

■ The FD-30 runs on cassette commands...that means no software changes! Because it runs on your existing programs.

- The FD-30 finds files 50 times faster than either the 9830 or the 9865A cassette drive.
- The FD-30 stores 5 cassettes of data at the cost of one cassette.
- The FD-30 applied in conjunction with Infotek's EM-30 16k-word memory and FAST BASIC ROMS gives unprecedented desk-top power.
- The FD-30 transfers data to or from the 9830 even faster than the 9880B mass memory system. The 9880 requires 23 seconds to store a 10,000 word array via MAT PRINT. The FD-30 does this in 7 seconds via a simple STORE DATA.
- The FD-30 sells for a fraction of the 9880B. And it is a far lower cost answer to most 9830 applications.

NO SOFTWARE REQUIRED!

The cassette control commands and syntax of the 9830 are obeyed to the last detail by the FD-30. All programs which operate with the 9830 cassette drive will run without modification. The result is a phenomenal reduction in program execution time and an increase in on-line data capacity.

NO INSTALLATION

Within minutes, the floppy drive takes on the appearance of original equipment as it fits neatly between the computer and printer. Only four inches are added to the overall height of the system.

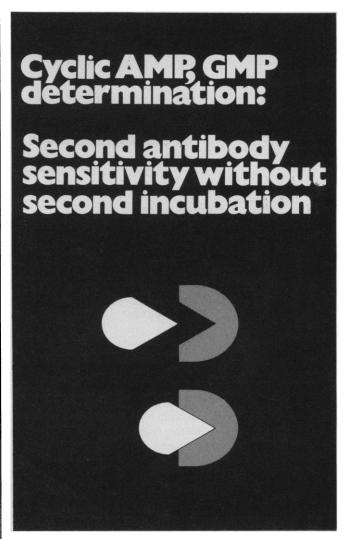
OTHER INFOTEK-9830A/B COMPATIBLE PRODUCTS:

EM-30 Extended Memory System FAST BASIC I ROM FAST BASIC II ROM TC-30 Real Time Clock PS-30 Paper Tape Punch/Reader

*a product of Hewlett-Packard



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These new ¹²⁵I RIA kits from NEN combine extreme sensitivity with speed and convenience. We developed a very sensitive first antibody and pre-reacted it with a second antibody to eliminate the intermediate incubation.

Femtomole sensitivity is easily achieved by acetylation – with reagents provided in the kits.

There are other improvements, too. The iodinated tracer is exceptionally stable and is stored refrigerated, not frozen. Pipetting is done at room temperature. And a tritium-labeled marker is included to monitor sample recovery.

The resulting system is highly sensitive, accurate, reproducible, and yields low blanks.

Everything else is included for running 200 tubes – buffer, standards, complete protocol – even a telephone number if we can be of technical assistance. Ask us to send you our technical brochure.



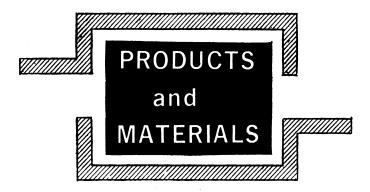
549 Albany Street, Boston, Massachusetts 02118 Customer Service 617-482-9595

Canada: NEN Canada Ltd., 2453 46th Avenue, Lachine, Quebec, H7T 3C9, Tel: 514-636-4971, Telex: 05-821808

Europe: NEN Chemicals GmbH, D-6072 Dreieichenhain, W. Germany, Daimlerstrasse 23, Postfach 1240. Tel: (06103) 85034.

Circle No. 67 on Readers' Service Card

28 JANUARY 1977



X-ray Spectrometer

The EXAC-1000 is an energy-dispersive x-ray analysis system for use with scanning or transmitting electron microscopes and with electron microprobes. The complete system includes a silicon (lithium) detector, a computerbased x-ray analyzer, and a CRT display. Multichannel analysis is programmed rather than hardwired. There are 1000 channels of data storage with 8 × 10⁶ counts per channel. Resolution is guaranteed to exceed 145 electron volts. Loss in resolution at 15,000 counts per second is typically 2 electron volts, and a resolution of 142 electron volts at 20,000 counts per second has been demonstrated. Nuclear Equipment. Circle 690.

Hazard-Eliminating Refrigerators

Model 813 is designed for storage of flammable materials at low temperatures in normal environments and model 814 is designed for storage of flammable materials at low temperatures in hazardous environments. Model 813 is designed to eliminate or to relocate all sparking sources so they do not come in contact with vapors from stored materials. In the model 814, all electrical contacts are contained in explosion-proof enclosures. Temperature may be adjusted in both of these units from -10° to 7°C in the refrigerator portion and from -25° to -1° C in the freezer section. When the units are empty, the temperature is uniform to within ±1.5°C in the refrigerator and to within ± 0.5 °C in the freezer portion. Both units hold 10.8 cubic feet in the refrigerator portion and 1.8 cubic feet in the freezer section. GCA/Precision Scientific. Circle 687.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by Science or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card (on pages 350A and 414A) and placing it in the mailbox. Postage is free.

—RICHARD G. SOMMER

X-ray Fluorescence Detector

The Hypersense detector operates efficiently at distances from 8 to 40 millimeters in scanning electron microscopy. It can detect x-rays emitted at takeoff angles up to 65 degrees in a detector area of 30 square millimeters with a resolution of 148 electron volts. Background strayline radiation is reduced because the detector is insensitive to radiation from above the horizontal plane. Nuclear Semiconductor Division, United Scientific. Circle 686.

Atomic Absorption Spectrophotometer

The IL 751 is a dual-channel, doublebeam instrument that includes a microcomputer. Each channel contains a 330millimeter monochromator and can operate with deuterium arc background correction. The microcomputer can use two to five standards to linearize analytical curves; it reads concentration in singlechannel, dual-channel, or in internalstandard modes; it measures peak heights and areas; and it provides analytical statistics. The IL 751 may be used to analyze all types of samples for up to 68 elements in trace amounts or as major constituents. Instrumentation Laboratory. Circle 685.

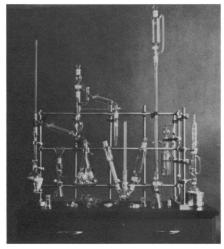


Fig. 1. Bantam-Ware, semimicro glassware.

Enzyme Analyzer

The Serometer 380 is an ultraviolet-kinetic enzyme analyzer with color-imetric capability. It may be programmed to perform a variety of analyses. It evaluates, calculates, memorizes, and reports in international units per liter. Substrate status is reported on the first reading, linearity is evaluated in three successive readings or more. There are six modes: temperature check; absorbance testing; direct readout of concentration for endpoints (two ranges); and kinetic enzyme assay with or without check for linearity. Mallinckrodt. Circle 688.

Semimicro Scale Glassware

Bantam-Ware (Fig. 1) is a complete line of small-scale glass apparatus for organic analysis. There are over 300 items designed to meet specific requirements and Bantam-Ware is also available in kit form with storage cabinet and equipment for support, agitation, and heating. Each kit contains apparatus for fractionation; steam, atmospheric, and vacuum distillation; chromatographic analysis; extraction; filtration; reflux; and separation. Kontes. Circle 689.

Literature

Lined Flexible Tubing describes Bev-A-Line which is now available in a free test kit that provides samples of Bev-A-Line and of unlined tubing with instructions for a 20-day test of this flexible, clear tubing. Thermoplastic Processes. Circle 691.

Amino Acid Analyzer describes the AAA-F-100 analyzer with a fluorometric system and picomole sensitivity. Mark Instrument. Circle 692.

Analytical Chemicals comprises 128 pages with sections on special products, literature, and safety hazards as well. Hach Chemicals. Circle 693.

Hotwire is a quarterly newsletter devoted to recent developments in gas chromatography that include applications and instrumentation. Gow-Mac Instrument. Circle 694.

High-Purity Metals lists six dozen elements from aluminum to zirconium in purities from 70 percent pure yttrium to 99.99999 percent pure gallium; most others are over 99 percent pure. Atomergic Chemetals. Circle 695.

Phosphorus-32 is a miniature guide to the safe handling of this common analytical radioisotope. New England Nuclear. Circle 696.



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Comes in kit form. Nominal assembly time, 4 to 7 evenings. Use as stand alone computer or "smart" terminal. Options include video monitor, floppy disk, printers, papertape reader, expansion memories, PROM programmer and interfaces.

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For transmethylation reactions requiring a high specific activity methyl donor

Adenosyl-L-methionine, S-[methyl-3H]-55-70Ci/mmol

Sulfuric acid (pH~1-3): ethanol solution, 9:1, shipped in dry ice.

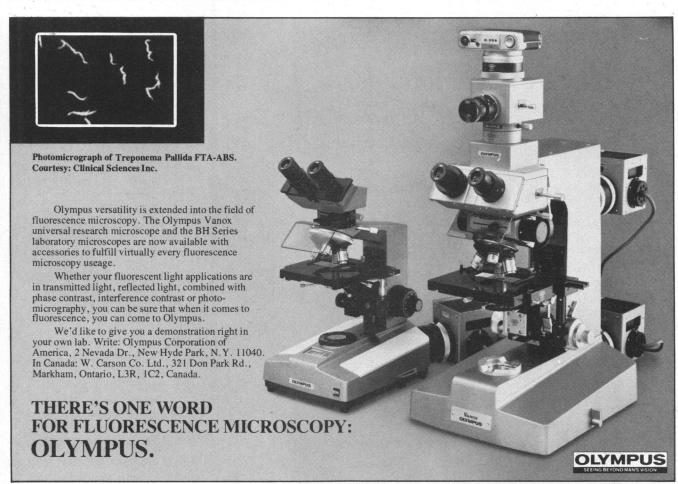
NET-155H \$103/250μCi \$273/1mCi

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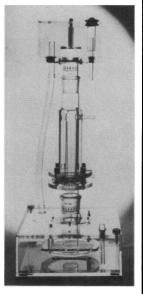
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Simply stated, the **Shandon Mark II Preparative Polyacrylamide Gel Electrophoresis** apparatus is as good as most other models on the market, yet carries a price tag of under \$700 complete. This high resolution unit will separate up to 80 mg of proteins, enzymes and other compounds of closely related molecular weights and electrophoretic mobilities—with discrete separations of fractions. Other features: efficient elution . . . buffer recirculation . . . tough acrylic plastic . . . easy setup. For details, contact Shandon Southern Instruments, Inc., 515 Broad Street, Sewickley, PA 15143 (Pittsburgh District).



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Min. plates per meter	36,000	14,000	••	26,000
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Solvent	hexane	hexane	hexane	40% ace tonitrile
Flow, ml/min	2.0	2.0	2.0	2.0
Pressure, psi	1640	280	280	3000
Test substance	nitro- benzene	nitro- benzene	nitro- benzene	diethyl phthalate
*available in 10 µm particle size also. **under evaluation				

Made by Brownlee Labs, the columns are guaranteed by both Brownlee and Rheodyne. Column packings are LiChrosorb (a registered T.M. of E. Merck Darmstadt Germany).

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Only those employers and individuals who do not discriminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising.

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BLIND AD replies should be addressed as follows;

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POSITIONS WANTED

Biochemist-Microbiologist. Ph.D. 1970. Creative investigator. Experienced in protein purification, protein synthesis, nucleic acid, enzymology, virology, tissue culture, immunochemistry, radioimmuno-assay, and molecular biology. Several publications, awards, and discoveries. Desires academic or industrial by the company of t trial position. Box 38, SCIENCE.

Biochemist/Protein Isolation, M.S. Sixteen years of industrial research and development experience in the biomedical field. Broad background includes pro-tein isolation, antibody production, RID, RIA, affini-ty chromatography, and electrophoresis. Patents and publications. Box 32, SCIENCE. X

Biophysicist, Ph.D. Experienced in mathematical/computer modeling, visual psychophysics, physical/physiological optics, bioengineering, government R & D management. (Hobbies: solar energy, electric vehicle.) Seeks challenging industrial/institutional R & D management. Box 39, SCIENCE. X

Computer Specialist, Ph.D. (physics) with special expertise in minicomputer systems and Fortran and assembly programming, desires appropriate position in scientific/engineering environment in computer support, or in academic institution in computer center operations or teaching. Box 40, SCIENCE.

M.S. in Geophysics (satellite meteorology), 1976. Publications. Seeks any position in research organization or university. For particulars, write to: A. K. Biswas, c/o Arun Kundu, 18 Nilmoni Mitra Street, Calcutta-6, India.

Human Geneticist (Ph.D.), with 3 years of experience in all phases of medical genetics, seeks challenging position. Box 41, SCIENCE. 1/28; 2/11

Mathematical Linguist. Ph.D. 1970. Considerable number of publications. Academic or industry. Box 42, SCIENCE. X

Neuroethologist. Ph.D. Publications, grants, extensive research on neurobehavioral systems in fishes. Seeks academic position to teach animal behavior and/or comparative neurobiology. Box 43, SCI-ENCE.

Recent Graduate, M.A. geography, B.S. biology, seeks position in general New York City area. Special interests are botany and soils. Box 44, SCI-ENCE.

POSITIONS WANTED

Medical Entomologist-Parasitologist. M.S., Ph.D., M.P.M.P.H.; experience in teaching, research, and administration; publications; 12 years of overseas experience in tropical medicine research. Desires senior academic position. Box 33, SCIENCE.

1/28; 2/4, 11

Research/Administrative/Academic: Ph.D. (1963) experimental/physiological psychology; management M.B.A. (expected June 1977). Broad biomedical background. Research department and project head for 8 years. Experienced with administration grants, teaching; 40 plus publications. Seeks position for fall 1977. Box 28, SCIENCE.

Research Associate/Technician: M.S., trained in invertebrate neurophysiology; wants problem in behavioral physiology, neurophysiology, neurobiology. Innovative, inquisitive, cooperative, independent. Ph.D. eventually. Recommendation from established researcher (present employer). Box 45, SCIENCE.

Vertebrate Morphologist. Ph.D. Postdoctoral experiverteurate Morphologist. Ph.D. Postdoctoral experience, publications, grants. Seeks position to develop a high-level teaching and research program in functional-comparative anatomy. Research area: comparative neuroanatomy and behavior. Box 46, SCIENCE.

POSITIONS OPEN

ANATOMISTS. Two positions: one to teach neuroscience and the other gross anatomy. Assistant professor level; Ph.D. or M.D. with postdoctoral research and teaching experience required. Candidates must demonstrate ability to develop fundable, independent research program. Preference fundable, independent research program. Preference will be given to persons with research interests in neuroendocrinology, neurochemistry, cellular neurobiology, chronobiology, immunology, or biochemical embryology. Applicants should send a curriculum vitae, bibliography, selected reprints, research plans, and names of three referees to: Dr. John E. Pauly, Professor and Chairman, Department of Anatomy, University of Arkansas for Medical Sciences, Little Rock, Arkansas 72201. An Equal Opportunity/ Affirmative Action Employer.

ANATOMY FACULTY POSITION: Junior appointment open July 1977. Experienced medical gross anatomist with demonstrated research expertise in neurosciences or teratology and biochemistry. Contact Chairman, Department of Anatomy, Jefferson Medical College, Thomas Jefferson University, 1020 Locust Street, Philadelphia, Pa. 19107. An Equal Opportunity/Affirmative Action Employer.

University of Cincinnati: Possible opening for AN-THROPOLOGIST to head small department with B.A. and M.A. programs. Research and teaching experience necessary. Preferred specialties include oceanic or Southeast Asian cultures, Old World archeology, or primatology. An Equal Opportunity Employer. Send curriculum vitae to Anthropology Headship Search Committee, Office of the Dean, College of Arts and Sciences, University of Cincinnati, Cincinnati, Ohio 45221. nati, Ohio 45221.

ASSISTANT PROFESSOR AT YALE UNIVERSITY Department of Engineering and Applied Science

Desired: Ph.D. in either electrical engineering or physics with 1 or 2 years of experience in the experi-mental laser area to teach undergraduate courses in quantum electronics, communications, or modern applications of electromagnetic waves. Research opportunities would be in the experimental laser area and would involve applications in the frequency domain such as modulation, detection, mixing, frequency stabilization, and coherent beating techniques in laser spectroscopy.

Qualified individuals should send résumés with professional references to Professor W. R. Bennett, Jr., Engineering and Applied Science Department, Yale University, New Haven, Connecticut 06520.

Please submit applications by 1 March 1977.

(Note: Yale is interested in increasing the number of minority group members in its faculty and would wel-come applications from women and minority group

POSITIONS OPEN

ASSISTANT PROFESSORSHIP. Applications are invited for an assistant professorship in general chemistry at Colby-Sawyer College. Evaluation of applicants will be made on proven teaching ability and academic qualifications. Ph.D. in chemistry or Ed.D. with M.S. in chemistry is required. Submit letter of application, including résumé and three recommendations, by 1 March 1977, to the Dean of the College, Colby-Sawyer College, New London, N.H. 03257. An Equal Opportunity Employer.

The Department of Psychiatry at the University of Wisconsin-Madison has a full-time faculty opening at the ASSISTANT PROFESSOR level for a general psychiatrist with special interest in the consultation-liaison area. Applicants should possess a strong interest in teaching and research in this area. In addition the position would involve general psychiatry teaching for medical students, residents, and psychology trainees in the Department of Psychiatry. Applicants should send curriculum vitae and references to William T. McKinney, Jr., M.D., Chairman, Department of Psychiatry, University of Wisconsin Medical School, 1300 University Avenue, Madison, Wisconsin 53706.

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An Equal Employment Education Institution, Title IX/Title VI

Position available for ASSISTANT PROFESSOR with D.V.M. and Ph.D. in pharmacology. Responsibilities to include development of an active research program; participation in the departmental graduate program; and teaching in the professional curriculum with responsibilities in clinical pharmacology. Send résumé and request that three letters of recommendation be sent to:

Dr. Neal R. Cholvin, Chairman
Department of Veterinary Anatomy, Pharmacology
and Physiology
College of Veterinary Medicine
lowa State University
Ames, Iowa 50011

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UNIVERSITY OF MASSACHUSETTS/BOSTON

At least one assistant professorship open in the Biology Department with particular interest in population or community ecology of marine coastal waters, biochemical evolution, biochemical cytology, and microbial physiology. The campus is located on Boston harbor, an exceptional setting for research in a specialized locale. Facilities are superior for ecological, biochemical, and ultrastructural investigations. Qualifications include Ph.D. and excellence as a scholar and teacher. Assume duties September 1977; salary negotiable. Submit curriculum vitae, names of three references, and summary of research interest. Send résumé to: Dr. Herbert Lipke, Personiterest. Send résumé to: Dr. Herbert Lipke, Personiterest. interest. Send résumé to: Dr. Herbert Lipke, Personnel Committee, Biology Department, University of Massachusetts, Boston, Harbor Campus, Boston, Mass. 02125. Affirmative Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR in the general area of ASSISTANT PROFESSOR in the general area of plant physiology, plant biochemistry, or molecular biology. The Department of Botany, the University of Texas at Austin, invites applications from individuals qualified to establish a program of experimental plant research and teach cellular and molecular biology starting fall 1977. Ph.D. required and post-doctoral experience desirable. Applicants should send curriculum vitae and names of three references to: Dr. Guy A. Thompson, Jr., Chairman, Search Committee, Department of Botany, The University of Texas at Austin, Austin, Texas 78712. An Equal Opportunity/Affirmative Action Employer.

THE UNIVERSITY OF NEW MEXICO

The Department of Anatomy invites applications for the position of ASSISTANT PROFESSOR. Successful candidates should have teaching capabilities in histology and neuroanatomy as well as competence in gross anatomy. An active and current research program in the area of cell biology and development is desired. Send curriculum vitae, bibliography, names of three references, and a statement of research plans to: A. J. Ladman, Department of Anatomy, The University of New Mexico, Albuquerque, N.M. 87131. An Affirmative Action/Equal Opportunity Employer.

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Regular faculty position in the Department of Regular faculty position in the Department of Chemistry. Well-equipped research laboratory available. Postdoctoral experience required. Interest in immunochemistry, cell surface phenomena, or fast reaction enzyme kinetics preferred. Send curriculum vitae to Earl Frieden, Department of Chemistry, Florida State University, Tallahassee, Fla. 32306. Equal Opportunity Employer.

ASSISTANT PROFESSOR OF BIOLOGY AT UCLA

The Department of Biology invites applications from highly qualified individuals with a commitment to teaching and research in plant morphology. Teaching responsibilities include participation in the introductory biology course, and advanced undergraduate course in plant morphology plus advanced courses and seminars in the area of the applicant's research interests. Research may range from cellular to organismic approaches involving morphoge. lar to organismic approaches involving morphogenetic problems in multicellular systems. A curriculum vitae, list of publications, names of three references to be used for letters of recommendation, and a summary of research interests should be sent to: Chairman, Search Committee, Department of Biology, University of California, Los Angeles, Calif. 90024. Closing date for application is 1 March 1977.

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ASSISTANT PROFESSOR OF MICROBIOLOGY.

Asplications from Ph.D.'s or D.V.M.'s with strong academic background in general molecular virology are invited. Candidates should be qualified to conduct research on the biology and molecular aspects duct research on the biology and molecular aspects of RNA tumor viruses. Experience and publications in this field are essential. The position is available immediately. Send complete curriculum vitae, list of publications, and at least three references to Dr. Jorge F. Ferrer, Leukemia Research Studies Unit, New Bolton Center, University of Pennsylvania, Kennett Square, Pennsylvania 19348.

ASSISTANT PROFESSOR IN PHARMACOLOGY. Applications are invited for a research/teaching position in the Department of Pharmacology, Yale University School of Medicine. Preferred qualifications include a Ph.D. degree with experience in nucleic acid biochemistry, and a desire to work closely with clinicians interested in pathogenesis and treatment of malignant disease. Submit résumé to Dr. Joseph R. Bertino, Department of Pharmacology, Yale University School of Medicine, New Haven, Connecticut 06510 by 15 February 1977. Yale University is an Equal Opportunity Employer. Women and minorities are encouraged to apply. ASSISTANT PROFESSOR IN PHARMACOLOGY.

ASSISTANT PROFESSOR OF ZOOLOGY in the area of mammalogy, full-time, tenure track, \$13,572 to \$16,320, 9-month appointment, starting date: 22 August 1977. Teaching responsibilities to include mammalogy, human anatomy, and other courses or mammalogy, human anatomy, and other courses or seminars in the candidate's area of specialization. Applicant must hold the Ph.D. degree or equivalent by the end of August 1977. Preference will be given to candidates with strong evidence of quality research and teaching. Submit curriculum vitae, reprints, transcriptions, statement of research interest, and three letters of reference to Roger E. Carpenter, Manuraley Search Committee Pearer of Teel. Mammalogy Search Committee, Department of Zoology, San Diego State University, San Diego, California 92182. An Equal Opportunity/Affirmative Action/Title IX Employer.

PHARMACOLOGIST

The Pharmacology Department of Washington Unirice Pharmacology Department of Washington University invites applications from Ph.D.'s and M.D.'s for the position of assistant professor. Applicants will be expected to carry on independent research, assist in the teaching and training of medical students and pre- and postdoctoral fellows.

Minorities and women are encouraged to apply. Send three letters of reference and curriculum vitae to: Dr. James A. Ferrendelli, Pharmacology Department, Washington University Medical School, 660 South Euclid, St. Louis, Mo. 63110.

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Dr. A. M. Beeton, Director
Great Lakes and Marine Waters Center
University of Michigan
2200 Bonisteel Boulevard
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The Department of Biology, Adelphi University, seeks to fill three faculty positions at the assistant professor level. Applicants should have teaching and research competence in one or more of the following areas: terrestrial ecology, developmental biology comparative physiology, immunobiology, and mir. obiology. Appointments to begin on or before 1 September 1977. Duties include undergraduate and graduate teaching and a strong research program uate teaching and a strong research program

Candidates will be chosen on the basis of demon-strated and potential teaching and research ability. Ph.D. required.

Please send curriculum vitae, statement of research and teaching interests, and the names of three persons who may be contacted as references. Address: Chairman of the Personnel Committee, Department of Biology, Adelphi University, Garden City, N.Y. 11530. An Affirmative Action/Equal Opportunity Employer.

NEUROBIOLOGIST

Faculty positions available, 1977, for individuals with research backgrounds in cellular and developmental neurobiology. Medical and graduate teaching responsibilities, professional rank, and salary deing responsionlites, professional rank, and salary de-termined by experience. Send inquiries and résumés to: Dr. F. Scalia, Search Committee, or Dr. D. Fisch-man, Chairman, Department of Anatomy and Cell Bi-ology, State University of New York, Downstate Medi-cal Center, 450 Clarkson Avenue, Brooklyn, N.Y. 11203. Equal Opportunity/Affirmative Action Em-player

NEUROSCIENTIST

Interest in autonomic nervous system. Must be familiar with neurophysiologic and neuroanatomic techniques. Salary commensurate with experience. Send résumé to Box 18, SCIENCE.

DEPARTMENT OF ANATOMY CREIGHTON MEDICAL SCHOOL

(ANATOMIST)/HISTOLO-NEUROSCIENTIST GIST. Assistant to associate professorship available 1 June 1977. Teaching assignments in medical curriculum. Research open; neuroscience or microstructure preferred. Predoctoral program concentrastructure preferred. Fredoctoral program concentra-tions offered in these fields. New research/instruc-tional facility. Résumés and references to: Dr. William E. Dossel, Department of Anatomy, Creigh-ton Medical School, Omaha, Nebraska 68178. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available-2 years for Ph.D. or equivalent for project on porcine follicular oocyte maturation inhibitor. Applicant must have experience in in vitro observations of mammalian oocytes. Available 1 June 1977. Address inquiries to Dr. Cornelia P. Channing, Department of Physiology, University of Maryland School of Medicine, 660 West Redwood Street, Baltimore, Maryland 21201. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSOCIATE OR ASSISTANT MEDICAL DIRECTOR for national health foundation. Advanced degree desirable but peer group involvement with phy-sicians and scientists may be accepted. Duties will include grants and contracts management, editorial and creative writing functions, legislative and federal interactions, and developing interface between medical department and volunteers connected with the foundation. Opportunities available for imaginathe roundation. Opportunities available for imaginative and innovative program development, particularly in the biostatistical area. The individual selected will be responsible to the medical director. Salary open. Position available immediately. For further information, send résumé, a list of at least four references, and letter detailing interests and career objectives to: Medical Director, Cystic Fibrosis Foundation, 3379 Peachtree Road, NE, Atlanta, Georgia 30326.

University of Alberta, Department of Botany, invites applications from **PHYSIOLOGISTS** with research interests and experience in plant growth and development. Duties include developing active redevelopment. Duties include developing active research program; participation in introductory courses in biology/plant physiology/at least one graduate course in speciality. Ph.D. required. Salary/rank commensurate with experience. Curriculum vitae with complete publication list, copies of no more than three most important papers, and three reference letters to be sent to J. A. Marken, Department of Botany, University of Alberta, Edmonton, Alberta, Canada T6G 2E9. Closing date including receipt of letters: 1 March 1977. Appointment begins 1 July 1977. 1 July 1977

PLANT PATHOLOGIST, assistant professor. Ph.D. in plant pathology or related area with expertise in bacterial plant pathology, field crop pathology, or epidemiology. This position will be concerned with solving plant disease problems related to management of small grain cereal residues. A limited amount of teaching. Applications, including a résumé, names of four references, and reprints of published papers should be sent by 1 April 1977 to Dr. D. E. Mathre, Department of Plant Pathology, Montana State University, Bozeman, Montana 59715. Affirmative Action/Equal Opportunity Employer.

POSITION AT WASHINGTON STATE UNIVERSITY

Applications invited from Ph.D.'s with research ability to quantify phenomena from the natural and/or managerial sciences using sophisticated methematical modeling techniques of analytical continuous of the property of the matical modeling techniques of analytical continuous and/or discrete nature for position to start September 1977. Desire person capable of teaching advanced modeling courses and directing interdisciplinary theses. Rank and salary commensurate with qualifications. Equal Opportunity/Affirmative Action Employer. Contact David J. Wollkind, Department of Pure and Applied Mathematics, Washington State University, Pullman, Wash. 99164 by 1 March 1977.

POSITION AT WASHINGTON STATE UNIVERSITY

Applications invited from Ph.D.'s with good knowledge of multivariate analysis, linear models, stochastic processes for position beginning September 1977. Desire person with research interests in biological applications, especially mathematical genetics, although others interested in interdisciplinary ics, although others interested in interdisciplinary collaboration urged to apply. Rank and salary commensurate with qualifications. Equal Opportunity/Affirmative Action Employer. Contact Sam C. Saunders, Department of Pure and Applied Mathematics, Washington State University, Pullman, Wash. 99164 by 1 March 1977.

POSTDOCTORAL POSITION available immediately in the area of mathematical models for biological oscillations. Send résumé to Professor T. Pav-lidis, Department of Electrical Engi-neering and Computer Science, Prince-ton University, Princeton, N.J. 08540.

BACTERIOLOGIST/IMMUNOLOGIST

A teaching position is open at the rank of assistant or associate professor to teach courses in bacteriology, immunology, and environmental science for nonmajors. The position involves instruction and advising at the undergraduate level. Research interest is desirable. Ph.D. required or nearly completed. Please send a letter of application, curriculum vitae, complete official transcripts of all college work, and arrange to have at least three letters of recommenda-tion sent to: Dr. John Housley, Dean of Academic Af-fairs, Linfield College, McMinnville, Oregon 97128. An Affirmative Action/Equal Opportunity Employer.

BIOLOGIST or BIO-ENGINEER with Ph.D. Academic research position currently available for an investigator with publications and/or high research potential to conduct studies of bone. Aptitude in applied mathematics essential. Rank and salary dependent upon qualifications. Female and minority candidates are encouraged to apply. Send applicacandidates are encouraged to apply. Send applica-tion to Dr. D. Baylink, VA Hospital, 4435 Beacon Ave-nue South, Seattle, Wash. 98108.

BIOLOGY POSITIONS. Two temporary positions (preference for completed Ph.D.'s). One-year sabbatical replacement: full course in general microbiology, one-half course in environmental science. Two-year appointment: half-time teaching and half-time research, full course in molecular biology, research in area of interest or in conjunction with a staff member.

Both individuals will participate in aspects of tear, taught departmental courses: introductory biology, senior seminar, direction of student research projects. Send résumés to T. A. Cole, Department of Biology, Wabash College, Crawfordsville, Indiana 47933. Wabash College is an Equal Opportunity Employer. ployer.

MICROBIOLOGY-CHAIRMAN

The University of South Carolina invites applica-The University of South Carolina invites applications from qualified individuals interested in the position of chairman of the Department of Microbiology of the University of South Carolina School of Medicine. Candidates should desire involvement in a growing department, have commitment to the teaching of medical students and graduate students, and have breadth of interests that will allow interrelationships with undergraduate programs of the University as well as clinical programs of the Medical School. Candidates must possess a doctoral degree.

The University of South Carolina offers Equal Op-portunity in employment, in admissions, and educa-tional activities in compliance with Title IX and other civil rights laws.

Correspondence should be addressed to Office of the Dean, School of Medicine, University of South Carolina, Columbia, South Carolina 29208, and submitted within 30 days of the date of this issue of SCIENCE.

OCEANOGRAPHY CHAIRMANSHIP. The University of South Florida is accepting applications until 25 March 1977 for chairmanship of the Department 25 March 1977 for chairmanship of the Department of Marine Science, a 12-month, tenure-earning administrative position. Qualifications: Ph.D. degree, oceanography experience at management and research levels, teaching or administrative experience desirable. Salary negotiable. Apply to Dr. T. L. Hopkins, Department of Marine Science, University of South Florida, St. Petersburg, Fla. 33701. An Affirmative Action/Equal Opportunity Employer.

COMPARATIVE PATHOLOGIST. M.D., or D.V.M. with Ph.D. pathology board or ACVP eligibility or certification desirable. Experience in rodent pathology, carcinogenesis, clinical pathology, immunology, histochemistry, autoradiography, or electron microscopy helpful. Duties include: (i) involvement in multidisciplinary projects with some individual research time available, (ii) participation in histopathologic examination of tissues from rodents involved in general contractions. histopathologic examination of tissues from rodents involved in carcinogenic, mutagenic, and teratogenic studies, (iii) teaching, (iv) involvement in graduate and undergraduate education, and (v) involvement in interdisciplinary graduate toxicology program. Excellent clinical pathology and electron microscopy support. Salary commensurate with qualifications/ experience. Send résumé to Director, University of Arkansas, Pathology Services Project, National Center for Toxicological Research, Jefferson, Arkansas 72079. Equal Opportunity Employer.

POSITIONS OPEN

DEAN OF MEDICINE UNIVERSITY OF BRITISH COLUMBIA

Applications invited from academics with scholastic and administrative experience in medicine. Dean to provide leadership to a growing medical school, with a developing University Hospital complex. Send résumé and names of three referees to: Dean Robert M. Will, Chairman, Search Committee/Dean of Medicine, Faculty of Arts, University of British Columbia, Vancouver, British Columbia, Canada V6T 1W5.

DEAN, SCHOOL OF MEDICINE

The University of Texas Medical Branch is seeking candidates who are experienced educator-academicians to continue leading the school's vigorous academic growth. Candidates should submit curriculum vitae and references to: William P. Deiss, Jr., M.D., Chairman Department of Medicine, University of Texas Medical Branch, Galveston, Texas 77550. The University of Texas is a Regula Consenting M/E. Emperience of Texas is a Regula Consenting M/E. versity of Texas is an Equal Opportunity, M/F, Em-

YALE UNIVERSITY-DEVELOPMENT

Applications invited for position of assistant direc-Applications invited for position of assistant director, Office of Special Projects and Foundations, Yale University. Working under the director and in cooperation with members of the faculty in the natural sciences, appointee will be responsible for development. opment of both institutional and research proposals for submission to foundations, corporations, and federal agencies. Background in one of the biological or physical sciences required; Ph.D. preferred. Appli-cants should have demonstrable skill as writers and cants should have demonstrable skill as writers and experience in the preparation of grant proposals (or in organizations awarding grants). Yale University encourages applications from qualified minority group members and women. Send résumés and salary histories to Office of Special Projects and Foundations, Yale University, P.O. Box 2038, New Haven, Connecticut 06521.

POSITIONS OPEN

CYTOGENETICS TECHNICIAN. The Division of Medical Genetics at Methodist Hospital of Indiana is seeking a cytogenetic technician with experience in: seeking a cytogenetic technician with experience in: (i) human cytogenetics, (ii) tissue culture of amniotic fluid cells, and (iii) in tissue culture generally. This individual must be able to work both independently and as part of a team with others. The annual salary is \$9,000 to \$12,000, commensurate with experience. Send résumé to Ray M. Antley, M.D., Division of Medical Genetics, Methodist Hospital of Indiana, 1604 North Capitol, Indianapolis, Ind. 46202. An Equal Opportunity, M/F, Employer.

DIRECTOR Population Center

The University of North Carolina at Chapel Hill invites applications and nominations for the position of director of the Carolina Population Center, an interdisciplinary institute of the university devoted to fostering research, service, and teaching activity in the population field.

Candidates should have an earned doctoral Candidates should have an earned doctoral degree, some advanced graduate study in demography and one of the social sciences, creditable research accomplishment in population-related problems, and a demonstrated capacity for leadership and administration in

The search committee intends to consider candidates from a variety of disciplines. The position would involve a senior faculty appointment in an appropriate department of the university.

Please submit application and complete curriculum vitae no later than 15 March 1977 to: Dr. Amos Hawley, Chairman, Search Committee, Department of Sociology, 203 Hamilton Hall 070A, The University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27514.

An Equal Opportunity Employer

HAHN-MEITNER INSTITUTE FOR **NUCLEAR RESEARCH BERLIN GMBH**

Department of Nuclear Chemistry and Reactor

invites applications and nominations for the position of

Geochemist

Applicants should have a substantial record of academic achievement in geochemistry and/or economic geology. He should have a broad background in modern analytical methods used in geochemistry (mass spectrometry, neutron activation analysis etc) and should be capable of furthering the scope of nuclear methods of analysis, in geochemical research. Duties also include graduate teaching in geochemistry and promoting the existing interdisciplinary research projects between the geochemical group of this department and institutes of geosciences of the universities of Berlin.

Salary: appropriate for qualifications and responsibilities of a senior scientist and head of geochemistry group (position of full professor). German is not a prerequisite.

Applications and nominations should be accompanied by a curriculum vitae and submitted to:

> Prof. H. Dachs Hahn-Meitner-Institut für Kernforschung Berlin GmbH Post Box 39 01 28, D-1000 Berlin 39

DIRECTOR, CENTER FOR MARINE STUDIES

The University of Maine at Orono seeks a director for its newly created Center for Marine Studies. The director will be responsible for administering the Center which has graduate education, research, and center which has graduate education, research, and coastal advisory services as the primary functions. The director will also administer the University of Maine Sea Grant program and the activities of the Ira C. Darling Marine Research Center. Rank and salary open, depending upon qualifications. Apply by 15 February 1977.

Write and send curriculum vitae to:

Dr. Frederick E. Hutchinson Vice President for Research and Public Service
21 Coburn Hall University of Maine Orono, Maine 04473

The University of Maine is an Equal Employment Opportunity Institution.

MEMORIAL UNIVERSITY OF NEWFOUNDLAND DEPARTMENT OF BIOLOGY ENTOMOLOGIST

Subject to budgetary approval, an entomologist subject to budgetary approval, an entomologism will be required at the assistant or associate professor level by the Department of Biology for I September 1977. The successful applicant will be expected to teach introductory and graduate level courses in entomology and related areas, and to carry out research in an appropriate field. Candidates should have a strong background in insect systematics and

Applications with a curriculum vitae and the names of three referees should be sent to Dr. G. R. South, Head, Department of Biology, Memorial University of Newfoundland, St. John's, Newfoundland, Canada A1C 587. The closing date for applications is 1 March 1977.

RESIDENT EXECUTIVE DIRECTOR OF THE MARINE SCIENCE CONSORTIUM, INC., WAL-

LOPS ISLAND, VIRGINIA.

Minimum requirements: baccalaureate degree, 3 years of managerial and administrative experience in multidiscipline educational and research programs. Salary and benefits commensurate with experience. Applications accepted until 11 February 1977. Apply

Dr. Herbert Hays, President The Marine Science Consortium FSC 205 Shippensburg State College Shippensburg, Pennsylvania 17257

EXPERIMENTAL MOLECULAR PATHOLOGIST with full competence in histochemical, autoradiogra-phic, and electron microscopic methods. Assistant pnic, and electron microscopic methods. Assistant professor level preferred. Position entails mostly research with some teaching and service. Respond before 1 March 1977 to Dr. Harold M. Fullmer, Director, Institute of Dental Research, University of Alabama Medical Center, Birmingham, Alabama 35294. Equal Opportunity/Affirmative Action Employer.

EXPERIMENTAL NEUROPSYCHOLOGIST. A position is open for a new or recent Ph.D. experienced in animal behavioral techniques, in brain correlates in animal behavioral techniques, in brain correlates of behavior, and in psychopharmacological interventions. The responsibilities would include experimental research in these fields and guidance of experimental work of both graduate and undergraduate students in a laboratory well equipped with behavioral testing equipment and data processing systems. Applicants should send curriculum vitae, copies of authorities, and curriculum vitae, copies of reference and curriculum vitae, copies of reference and curriculum vitae, copies of reference and curriculum vitae. publications, and arrange to have three letters of references sent to: Professor K. Bättig, Department of Behavioral Sciences, Federal Institute of Technology, Turnerstrasse 1, 8006 Zurich, Switzerland.

BIOLOGY DEPARTMENT HEAD OPENING. Ph.D., strong commitment to effective teaching, proven abilities in research and achievement of external funding support, administrative skills, and experience and professional achievement appropriate for appointment at the rank of associate or full professor. Background in animal ecology is a high priority, but other disciplines may apply. Twelve-month contract. Salary competitive. Applicants should send curriculum vitae and three references to Bert C. Bach, Dean, College of Arts and Sciences, The University of Tennessee at Chattanooga, Chattanooga, Tennessee 37401. Affirmative Action/Equal Opportunity Employer. BIOLOGY DEPARTMENT HEAD OPENING.

POSITIONS OPEN

The Department of Pharmacology, University of North Carolina, Chapel Hill, invites application for two FACULTY POSITIONS, one at the assistant professor level and one at the level of associate professor. Applicants are expected to have appropriate postdoctoral training and demonstrable originality and productivity in research. Applicants for the posiand productivity in research. Applicants for the posi-tion of associate professor should have developed a productive, independent research program which can be continued in this position. Preference will be given to applicants whose research interests and experience are related to the study of cell surface receptors for hormones and neurotransmitters or the ceptors for hormones and neurotransmitters or the study of membrane transport processes. Send curriculum vitae, statement of research plans, and three references to: Dr. John Perkins, Department of Pharmacology, University of North Carolina at Chapel Hill, School of Medicine, Chapel Hill, North Carolina 27514. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.

UNIVERSITY OF CALIFORNIA, IRVINE

The University of California, Irvine, Department of Psychiatry and Human Behavior, invites applicants for full-time FACULTY POSITIONS. M.D. degree, 3 years of accredited psychiatric residency, California licensure, and evidence of scholarly productivity relicensure, and evidence of scholarly productivity required. (i) Assistant professor level, family therapy and liaison with family medicine (training in family therapy preferred); (ii) assistant professor level to coordinate undergraduate psychiatry curriculum, diactic, clinical, and cognate basic sciences at medical student level; (iii) two at assistant or associate professor level to direct inpatient and outpatient services, including clinical supervision and didactic teaching of medical students and residents in child and adult psychiatry. Applications from all qualified candidates are welcome; minorities and women are encouraged to apply. Se.id curriculum vitae and names of three references to Dr. E. Mansell Pattison, University of California, Irvine, Calif. 92717.

FACULTY POSITIONS: DEPARTMENT OF PATHOLOGY NEW YORK UNIVERSITY MEDICAL CENTER

- (1) Surgical Pathology-Cytopathologist to direct Cytology Services and related training programs for the Medical Center. Will participate in surgical and autopsy services part time. Should have experience in all areas of cytologic methodology and interest in related research and development programs.
- (2) Surgical Pathologist with experience in electron microscopy to train residents and fellows as well as pursue own investigations. A new Joelco TEM-SEM is operational and two full-time technicians are fully funded.
- (3) Clinical Chemistry and Toxicology Director to supervise routine and emergency services and train residents. Research space available, opportunity to collaborate with New York City Toxicologists Medical Examiner's Office and New York University Department of Environmental Medicine.

All positions entail full academic privileges and responsibilities with rank and salary dependent on experience, scholarly achievements, and potential. Send résumé to Vittorio Defendi, M.D., Chairman, Department of Pathology, New York University Medical Center, 550 First Avenue, New York, New York 10016. An Equal Opportunity/Affirmative Action Employer, M/F.

HEAD-Department of Chemistry, University of Connecticut. Nominations and applications are invited for the position of head of the Department of Chemistry. The Department has 25 full-time faculty members, 60 graduate students, and ample space. The University's commitment to strong teaching and research programs in chemistry has been demonstrated most recently by a generous allocation of funds to the Chemistry Department for the purchase of a number of major, sophisticated laboratory infunds to the Chemistry Department for the purchase of a number of major, sophisticated laboratory instruments. The University has an enrollment of 16,000 undergraduate students and 5,500 graduate students at its Storrs Campus. Qualifications include strong administrative and leadership ability, an established record of distinguished research, and a demonstrated interest in promoting excellent teaching and research. The position will be available September 1977. Send résumé and names of references to: Frank D. Vasington, Search Committee, The University of Connecticut, Storrs, Connecticut 06268. An Equal Opportunity Employer.

POSITIONS OPEN

HISTOLOGIST. The University of Arkansas Pathology Services Project at the National Center for Toxicological Research (NCTR) has an opening for a histologist. Applicants should possess the Ph.D. degree. Knowledge of histology, histologic technique, and histochemistry essential. Experience in autoradiography and electron microscopy desirable. Duties include: (i) supervision and administration of a large histopathology laboratory, (ii) histochemical evaluation of tissues from rodents involved in toxicological studies, and (iii) involvement in graduate and undergraduate education. Salary commensurate and undergraduate education. Salary commensurate with qualifications/experience. Send résumé to Director, Pathology Services Project, National Center for Toxicological Research, MC 16, Jefferson, Ark. 72079. Equal Opportunity Employer.

The Department of Biological Sciences, San Jose The Department of Biological Sciences, San Jose State University, an Equal Opportunity Employer, announces a probationary appointment, effective September 1977, in teaching and research in HUMAN PHYSIOLOGY. We prefer experience in vertebrate endocrinology and the use of computers in instruction. Send curriculum vitae to Dr. Joseph Young, Chairman, Department of Biological Sciences, San Jose State University, San Jose, Calif. 95192. Closing date: 1 March 1977.

INSECT PHYSIOLOGIST

The Department of Entomology has a research position, available immediately, for a 12-month faculty position in insect physiology as assistant or associate professor.

The Ph.D. is required. Applicants should have broad training in entomology, ecology, plant sci ence, and chemistry,

Research responsibility will focus on insect-plant relations at the physiological or chemical level

Teaching responsibilities will include supervision of graduate students and some course instruction based on departmental need and scientist's interest.

Applications consisting of a curriculum vitae, graduate transcripts, a brief outline of future research plans, and three letters of recommendation should be sent before 15 February 1977 to:

Dr. Eldon E. Ortman, Head Department of Entomology Purdue University West Lafayette, Ind. 47907

Purdue University is an Equal Access/Equal Opportunity Employer.

INVERTEBRATE BIOLOGIST

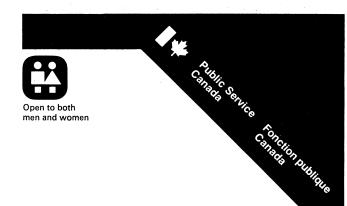
Assistant professor to teach marine invertebrate physiology, with field lab. Two years of postdoctoral experience required, plus independent research program in comparative physiology, biochemistry, or ecology of invertebrates. Send curriculum vitae, statement of research and teaching interests, and three references by 15 March to Dr. R. J. Goss, Division of Biology and Medicine, Brown University, Providence, R.I. 02912.

An Affirmative Action/Equal Opportunity Employer

MICRORIOLOGISTS. San Diego State University. Department of Microbiology, is recruiting for two full-time tenure track faculty members at the assistant professor level, one to teach immunology and medical bacteriology and one to teach advanced general microbiology and aquatic or marine micro-biology. Both faculty members will be expected to teach introductory microbiology courses as needed and to develop active research programs. Ph.D. preferred. Postdoctoral experience helpful. Assistantorofessor salary range \$13,572 to \$16,320. Affirmative Action/Equal Opportunity/Title IX Employer. Actionizqual Opportunity/Ittle 1A Employer. Applicants should submit curriculum vitae and three letters of reference to Beatrice L. Kelly, Chairman, Department of Microbiology, San Diego State University, San Diego, California 92182 by 15 April 1977.

NEUROANATOMIST interested in biochemical and behavioral pharmacology. Applicant must have capabilities in several kinds of advanced methodology (including histofluorescence, immunohistochemistry, horseradish peroxidase, autoradiography, microdissection) and be willing to establish collaborative relationships with other faculty members as well as an independent reacraph position is available. an independent research program. Position is available in a pharmacology department of a northeastern medical school. Position (faculty rank) and salary are negotiable.

Box 47. SCIENCE



Dartmouth, Nova Scotia Canada

DIRECTOR, MARINE ECOLOGY LABORATORY

Salary: \$27,970 to \$36,370 Ref. no: 76-OC-8006 S

The Canadian government, Department of Fisheries and the Environment, requires a Director to manage a marine research laboratory with multidiscipline research programmes in the structure and dynamics of marine ecosystems. The Laboratory is located at the Bedford Institute of Oceanography and consists of a staff of 70 including 22 research scientists and full support facilities. Qualifications required are a Ph.D. or equivalent and research experience including directing research at the level of university department head or equivalent (preferably multidiscipline with marine ecology).

Preference will be given to Canadian citizens.

How to Apply

Forward completed 'Application for Employment' (Form PSC 367-4110) available at Post Offices, Canada Manpower Centres or offices of the Public Service Commission of Canada. To ensure consideration, please forward curriculum vitae to:

Executive Programs Public Service Commission of Canada 20th floor, Tower West **Esplanade Laurier** Ottawa, Ontario KIA OM7

For further enquiries please contact: Dr. W.L. Ford, Director General Ocean and Aquatic Sciences **Bedford Institute of Oceanography** P.O. Box 1006

Dartmouth, Nova Scotia TEL: (902) 426-3492

Please quote the applicable reference number at all times.



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Circle No. 164 on Readers' Service Card

Wageningen

AGRICULTURAL UNIVERSITY OF WAGENINGEN, The Netherlands.

The Faculty of Agricultural Sciences announces the vacancy of the position of

ORDINARY PROFESSOR OF ENVIRONMENTAL PHYSICS.

The duties of the professor will be:

- The duties of the professor will be:
 —teaching courses in the field of meteorology and climatology in the Department of Physics and Meteorology. Teaching comprises lecturing and tutoring of students carrying out experimental and theoretical research. The successful candidate is expected to do research in those areas of environmental physics which are pertinent to the work of the Agricultural University.
 Requirements for the post are:
 —thorough knowledge of the problems prevalent in agriculture and agricultural research:
- agricultural research; thorough knowledge of and training in agrometeorological re-
- search
- search, good didactic skills; willingness to consult other institutions and to play an active part in the coordination of agrometeorological research in the Netherlands;
 -willingness to maintain and promote international contacts in this
- willingness to familiarize him/herself with subjects such as: micro-meteorology, aerobiology, glasshouse climatology, urban meteorology; good administrative and leadership qualities;
- —willingness to learn the Dutch language.

Prospective candidates for this post are invited to apply to the Secretary of the Faculty of Agricultural Sciences, Herenstraat 23-25, Wageningen, The Netherlands, before 15 February 1977, quoting num-

Suggestions for suitable candidates may also be sent to the above

POSTDOCTORAL POSITION: Two-year fellowship available immediately involving high resolution elecavailable immediately involving ing resolution electron microscopy of photoreceptor membranes and the relationship of the pigment epithelium to receptor cells. Send curriculum vitae and names of three references to: Dr. Frank Kretzer, Department of Ophthalmology, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity/Affirmative Action Employer. Action Employer.

POSTDOCTORAL POSITION available immediately for biochemical research on transport mechanisms in cultured fibroblasts and derived plasma membrane vesicles. Background in biochemistry, enzymology, and/or tissue culture preferred. Salary of \$10,800 for first year. Send curriculum vitae, including names of references to: Dr. E. M. Barnes, Department of Biochemistry, Baylor College of Medicine, Houston, Texas 77030. An Equal Opportunity/Affirmative Action Employer. firmative Action Employer.

POSTDOCTORAL POSITION possibly leading to faculty research position at UCLA School of Medicine. Available immediately, Ph.D. in human genetics or biochemistry with experience and skills in biochemistry and the use of cultured lymphocytes. Send curriculum vitae to Dr. S. D. Cederbaum, Mental Retardation Research Center, 760 Westwood Plaza, Los Angeles, Calif. 90024. An Equal Opportunity Employer.

POSTDOCTORAL POSITIONS in oncology, immunology, microbiology, virology, molecular and cellular biology. Available: July to September 1977. Inquiries to: Dr. Sheldon Dray, Head, Department of Microbiology, University of Illinois Medical Center, P.O. Box 6998, Chicago, Illinois 60680. The University of Illinois is an Equal Opportunity/Affirmative Action Employer tion Employer

POSTDOCTORAL RESEARCH POSITION-begin-POSTDOCTORAL RESEARCH POSITION-beginning 1 July 1977 for study in respiratory mechanics, lung clearance mechanisms, and/or pulmonary circulation. Background could be mathematics, engineering, physics, physiology, and/or medicine. Send curriculum vitae to: Dr. E. H. Bergofsky, Department of Medicine, Division of Respiratory Disease, State University of New York, Stony Brook, New York 11794. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ON CYCLIC NU-CLEOTIDES. Position available this summer for re-cent Ph.D. to study the mechanism of activation of guanylate cyclase and/or purification of this enzyme from lung. Salary minimum is \$10,000 per year. Send orniung. Salary minimum is \$10,000 per year. Send curriculum vitae and names of three references to:
Dr. Arnold White, John M. Dalton Research Center,
University of Missouri-Columbia, Columbia, Mo.
65201. An Equal Opportunity Employer.

An opening for a **POSTGRADUATE RESEARCHER** IN **PALEOCEANOGRAPHY** (\$11,300 to \$14,200) exists at the Scripps Institution of Oceanography. Preference is for a candidate with a strong background in erence is for a candidate with a strong background in marine micropaleontology and with experience in statistical data analysis. Address inquiries and résumés to: Dr. W. H. Berger, University of California, San Diego, Scripps Institution of Oceanography, La Jolla, California 92093. University of California, San Diego, is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to

RESEARCH ASSOCIATE IN RADIATION BIOLOGY/BIOCHEMISTRY

Ph.D. to study biochemical repair of damage in DNA and chromatin in cultured cells and its correlation with impaired transcription. Experience in nucleic acid isolation and characterization desirable. Salary \$11,000 to \$13,000. Available immediately. Send curriculum vitae to: N. L. Oleinick, Ph.D., Division of Radiation Biology, Case Western Reserve University School of Medicine, Cleveland, Ohio 44106. An Equal Opportunity Employer.

RESPIRATORY PHYSIOLOGIST. Must have strong research background in respiratory physiology. Responsibilities include medical, dental, and graduate teaching, development of independent research program. Rank and salary dependent on qualifications. Send inquiries including curriculum vitae, bibliography, and names of three references to Dr. Harry D. Patton, Department of Physiology and Biophysics SJ-40, University of Washington, Seattle, Wash. 98195. An Equal Opportunity Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS IN HUMAN AND MEDICAL GENETICS

Training available in clinical, biochemical, immunological, and population genetics. Candidates must have M.D., Ph.D., D.V.M., or comparable degree and be U.S. citizens or permanent residents. Fellowships will begin 1 July 1977. The stipend is \$10,000 to \$13,200, depending upon previous postdoctoral experience.

Send curriculum vitae and the names of three references to: Dr. Arthur G. Steinberg, Case Western Reserve University, Cleveland, Ohio 44106.

PREDOCTORAL FELLOWSHIPS, physiology and biophysics, starting 16 August 1977. Training in muscle, renal, endocrine, and cell physiology, neurophysiology, respiration, and thermoregulation. Applications must include departmental application form, transcripts, GRE scores (verbal, quantitative, one advanced), three recommendations. Deadlines for institutional and departmental support: 10 February and 15 April 1977. For applications, write: Physiology and Biophysics Department, West Virginia University Medical Center, Morgantown, W.Va. 26506.

POSTDOCTORAL TEACHING FELLOWSHIP

Cornell University seeks a postdoctoral teaching fellow to participate in development and administration of introductory biology course. Introductory biology traching experience required. One-year appointment with possible extension to 2-year maximum. For application guidelines, write to Dr. J. Glase, 310 Roberts Hall, Cornell University, Ithaca, New York 14853. Application deadline: 1 April 1977.

Cornell University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS IN CRANIOFACIAL PAIN MECHANISMS AND CONTROL

Available immediately, postdoctoral (D.D.S., M.D., Ph.D.) 2- to 3-year training opportunity for individuals interested in academic careers related to civiquals interested in academic careers related to craniofacial pain mechanisms and control. Program sponsored by NIDR provides core courses in neurobiology, selected clinical service rotations, pain research skill training, a multidisciplinary pain clinic, teaching, and in-depth research. Stipends begin at \$10,800. Write:

Dr. John M. Gregg Dental Research Center University of North Carolina Chapel Hill, N.C. 27514

An Equal Opportunity/Affirmative Action Employer

SOIL BIOLOGY

Postdoctoral research fellowship in quantitative and physiological microbiology. Predoctoral research in invertebrate physiology, decomposition processes, floral-faunal interactions, and soil microcommunities. Departmental teaching assistantships available. For further information contact: Dr. M. J. Mitchell, Department of Forest Zoology, College of Environmental Science and Forestry, State University of New York, Syracuse, N.Y. 13210.

PROGRAM

DOCTORAL PROGRAM IN PHYSICS-ENVIRONMENTAL SCIENCES AND RESOURCES

TEACHING ASSISTANTSHIPS AVAILABLE

This multidisciplinary program is designed to pro-vide an opportunity for students interested in an acavide an opportunity for students interested in an academic graduate physics program to participate in environment and resource-related research. Formal course work emphasizes sound training in physics coupled with seminar and course work designed to familiarize students with problems of the environment and with the utilization of our energy and material resources. Portland State University is an Equal Opportunity/Affirmative Action Employer. All interested necessary are encouraged to apply. ested persons are encouraged to apply

Appointments effective: fall 1977. Contact:

Dr. Mark Gurevitch, Chairman
Department of Physics
Portland State University
P.O. Box 751 Portland, Oregon 97207

COURSES

FIFTH SUMMER SCHOOL IN METHODS OF IMMUNOLOGIC RESEARCH AND DIAGNOSIS

The fifth biennial course on current methods of im-The little desimilar course on current methods of immonlogic research and diagnosis will be offered by The Center for Immunology of the State University of New York at Buffalo in June 1977. The deadline for applications is 15 April 1977.

Further information may be obtained from James F. Mohn, M.D., Director, The Center for Immunology, 210 Sherman Hall, State University of New York at Buffalo, Buffalo, New York 14214.

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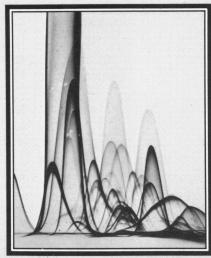
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