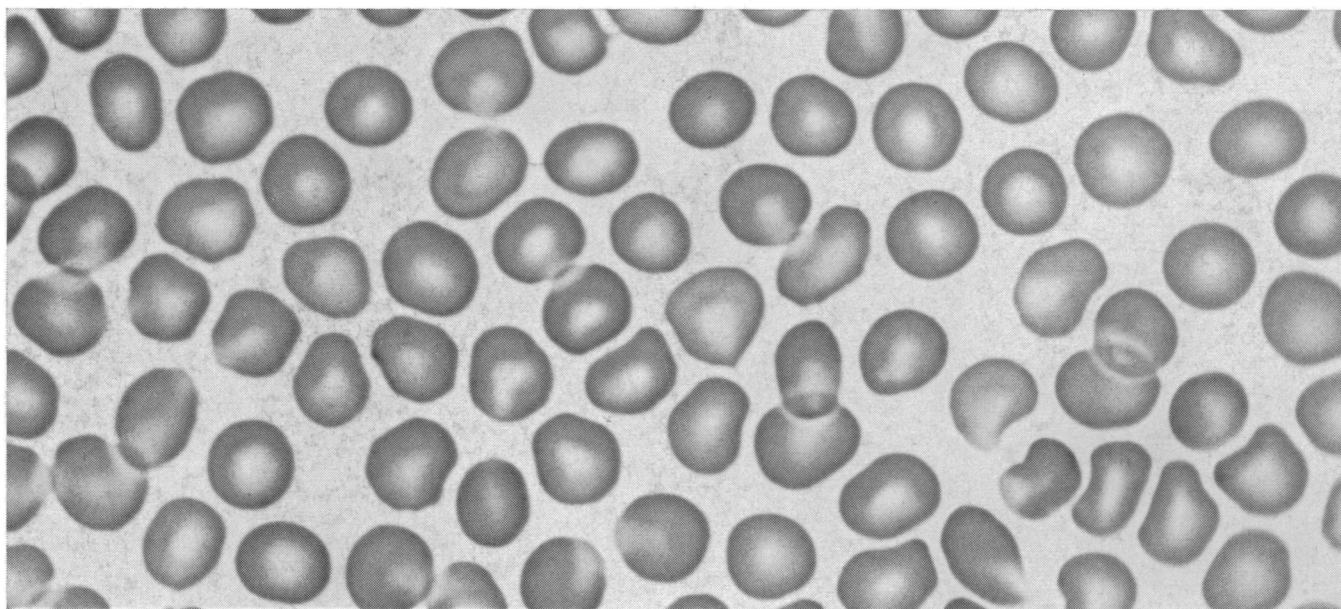
The Proceedings of the Conference on National Energy Policy

send your name and address plus \$6.00
(AAAS members \$5.40) to



AAAS Dept. N2
1515 Massachusetts Ave., NW
Washington, DC 20005.

ORDER YOUR COPY NOW!



ERYTHROCYTES

(Color them red,
or whatever.)

About how biological stains are "certified"

Though we believe with all our heart in free enterprise, we cheer for the Biological Stain Commission and all it stands for in inhibiting us from even hinting at intrinsic superiority of any given stain bearing our label, as long as it carries the Commission's label. Preference for our product would have to be founded on such secondary factors as emotional bias or, better yet, convenience in ordering along with other EASTMAN Organic Chemicals from your lab supplier.

The Commission originated under auspices of the National Research Council in 1921 to cope with vagaries in performance encountered when snatching a few drops for the microscopical lab from the torrents of industrial dyestuffs. The Commission enjoys the backing of 11 scientific societies. It sells its label to cooperating lab supply houses. The revenue maintains a certifying laboratory at the University of Rochester School of Medicine and Dentistry. The Commission's label signifies that:

1. It has tested a sample of the particular batch of dye and has a sample of that batch on permanent file.
2. The identity of the dye has been confirmed spectrophotometrically.
3. The dye content meets Commission specifications.
4. The dye has been tested to perform satisfactorily the tests indicated on the label.

Each label also contains a certification number corresponding to the batch tested. The label requests that the user report any unsatisfactory results to the Commission.

The catalog "EASTMAN Biological Stains" (Kodak Publication No. JJ-281) is available on request from Dept. 412-L, Kodak, Rochester, N.Y. 14650. It gives synonyms and early literature references for the certified stains we offer. It also tells about other Eastman products for microtechnique, quite apart from photography.

. . . and about the economy of black-and-white for illustrating

Uncommunicated science is hardly science at all. Therefore some of the cost of operating a laboratory must go for communicating by photographic illustrations. Color punches through generally better than black-and-white, of course, particularly when vividness counts, as in engaging those who hadn't known they were interested. But when a shrinking dollar must be sliced too many ways, black-and-white prints communicate better than words alone.

The economy in black-and-white stems from mechanized processing at appropriate levels of production volume. To get a better handle on the economics involved so that more reliable answers may be given, we have devised a questionnaire on photographic printing and processing practices and experiences in the laboratory environment.

In compensation for the kindness and postage in sending for the questionnaire on black-and-white printmaking, completing it, and returning it, we will send your laboratory a portfolio of 14 rather magnificent posters in photomicrographic color. Each bears a few words to help the color grab visitors and young scholars who may not have realized they were interested in that sort of thing.

Please write on your institution's letterhead indicating very briefly how you are involved in its photography. Mail to J. E. Brown, Dept. 412L-97, Kodak, Rochester, N.Y. 14650. Offer expires March 31, 1978.

