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Fig. 1. The model 4800A Cytofluorograf measures light scattering and fluorescence. Cells may be studied with fluorescent techniques such as the Schiff procedure for DNA, with vital stains such as acridine orange for viability, or with fluorescein compounds to characterize cellular enzymes in addition to automatic sizing and counting.



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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 (see pages 706A and 770C) and placing it in the mailbox. Postage is free.—RICHARD G. SOMMER

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Quality Assurance in Blood Banking lists products for all facets of blood banking including typing serums, alcohol swabs, lancets, microhematocrit tubes, and instrumentation for crossmatching procedures. Scientific Products Division, American Hospital Supply Corporation. Circle No. 298 on Readers' Service Card.

Med-Lab Reporter is an eight-page newspaper that offers capsule reports on new products for the clinical laboratory. The latest issue (volume 13, No. 3) features several hundred items, such as instruments, clinical test kits, accessories, and apparatus. Fisher Scientific Company. Circle No. 299 on Readers' Service Card.

A Complete System for Maintaining Sample Integrity introduces the Filette disposable sample clot/fibrin separating filter pipettes for plasma and serum processing. Sharon Medical Products Corporation. Circle No. 283 on Readers' Service Card.

Gilford Lab-Letter (volume 2, No. 4, 1973) features an article on an enzyme-multiplied immunoassay technique (EMIT[®]) for rapid drug analysis. Gilford Instrument Laboratories Incorporated. Circle No. 284 on Readers' Service Card.

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Teaching (Medical, Dental, and Graduate) and research. Budget line position on a 12-month basis. Moderate teaching load with ample time for research. Adequate facilities.

Applications from minority groups and women are encouraged.

Send curriculum vitae and list of references to: Head, Department of Biochemistry, LSU Medical Center, 1542 Tulane Ave., New Orleans, Louisiana 70112.

ASSISTANT PROFESSOR-BIOLOGY

Available 1 September 1974. Molecular Biologist sought to teach Biomolecules, Molecular Biology, and Introductory Biology. Ph.D. and strong research interest is essential. Salary open. Send curriculum vitae to Dr. W. S. Klug, De-partment of Biology, Trenton State College, Trenton, N.J. 08625.

An Affirmative Action Employer

ASSISTANT PROFESSOR-EXTRACTIVE METALLURGY

EXTRACTIVE METALLURGY Extractive Metallurgy Ph.D. required; teach un-dergraduate and graduate courses in the general area of extractive metallurgy. Expected to have a strong background or interest in hydrometal-lurgy and teaching, and to develop vigorous research programs in these or related areas. Salary ranges from \$1250 to \$1450 per month on an 11-month contract depending upon experi-ence or promise. Position available 1 July 1974. Appropriately qualified persons are asked to submit résumés to Dr. L. E. Murr, Head, De-partment of Metallurgical and Materials Engi-neering, New Mexico Institute of Mining and Technology, Socorro, New Mexico 87801. The Institute is an equal opportunity, affirmative action employer.

ASSISTANT PROFESSOR/PULMONARY

ASSISTANT PROFESSOR/PULMONARY Co-Director of the Clinical Pulmonary Function Laboratory at the VA Hospital, Department of Medicine, University of California, San Diego. Other responsibilities include rounding on the Inpatient Pulmonary Consultation Service and participation in the standard clinical and teach-ing activities of the Department. Expertise in fiber-optic bronchoscopy desirable. Appointee will have approximately 30 to 40 percent time to devote to his research interest. Must have Cali-fornia Medical License. Respond by 1 April 1974 to Dr. Helen Ranney, Chairman, Depart-ment of Medicine, University Hospital, 225 W. Dickinson St., San Diego, California 92103, An Equal Opportunity/Affirmative Action Employer.

INSTITUTE OF GEOPHYSICS AND PLANE-TARY PHYSICS invites application for position at the Assistant Research level in physical oceanography. Candidates should have demon-strated an outstanding ability in research in dynamical, experimental, and descriptive aspects of physical oceanography, specifically with regard to internal waves and microstructure. Applicants should send résumés and lists of publications to Dr. Walter H. Munk, Director, IGPP, University of California 92037, before 15 March 1974. The University of California is an affirmative action employer.

AVIAN BIOLOGIST

AVIAN BIOLOGIST Applications are invited for a faculty position at the Assistant Professor level. Responsibilities will include teaching an undergraduate course in ornithology and the development of a strong experimentally oriented research program in some aspects of avian biology. Applicants should submit a curriculum vitae and three letters of recommendation as soon as possible to: W. A. Dunson Department of Biology 208 Life Sciences I Pennsylvania State University University Park, Pennsylvania 16802

POSITIONS OPEN

ASSISTANT PROFESSOR OF PHYSICS

Position open fall 1974 to teach undergraduate physics including electronics and introductory experimental laboratory. Ph.D. in experimental physics required and some undergraduate teach-ing experience. Salary \$11,000 to \$12,000 for 9 months. Send résumé and list of three references to G. I. Moller, Chairman, Department of Earth Sciences/Physics, University of South Dakota, Vermillion, S.D. 57069. Deadline 1 April 1974. An equal opportunity-affirmative action employer.

BIOLOGISTS

Seeking applications for two positions academic year 1974, areas of developmental biology and immunology. Send résumés to

Dr. James D. Crum, Dean School of Natural Sciences California State College, San Bernardino 5500 State College Parkway San Bernardino, California 92407 An Equal Opportunity Employer

DARTMOUTH MEDICAL SCHOOL DEPARTMENT OF BIOCHEMISTRY

Applications are invited for an appointment at the Assistant Professor level, effective 1 Septem-ber 1974. Preference will be given to candidates with research interests in the biochemistry of excitable membranes and/or the interaction of excitable cells. Please send curriculum vitae, a brief description of research plans, and the names of three references to: Search Committee, Department of Biochemistry, Dartmouth Medical School, Hanover, New Hampshire 03755. Closing date for applications is 15 March 1974. Dart-mouth Medical School is an equal opportunity, affirmative action employer.

CARDIOVASCULAR PHARMACOLOGY RESEARCH Ph.D.

Newly created position is now avail-able for a senior scientist in our expanding cardiovascular research program. Primary responsibility will be for the overall supervision and coordination of the activities of cardiovascular pharmacology labora-tories staffed by both Ph.D. and associate level scientists.

In addition, this individual will be expected to have some direct lab-oratory involvement to expand the technical capabilities of the group and to explore alternative ap-proaches to the treatment of cardio-vascular diseases.

Minimum requirement includes Ph D Minimum requirement includes Ph.D. in Pharmacology plus five or more years of direct laboratory experi-ence in cardiovascular research, pref-erably in industry. Broad experience in cardiovascular methodologies and supervisory experience are particu-larly desirable.

Phone inquiries are invited and will be handled in strict confidence. Letter should include salary require-ments and month available. F. J. Beston, Director of Scientific Em-ployment, 1510 Spring Garden Street, Philadelphia, Pa. 19101. (215) LO 4-2400

SMITH KLINE & FRENCH LABORATORIES

Division of SmithKline Corporation

Equal Opportunity Employer M/F

Coagulation Research

Excellent opportunity for a Ph.D. to initiate, design, direct and analyze experiments conceived with the Research and Development of diagnostic and therapeutic reagents to be used for hemorrhagic and thrombotic disease.

Nestled in a quiet central New Jersey setting, Ortho offers an excellent starting salary plus opportunity for advancement.

Qualified candidates only, please send résumé and salary history to: John Chaya, Manager, Employment

XORTHO DIAGNOSTICS 🗠

Route 202, Raritan, N.J. 08869 (A Johnson & Johnson Company) an equal opportunity

and affirmative action employer

Diagnostic **Products** Dow Method Development

M.S./Ph.D. in biochemistry or equivalent. Prefer individual with previous experience in Method Development Clinical Diagnostic Reagents. Should enjoy bench. Work is challenging, varied in nature and highly technical. The position will be in DOW's Indianapolis Division. We offer excellent opportunity for future growth and advancement. Salary is commensurate with education, experience and ability.

Please send detailed résumé and salary history, in confidence, to:

R. J. Webber, Manager of Recruiting



An equal opportunity employer m/f

POSITIONS OPEN

BIOCHEMIST

Assistant Professor to teach enzymology and clinical biochemistry, develop research program, September 1974. Postdoctoral experience pre-ferred. Salary approximately \$12,000 for academic year. Send curriculum vitae, three letters of recommendation and reprints to R. M. Nardone, Biology Department, Catholic University, Wash-ington, D.C. An equal opportunity-affirmative action employer.

DEPARTMENT OF BIOLOGICAL SCIENCES DARTMOUTH COLLEGE

DARTMOUTH COLLEGE Dartmouth College has openings for two Assist ant Professors, one in the area of Cell Biology and one in the area of Genetics. Successful ap-plicants will be required to teach undergraduate and graduate courses and to establish a research program. Interested candidates should send a curriculum vitae and have three letters of recom-mendation sent to Chairman. Search Committee, Department of Biological Sciences, Dartmouth College, Hanover, N.H. 03755. Dartmouth College is an Equal Opportunity Employer with an Affirmative Action Plan, Women and minority group candidates are encouraged to apply.

BIOLOGISTS

Positions available for 1 September 1974 in the Department of Biology at the rank of Assistant Professor. Qualifications: Ph.D. and active in-terest in both teaching and research at the undergraduate and graduate (Master's) level. Send résumé to Dr. George K. Russell, Chair-man, Personnel Conmittee, Department of Biol-ogy, Adelphi University, Garden City, New York 11530.

An affirmative action/equal opportunity employer

BIOLOGISTS. Positions available for 1 Septem-BIOLOGISTS. Positions available for 1 Septem-ber 1974. Salary and rank commensurate with experience. Minimum requirement, Ph.D. (i) Cell Biologist-Histologist to teach cell biology, his-tology and general biology. (ii) Aquatic Ecologist to teach aquatic ecology, marine biology, and general biology. Appointees expected to conduct research in area of specialities. Send résumés to: Dr. Jackson E. Jeffrey, Department of Biology, Virginia Commonwealth University, Academic Division, Richmond, Va. 23284. VCU is an equal opportunity affirmative action employer.

CELLULAR AND MOLECULAR BIOLOGY

CELLULAR AND MOLECULAR BIOLOGY A senior position at the rank of Full or Asso-ciate Professor is available in the Department of Biology, York University, Toronto, tenable 1 July 1974, Preferred areas of research interest are: genetics and biochemistry of development, cellular and molecular genetics, neurobiology. Exceptional junior candidates may also be con-sidered. Salary negotiable and commensurate with rank. Send curriculum vitae, reprints, and names of three referees to **Professor J. D. Friesen, Department of Biology, York University. 4700 Keele Street, Downsview, Ontario M3J 1P3, Canada.**

CENTER FOR SYSTEMS NEUROSCIENCE

CENTER FOR SYSTEMS NEUROSCIENCE The Center will, starting September 1975, pro-vide Fellows with a training and research pro-gram which will enable them to augment experi-mental work, on return to their laboratories, with computer simulation and cybernetic model-ing. To aid them in designing and running the Fellowship Program, the Executive Committee (Drs. Arbib, Kilmer, and Spinelli) seeks a Center Associate (a neuroscientist experienced in experi-mentation and computer modeling) and Systems **Programmer** (experienced in operating systems and computer graphics). Send curriculum vitac to Michael Arbib, Graduate Research Center, University of Massachusetts, Amherst, Massa-chusetts 01002. University of chusetts 01002.

The University is an equal opportunity employer and both female and minority applicants are urged to apply.

CHAIRMAN DEPARTMENT OF CELL BIOLOGY

Applications are invited from individuals with medical college experience and research interest in a fundamental aspect of microbiology to chair an active, vigorous group involved in medical student and graduate teaching and re-search. Send curriculum vitae to: Abram S. Benenson, M.D., Chairman of Search Commit-tee, University of Kentucky College of Medicine, Lexington, Kentucky 40506.

An equal opportunity university.

DEAN, SCHOOL OF MATHEMATICS AND NATURAL SCIENCES. Earned doctorate in mathematics, biology, chemistry, or physics; evidence of administrative ability; successful teaching experience in college or university. Scholarly stature in one or more of above disciplines is required. Submit résumé by 1 March, to Dr. John Korn, Chairperson, Mathe-matics and Natural Sciences Search Committee, Shippensburg State College, Shippensburg, Pa. 17257. An Equal Opportunity Employer.

POSITIONS OPEN

CHAIRMAN, LIFE SCIENCES DEPARTMENT

CHAIRMAN, LIFE SCIENCES DEPARTMENT This program encompasses the Department of Biochemistry, Biology, and Biophysics and Mi-crobiology in the Faculty of Arts and Sciences; 45 full-time faculty, 119 graduate students, and 680 undergraduate majors. The Candidates to be considered for this posi-tion must possess the Ph.D. degree or equivalent, excellent past research achievements, administra-tive experience, and capability to head and structure a Life Sciences Department made up of the above-listed components with the goal of developing an integrated biological sciences curriculum and research program. Qualified candidates should mail a complete curriculum vitae to I. R. McManus, Chairman, Search Committee, Department of Biochemistry, Faculty of Arts and Sciences, University of Pittsburgh, Pa., 15261. The University is an Affirmative Action-Equal

The University is an Affirmative Action-Equal Opportunity Employer.

CHAIRPERSON DEPARTMENT OB-GYN WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE

Contact: W. G. Klingberg, M.D. Chairman of Search Committee West Virginia University School of Medicine Morgantown, West Virginia 26506

An equal opportunity-affirmative action employer

CHIEF OF MEDICINE

CHIEF OF MEDICINE Full-time Chief of Medicine at University of California-affiliated Hospital. Extensive experi-ence in teaching and administration required; research background desirable. Salary and aca-demic appointment dependent upon academic qualifications. Applicants should submit curric-ulum vitae, bibliography, and letters from three professional referees by 31 March 1974. Inquiries should be addressed to Dr. Helen Ranney, Chairman, Department of Medicine, University Hospital, 225 West Dickinson St., San Diego, Calif. 92103. An Equal Opportunity/Affirmative Action Employer.

CLINICAL MICROBIOLOGIST UNIVERSITY OF NORTH CAROLINA

UNIVERSITY OF NORTH CAROLINA A newly organized program in laboratory medi-cine seeks a Director of Clinical Microbiology Laboratories. Doctoral degree, evidence of schol-arly achievement, and significant hospital labora-tory experience required. Appointee will have opportunity to nominate two associate directors, assist in planning new laboratories, and partici-pate in establishing laboratory computer system. The director and associates will have academic appointments in Department of Bacteriology and Immunology, University of North Carolina School of Medicine. Send curriculum vitae and list of three references to: W. W. McLendon, M.D., Chairman, Department of Hospital Laboratories, North Carolina Memorial Hospital, Chapel Hill, N.C. 27514. The University of North Carolina is an Equal Opportunity/Affirmative Action em-ployer and encourages applications from women and minority groups.

DEAN OF THE FACULTY **OF ARTS AND SCIENCES**

OF ARTS AND SCIENCES The University of Pennsylvania invites appli-cations for the position of the Dean of the Faculty of Arts and Sciences. The Dean will have primary budgetary and appointment re-sponsibility for the 29 departments in this faculty. Applicants should have a high level of scholarly achievement and preferably have had significant administrative experience. The wide range of disciplines represented in the faculty suggests that, in addition, candidates be such that they can deal effectively with the concerns of a diverse faculty. Salary to be determined depending on qualifications and ex-perience.

The University of Pennsylvania is an equal opportunity employer. Applications should be

Prof. J. Robert Schrieffer Chairman, Search Committee Department of Physics University of Pennsylvania Philadelphia, Pa. 19174

DEAN OF THE GRADUATE SCHOOL AND DIRECTOR OF RESEARCH—UNIVERSITY OF NEW HAMPSHIRE AT DURHAM. The deadline for receipt of applications as given for the above position in the 1 February 1974 issue of *Science* has been extended to 20 March.

SCIENCE, VOL. 183

UNIVERSITY OF MALAYA FACULTY OF SCIENCE

Applications are invited for the posts of Lecturer/Assistant Lecturer in the Departments listed below. Subject to academic suitability and experience, preference will be given to candidates who are competent in Bahasa Malaysia (Malay). Candidates should have at least a good Honours degree with suitable teaching and research experience in addition to the special qualifications where indicated. For the Lectureships, a Doctorate is normally required.

DEPARTMENT OF GEOLOGY: one post of Lecturer/Assistant Lecturer to teach and carry out research in mineral evaluation and exploration techniques.

SCHOOL OF BIOLOGICAL SCIENCES: one post of Lecturer/Assistant Lecturer in the field of Invertebrate Zoology. Preference will be given to the candidate who possesses a good knowledge of the local invertebrate fauna especially the fauna of marine/estuarine habitat.

Salary Scales (approx. stg. equivs.): Lecturer $\pounds1524$ —2441 p.a.; Assistant Lecturer $\pounds1330$ —1460 p.a. In addition the following allowances are payable: Variable Allowance $\pounds243$ min. $\pounds649$ max. p.a.; Supplementary Housing Allowance $\pounds503$ p.a. and Medical benefits.

Further particulars and application forms are obtainable from the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H OPF.

The closing date for the receipt of applications is **21 March 1974.**



ORGANIC CHEMIST

(PEPTIDE SYNTHESIS)

The Marschall Division of Miles Laboratories, Inc., a recognized world leader in industrial & food ingredients, provides an excellent opportunity of research in the area of protein chemistry.

The candidate should have a Ph.D. in organic chemistry with experience in peptide synthesis and synthetic methods used in protein chemistry. The successful candidate must be imaginative, resourceful and capable of independent thinking with potential to provide scientific leadership.

Located in Elkhart, Indiana, a community of 50,000 population, we offer excellent recreational & educational opportunities, as well as convenient accessibility to the Chicago area. Excellent starting salary commensurate with experience, plus a superior benefits program. Relocation expenses paid by the company. Please send complete résumé plus expected salary in confidence to:

Curtis A. Brown, Senior Placement Representative

Department 702-A



An Equal Opportunity Employer

BIOCHEMICAL ENGINEER

This internationally known firm, a leader in the field of pharmaceutical research and development, has an immediate need for an experienced and innovative biochemical engineer. The area of concern is the development of biological processes, particularly for vaccine manufacturing operations, including design and scale up of equipment and start up of manufacturing facilities . . . The successful candidate for this excellent career opportunity should have a minimum of 3 years of experience in related research and development in industry.

We offer a creative working environment plus an excellent salary and compensation package.



University of Berne, Switzerland CHAIR OF PHARMACEUTICAL TECHNOLOGY At Institute of Pharmacy

Applicants are invited for the Chair of Pharmaceutical Technology. The person appointed will be required to take up duty at the beginning of the summer term 1975.

Applications, with curriculum vitae, diplomas, and a list of the scientific publications, should be sent to the:

> Erziehungsdirektion des Kantons Bern Münsterplatz 3a CH-3011 Berne

to arrive not later than 15 March 1974.

MICROBIOLOGY (Ph.D. level)

• CHEMOTHERAPY-Infectious Disease

Research capability is required in the area of experimental infections, pharma-cokinetics, bioassays and toxicology related to bacterial, parasitic, and mycotic infections. Included will be studies in antibiotic chemotherapy, and relation-ships of activity, toxicity, absorption, and the infectious agent to drug-to-host interactions. In addition to doctorate, at least 2 years of industrial experience in infectious disease chemotherapy is required.

• FERMENTATION—Antibiotics

For this high priority program, industrial experience is necessary in antibiotic-producing organisms, involving studies of fermentation and production of useful new antibiotic substances. This senior position requires a doctorate, with back-ground in biosynthetic processes and strain selection desirable.

Broand in prosynthetic processes and strain selection desirable. Our vigorous, productive research effort has steadily expanded, and the growth trend continues. Our Research Center provides the resources and environment that foster fullest utilization of your professional abilities. Our location affords a wide choice of pleasant suburban New Jersey living, with easy access to the metropolitan region's educational and other resources. Please direct a confiden-tial résumé to Research Personnel, Schering Corporation, 60 Orange Street, Bloomfield, New Jersey 07003.

SCHERING CORPORATION

Applicants of all races are encouraged to apply Female-Male

DIRECTOR OF ELECTRON MICROSCOPY FACILITY

Applications are invited for appointment as Director of new high resolution electron mi-croscopy facility serving several active research groups in the areas of cell and molecular biology. Joint appointment in Departments of Micro-biology and Physiology with rank of Assistant Professor. Opportunities for both collaborative and independent research and for graduate and medical student teaching. Experience with both conventional and specialized techniques of elec-tron microscopy, including freeze-etching, is de-sirable.

Please send complete curriculum vitae, list of publications, and names and addresses of three references to:

Dr. Lawrence Rothfield or Dr. Richard Berlin University of Cognecticut Health Center Farmington, Connecticut 06032

Applications from women and members of minority groups are welcomed.

OREGON STATE UNIVERSITY ESTUARINE/COASTAL RESOURCE MANAGEMENT SPECIALIST: Deadline: 28 February 1974 Applied interdisciplinary research involving the School of Engineering and Oceanography with ex-pected results pertinent to estuarine management. Education and Experience: Master's required, Ph.D. preferred, in planning or resource manage-ment; should have strength in resource economics and understanding of system modeling. Must have ability to examine the functioning of government, and to understand new legislation and public ad-ministration with regard to coastal/estuarine man-agement.

Must assist in writing annual reports and pub-lications of research results. Please contact James Larkins, Personnel Direc-tor, Oregon State University Extension Service, Corvalis, Oregon 97331 for application. Completed application must be accompanied by a résumé and copies of university transcripts and returned no later than 28 February 1974. Oregon State University is an Affirmative Ac-tion/Equal Opportunity Employer. Women and members of minority groups are especially urged to apply.

DIRECTOR OF RESEARCH

DIRECTOR OF RESEARCH The College of Arts and Sciences is seeking a Director of Research. Applicants should have had experience in research and in procuring research funds. Duties include administration of College research funds and encouragement and implemen-tation of research and creative activities of the faculty. The Director will be expected to aid the faculty. The Director will be expected to aid the Director is a full-time administrator responsible to the Dean. Salary depends upon qualifications. Send résumé to: Dr. Elizabeth Guady, Microbi-ology Department, Oklahoma State University, Stillwater, Okla. 74074. Oklahoma State Univer-sity is an Equal Opportunity/Affirmative Action Employer.

Special Lectureships in the Division for Study and Research in Education at

MASSACHUSETTS INSTITUTE OF TECHNOLOGY 1974-1975

Two postdoctoral lectureships are open to ex-ceptionally qualified young people. The appoint-ments involve a mixture of teaching and research. Preference in the appointments will be given to recent recipients of a doctorate in anthropology, computer science, mathematics, physics, psychol-ogy, or sociology who have a strong interest in the relation of one or more of these fields to education, including learning theory, educational technology, and evaluation.

The DSRE is a newly constituted academic group concerned with a wholistic, integrated ap-proach to research in learning: that is, one which considers the total learning environment—its ma-terial, conceptual, human, and institutional dimensions

Appointments are for 1 year and are renewable for one additional year. The salary will be \$12,500 for the regular 9-month academic year. Applications should be filed by 15 March 1974.

Inquiries or requests for application forms should be addressed to DSRE, Room 20-C-124, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139.

POSITIONS OPEN

ASSISTANT PROFESSOR OF ENVIRON-MENTAL VIROLOGY to develop teaching and research program in that area. Postdoctoral ex-perience in virology essential. Apply: Dr. L. W. Little, Search Committee, Department of Environmental Sciences and Engi-neering, School of Public Health, University of North Carolina, Chapel Hill, North Carolina 27514

27514 Closing date: 31 March 1974.

Affirmative action/equal opportunity employer.

FACULTY POSITION

Assistant Professor. Ph.D. Fall 1974. To teach Comparative Vertebrate Anatomy. Applicant should be experienced and/or interested in de-veloping an audio-visual tutorial program for biology instruction. Send résumé, transcripts, and three letters of recommendation to Dr. M. Mc-Cracken, Biology Department, Texas Christian University, Fort Worth, Texas 76129. An equal opportunity/affirmative action employer.

DEPARTMENT OF ZOOLOGY UNIVERSITY OF CALIFORNIA, DAVIS

UNIVERSITY OF CALIFORMIA, DAVIS The Department of Zoology announces the opening of two faculty positions at the Assistant Professor level. One is for a person to offer an advanced course in **Invertebrate Zoology**. The other is for a person to offer an advanced course in **Protozoology**. Both individuals should be pre-pared to participate in the instruction of intro-ductory lower division courses as need arises. Each will be expected to offer an upper division course of his own design, as well as participate in the advising program and in graduate instruc-tion. Research fields are not specified for these positions, but it should be noted that the depart-ment has special need for research programs in neurophysiology, behavior, and evolution. Applicants should mail a curriculum vitae, three letters of recommendation, and statements of teaching capabilities and research areas to: **Dr. R. J. Baskin, Chairman**

Dr. R. J. Baskin, Chairman Department of Zoology University of California Davis, California 95616

Consideration of applications will begin in early March. The University of California is an Equal Opportunity and Affirmative Action employer and will welcome applications from members of mi-nority groups and women.

MARINE ECOLOGIST

MARINE ECOLOGIST Applications are invited for a position of As-sistant Professor of Zoology requiring Ph.D. with training and experience in marine biology. Available September 1974. Responsibilities in-clude undergraduate teaching in invertebrate or vertebrate zoology, graduate-level teaching and supervision in marine ecology or oceanography. Applicants should submit a curriculum vitae, reprints, a summary of teaching and research plans, and names of four references to Dr. Peter Thompson, Head, Department of Zoology, Uni-versity of Georgia, Athens, Georgia 30602. An equal opportunity employer with an affirma-

An equal opportunity employer with an affirma-tive action program.

MARINE SCIENCE

MARINE SCIENCE The Marine Science Institute of the University of Texas-Austin invites applications for two facul-ty positions from research-oriented people with an interest in teaching. One position is in the area of Seagrass Biology. The second opening is in the area of Coastal Zooplankton. Both posi-tions are at the assistant professor level and require a Ph.D. with postdoctoral or equivalent experience desirable. Requests for further information and applica-tions with curriculum vitae and letters of recom-mendation should be addressed to P. L. Parker, Director, The University of Texas Marine Science Institute, Port Aransas, Texas 78373. The University of Texas is an equal opportuni-

The University of Texas is an equal opportuni-ty/affirmative action employer.

Applications are invited from qualified persons for four (4) positions: One each in Neurobiology (Neurophysiological training preferred), Molecu-lar Biology, Biomathematics (ecological and/or oceanographic training preferred), and one in either Ecology, Marine Biology, Developmental Biology, or Animal Behavior. Ph.D. required (or about to be awarded). Rank and salary subject to negotiation, depending on experience. Appoint ments will be made on the basis of potential teaching and research. Regular teaching duties; excellent, new facilities for development of a research program. Please send curriculum vitae to Dr. Joseph Osinchak, Secretary, Appointments Committee, perartment of Biology, The City College of The City University of New York, Convert Avenue, New York, N.Y. 10031. An Equal Opportunity and Affirmative Action Employer.

Pharmacologists B.S./M.S.

Cooper Laboratories has openings for General Pharmacologists with a B.S. or M.S. degree and 3-5 years' industrial experience. Responsibilities include Primary Drug Screening, General Pharmacology and Methods Development in CNS, Autonomic, Ocular, Anti-inflammatory and Toxicity areas.

Cooper supports a vigorous research program, a substantial factor in our remarkable growth to major corporate status within the pharmaceutical industry.



Research Unit

on the

Spatial Structure of Biopolymers

A research unit on the spatial structure of ribosomes and their components is to be established at the Max-Planck-Institut für Molekulare Genetik in Berlin-Dahlem, with the financial support of the Deutsche Forschungsgemeinschaft.

Applications are invited for the positions of the head of this research unit and for scientists working in the unit. The annual salary for the head will be approximately 45-50.000 DM and for the scientists 32-42.000 DM. The initial appointment will be for three years with the possibility of extension.

Applicants should have experience in one of the following fields: Crystallization of proteins or nucleic acids, X-ray crystallography of biopolymers, chemistry of proteins or nucleic acids. It is not necessary for the applicants to be German.

Applications should be sent before March 30, 1974 to Prof. H. G. Wittmann, Max-Planck-Institut für Molekulare Genetik, Ihnestrabe 63-73, D-1000 Berlin 33, Germany.

Swiss Federal Institute of Technology, Zurich

At our Department of Geography we are looking for an

Associate Professor (ausserordentlicher Professor) of Quantitative Geography

Applicants for this new post should have teaching and research experience in the field of mathematical treatment of geographical problems, particularly in the handling of data and models by computer, in both physical and human geography.

Applications including curriculum vitae, evidence of research ability and teaching experience should be sent to the President of the Swiss Federal Institute of Technology, E.T.H. CH 8006 Zurich, not later than 31 March 1974.



POSITIONS OPEN

NEUROSCIENTIST

for Assistant Professorship beginning fall 1974. Must take responsibility for introductory course in Animal Physiology. Research commitment essential. Apply with all credentials to:

Apply with all credentials to Prof. Alan N. Epstein Chairman, Search Committee Department of Biology University of Pennsylvania Philadelphia, Pa. 19174 An equal opportunity, affirmative action employer

POPULATION GENETICIST

POPULATION GENETICIST A position is available at the Assistant Professor, or possibly the Associate Professor level, for a person with teaching and research expertise in population genetics. A Ph.D. is required and the salary is open. Responsibilities will include grad-uate and undergraduate teaching and the develop-ment of an active research program. Starting date August 1974; application deadline 15 March, 1974. The University of Illinois is an Affirmative Action-Equal Opportunity Employer and encour-ages applications from members of minority groups and women. Send curriculum vitae, three letters of recommendation, and other supporting materials to: Search Committee, Provisional De-partment of Genetics and Development, 515 Morrill Hall, University of Illinois, Urbana, Illinois 61801.

POSITIONS AVAILABLE RESIDENTIAL COLLEGE OF INTERDISCIPLINARY STUDIES

INTERDISCIPLINARY STUDIES Miami University, Oxford, Ohio, will open a new division, the Western College, in the fall of 1974. Directly adjacent to the main campus of 14,000 students, the Western College will provide an evolving curriculum in interdisciplinary studies, with initial emphases in American studies and environmental studies. We seek faculty with com-pleted degrees, multiple competencies, interdis-ciplinary orientation, and a willingness to col-laborate in a variety of teaching-learning situa-tions. The Western College will be a distinctive intellectual community, stressing high student-teacher contact and clustered living-learning facilities serving a 4-year undergraduate experi-ence. Miami University is an equal opportunity employer with an affirmative action program. Inquiries and applications to: Provost David G. Brown, Miami University, Oxford, Ohio.

PROVOST-DIVISION OF AGRICULTURAL AND LIFE SCIENCES

AND LIFE SCIENCES Position available 1 July 1974 for high ad-ministrative post, University of Maryland, College Park Campus. Essential that candidate have broad experience in a biological, biochemical, or agricultural area, preferably with professional background of teaching, research, and adminis-tration. Demonstrated leadership role in academic policy-making and established reputation in a given field of research highly desirable. Apply with full curriculum vitae before 15 March to Dr. John O. Corliss, Chairman, Search Com-mittee, Department of Zoology, University of Maryland, College Park, Md. 20742, telephone 301/454-3202. The University of Maryland is an Affirmative Action/Equal Opportunity Employer.

DEPARTMENT OF MOLECULAR, CELLULAR AND DEVELOPMENTAL BIOLOGY UNIVERSITY OF COLORADO

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POSITIONS OPEN

FACULTY POSITIONS—PATHOLOGY UNIVERSITY OF CALIFORNIA, SAN DIEGO

1) ASSISTANT PROFESSOR: Pathologist 1) ASSISTANT PROFESSOR: Pathologist specializing in endocrinology and steroid chemis-try. Teaching to include pathology and patho-genesis of endocrine diseases and metabolic con-sequences. Service responsibility for steroid and hormone laboratory.

2) ASSISTANT PROFESSOR: Pathologist with background in biochemical oncology.

background in biochemical oncology.
3) ASSISTANT PROFESSORS (two): Background in diagnostic anatomical pathology with service responsibilities on autopsy or surgical pathology service at University Hospital. Electron microscopy laboratory available.
4) ASSISTANT OR FULL PROFESSOR (In Residence): Senior pathologist, Board certified in anatomical pathology, specializing in clinical pathology. To serve as Chief of Laboratory Service, San Diego Veterans Administration Hospital. tration Hospital.

Please send curriculum vitae and list of publi-cations to Averill A. Liebow, M.D., Chairman, Department of Pathology, University of Cali-fornia, San Diego, La Jolla, California 92037.

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

STUDY OF ALLIED HEALTH

of allied health program potential and recom-mend future development of existing and new programs. This study may lead to the creation of a Department of Allied Health Sciences. Ph.D. with academic and clinical experience required. Rank and salary open. R.I.T. is an equal oppor-tunity employer. Send résumé to:

mployer. Send resume to: Dr. Thomas P. Wallace, Dean College of Science Rochester Institute of Technology One Lomb Memorial Drive Rochester, New York 14623

RESEARCH AND TEACHING POSITION Entirely grant supported. For June 1974. Doctor-ate plus experience in environmental science or ecology, in air pollution studies, and in com-puter modeling required. Teaching one course per semester. Send résumé and references to: Dr. William S. Gaud, Director, Environmental Impact Studies, Northern Arizona University, Box 5640, Flagstaff, Ariz. 86001.

An Equal Opportunity/Affirmative Action Employer

PLANT OR SYSTEMS ECOLOGIST

PLANT OR SYSTEMS ECOLOGIST Opening for plant or systems ecologist on Colorado Springs campus of the University of Colorado beginning in September 1974. Research required. Teaching experience is preferred with salary and rank open. Submit letters of application and curriculum vitae to: Dr. Robert W. Reese, University of Colorado, Cragmor Road, Colorado Springs, Colorado 80907. This is an equal op-normative institution Springs, Colorado 8 portunity institution.

UNIVERSITY OF SURREY GUILDFORD, ENGLAND APPOINTMENT OF VICE CHANCELLOR

APPOINTMENT OF VICE CHANCELLOR The University of Surrey was established in 1966 and is predominantly technological. The Vice Chancellor, Dr. D. M. A. Leggett, has notified the University of his intention to retire on 30 September 1975. The Joint Committee of Council and Senate charged with finding a successor have considered the nature of the appointment and the likely background of the person they hope to find. A note of this infor-mation is available. Persons interested in this appointment are invited to write for a copy to: **P. J. Timms**

P. J. Timms Clerk of the University Council University of Surrey Guilford, England

The strictest confidence will be maintained.

CHAIRPERSON DEPARTMENT OF ZOOLOGY UNIVERSITY OF RHODE ISLAND

UNIVERSITY OF RHODE ISLAND We are seeking, as Chairperson of the Depart-ment of Zoology, an active scholar, experienced teacher, with administrative experience. Depart-ment has 16 full-time members, active M.S. and Ph.D. programs, and 50 graduate students. The new Chairperson will be appointed Associate Professor or Professor effective 1 July 1974, according to qualifications. Salary competitive, Applications, with a résumé and bibliography plus three letters of reference, should be sent to Dr. C. Robert Shoop, Search Committee Chair-man, Zoology Department, University of Rhode Island, Kingston, R.I. 02881. An *Equal Opportunity/Affirmative Action*

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Dr. Jerry Lingrel Department of Biological Chemistry College of Medicine Eden and Bethesda Avenues Cincinnati, Ohio 45219

JONES FELLOWSHIP PROGRAM

The Council of the Tissue Culture Association is pleased to announce the establishment of the Jones Fellowship Program at the W. Alton Jones Cell Science Center in Lake Placid, New York. Three basic levels of fellowship awards will be made by the Director of the Center. The fellow-ship program was made possible by a grant from the W. Alton Jones Foundation. The three levels of Fellowship awards are as follows:

follows

The three levels of Fellowship awards are as follows: 1) Three-year Nettie Marie Jones Senior Re-search Fellowship. Salary: negotiable. 2) Two-year Associate Research Fellowship. Salary: \$14,000 per annum. 3) One-year Postdoctoral Research Fellowship. Salary \$9,000 per annum. Deadlines for applications are: 31 March 1974 for appointments commencing on 1 July 1974 30 June 1974 for appointments commenc-ing on 1 January 1975 31 December 1974 for appointments commenc-ing on 1 April 1975. Inquiries and curriculum vitae with letters of recommendation and transcripts should be sent to: Evantum Societary

Executive Secretary W. Alton Jones Cell Science Center P.O. Box 631 Lake Placid, New York 12946

QUEEN ELIZABETH II FELLOWSHIPS IN THE PHYSICAL AND BIOLOGICAL SCIENCES

SCIENCES To commemorate the Royal Visit to Australia in 1963 the Australian Government established the Queen Elizabeth II Fellowships Scheme. Under this scheme up to ten fellowships may be awarded each year for full-time research by young scientists of exceptional promise and proved capacity for original work. These are postdoctoral awards tenable in an Australian university or approved research institution, normally for 2 years. Tenure of a fellowship will commence on a date which normally should be within 9 months of the date of the award. **QUALIFICATIONS**. Queen Elizabeth II Fel-lows must be either Australian or United Kingdom citizens, They should have a Ph.D., or equivalent qualifications, in one of the physical or biological sciences (which are deemed to include mathematics and the scientific aspects of statistics, engineering, metallurgy, agriculture and medicine). Awards will, in general, be re-stricted to applicants who are not more than 30 years of age on the date when applications close. **STIPEND**, \$9,500 (Australian) per annum: in-

30 years of age on the date when applications close. STIPEND. \$9,500 (Australian) per annum; in-creased to \$10,250 per annum at age 28 years. ALLOWANCES. Allowancès are payable in respect of a Fellow's wife (\$500 per annum), each dependent child (\$200), superannuation payments (up to 10 percent of stipend), appro-priate insurance coverage and necessary travel expenses. Host institutions are paid an allowance toward the cost of setting up a Fellow and his research work.

toward the cost of setting up a Fellow and his research work. APPLICATIONS. Persons interested in apply-ing for the above fellowships should obtain ap-plication forms and a statement of the conditions of award from the Secretary, Queen Elizabeth Fellowships Committee, Department of Science, P. O. Box 449, Woden, A.C.T. 2606, Australia; The Education Liaison Officer, Canberra House, Strand, London, W.C.Z., England; or the Consul General, Australian Consultate General, 636 Fifth Avenue, New York 10020, Applications for the next round of awards, which will be announced in June 1974, close at the Canberra address on 1 March 1974.

COURSE

MARINE SCIENCE DUKE UNIVERSITY MARINE LABORATORY

Summer Courses — Graduate/Advanced Under-graduate. 17 June: Ecology, Comparative Bio-chemistry, Invertebrate Embryology, Microbiology, Physiological Ecology, Comparative Behavior, Chemical Oceanography. 18 July: Membrane Physiology, Invertebrate Zoology, Biological Oceanography, Marine Phycology, Geological Oceanography, Write: Director, Duke University Marine Laboratory, Beaufort, North Carolina 28516. Marine 28516.

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