

Personnel Placement

POSITION WANTED: 40¢ per word, minimum charge \$10. Use of Box Number Counts as 10 additional words. Payment in advance is required. These rates apply to individuals only. Personnel agencies and companies take display rate for all advertising.

POSITIONS OPEN: \$110 per inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Ads over 1 inch will be billed to the nearest half inch. Payment in advance is required except where satisfactory credit has been established.

COPY for ads must reach **SCIENCE** 4 weeks before issue date (Friday of every week). Send copy for Personnel Placement advertising to:

SCIENCE, Room 211
1515 Massachusetts Ave., NW
Washington, D.C. 20005

Replies to blind ads should be addressed as follows:

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

POSITIONS WANTED

Animal Health-Nutrition Administration, Ph.D., 10 years of experience, seeks position in management of animal health or nutrition division. Experience in animal health and nutrition research, technical selling, and government liaison. Box 83, **SCIENCE**. X

Associate Professor of Microbiology. Fifteen years of academic career. Seeks change. Box 80, **SCIENCE**. 2/18

Biochemist-Chemist, Ph.D., German, married. Six years of research experience, including postdoctoral training in the United States. Strong background in clinical enzymology and immunology, clinical quality control, and automation. Desires position in clinical chemistry in university, hospital, or institute. Box 76, **SCIENCE**. X

Biochemist, Ph.D. 1972. Analytical and lipid biochemistry. Strong background in TLC, GC, and other methods. Experience in mental retardation. Publications. Seeking research position in hospital or clinical laboratory. Box 78, **SCIENCE**. X

Biochemist, Ph.D. Experienced in nutrition research and teaching, food chemistry. Desires position in health or environment related areas. Box 53, **SCIENCE**. 2/11

Biologist, Ph.D. (Genetics, 1965). Broad training; 15 years of teaching experience (10 years full-time university). Special interest innovative undergraduate education. Desires position commensurate with background and interests. Box 34823, Dallas, Texas 75234. 2/25

Biologist, Ph.D. Seeking graduate teaching and research in physiological plant pathology, cell biology, quantitative cytochemistry. Would teach undergraduate plant physiology, microbiology, mycology/plant pathology, Freshman botany. Postdoctoral research and teaching experience. Excellent publications. Available fall 1972. Box 54, **SCIENCE**. 2/11

Biologist, Ph.D., 37, extensive university teaching and research experience in population ecology and genetics, publications including textbook, wants to relocate. Will also consider position as department chairman. Box 84, **SCIENCE**. X

Biomathematician, Ph.D. (Mathematics 1964). Eight years of university teaching (mathematics, statistics, biomathematics), research, and publications in the kinetics of metabolic systems, the development of automatic data processing facilities, and cardiovascular epidemiology. Seeks academic position. Box 77, **SCIENCE**. X

11 FEBRUARY 1972

POSITIONS WANTED

Geneticist, Ph.D., seeks academic or research position in the Baltimore-Washington area. Research interest in immunogenetics, somatic cell mutation, cell development. More than 10 years' experience as head of laboratory. Box 79, **SCIENCE**. X

Italian Scientist, 30, field of interest biological oceanography, well trained in work at sea, good experience in administrative, editorial, and bibliographical problems, good English and Spanish, seeks new research/academic appointment. Any location considered. Box 82, **SCIENCE**. X

Japanese into English. Medicine, biochemistry, pharmacology. Prompt, accurate, \$25 per 1000 English words. American. Tokyo International P.O. Box 5328, Tokyo, Japan. 2/11

Microbiologist, Ph.D. (1970), 2 years of postdoctoral/instructor experience. Microbial genetics, bacterial viruses, DNA repair and replication. Seeks research/academic position. Contact Larry Farrell, 1907 South Third Avenue, Maywood, Illinois 60153. X

Pharmacologist, Ph.D., 37, 11 years' experience including laboratory and clinical research, biomedical writing and grants administration. Salary requirement mid-20's. Box 64, **SCIENCE**. 2/11

Vertebrate Ecologist, Ph.D., 6 years of teaching-research experience, graduate advising, 20 publications. Desires teaching position with research opportunities. Box 70, **SCIENCE**. X

Virologist, Ph.D. 1960; 7 years of academic experience, 5 years of industrial experience. Viral oncology, interferon, epidemiology. Publications. Seeks suitable teaching, research, or industrial position. Box 71, **SCIENCE**. X

Zoologist, Ph.D., 3 years postdoctoral, desires academic or research position. Teaching interests include neurobiology and physiology. General research interests: mechanisms underlying periodic behavior. Box 72, **SCIENCE**. 2/11

Zoologist, Ph.D. Desires teaching-research position for September 1972. Publications and research in mammalian ecology as related to mineral and nutrient cycling. Systems analysis experience. Box 12, **SCIENCE**. X

Zoologist (Ph.D.), anatomy, histology, embryology, cell biology, seeks a teaching and research position, publications. Ultrastructure research, liver, endocrines. Box 85, **SCIENCE**. X

POSITIONS OPEN

UNIVERSITY OF CINCINNATI DEPARTMENT OF BIOLOGICAL SCIENCES

The department is seeking an assistant professor with primary interests in **PLANT COMMUNITY ECOLOGY** and an assistant professor in **INVERTEBRATE PHYSIOLOGY**. Faculty are expected to maintain both graduate and undergraduate teaching functions, together with an active research program. Applications from women and minority group members are encouraged.

Inquiries should be addressed to **Dr. William A. Dreyer** for the position of **Plant Community Ecologist**, and **Dr. Bruce L. Umminger** for the position of **Invertebrate Physiologist**.

CLINICAL CHEMIST with knowledge of toxicology for supervision and R&D in modern, active laboratory serving 850-bed hospital and medical examiners office, in beautiful, booming Orlando. Experienced Ph.D. or M.S. required. Send résumé to **Director of Laboratories, Orange Memorial Hospital, Orlando, Florida 32806**.

DEPARTMENT OF GEOLOGY DALHOUSIE UNIVERSITY Halifax, Nova Scotia

The Department of Geology announces a position in the field of

ECONOMIC GEOLOGY

Applicants should have interest and experience in exploration or mining geology, petroleum geology, or in another relevant field such as deep sea mineral deposits. The position will be filled at the level of assistant or associate professor. The appointment will start 1 July 1972 or as soon after as is convenient. For further details write to: **The Chairman, Department of Geology, Dalhousie University, Halifax, Nova Scotia, Canada.**

POSITIONS OPEN

BIOLOGY, TWO POSITIONS: (1) **IMMUNOLOGY**, teaching and research, graduate (Master's degree) and undergraduate commitments in this and other fields; (2) **GENERAL BIOLOGY**, teaching majors and nonmajors, opportunity for research. Both positions require Ph.D. Appointments at Instructor or Assistant Professor level. Submit résumé to: **Dr. Frank F. Katz, Acting Chairman, Department of Biology, Seton Hall University, South Orange, New Jersey 07079.**

ENDOCRINOLOGIST

The Department of Zoology, University of Wisconsin, an equal opportunity employer, has a position for an Endocrinologist—rank and salary commensurate with experience. Teaching requirements will include a course in general endocrinology and graduate courses. Interested persons are requested to send a curriculum vitae, bibliography and, if possible, reprints of most significant publications to **S. Abrahamson, Chairman, University of Wisconsin, Madison, Wisconsin 53706.**

EXPERIMENTAL PATHOLOGISTS/ TOXICOLOGIST/PHARMACOLOGIST

Large, well-equipped research institute in Southeast has openings in respiratory and environmental carcinogenesis programs for experimental pathologists. Board certification not required; active interest in research desirable. Toxicologist or pharmacologist at Ph.D. level needed to head studies in cigarette smoke inhalation. Salaries commensurate with training and experience. Submit curriculum vitae to:

BOX 75, SCIENCE

The University of Waterloo, Department of Kinesiology, requires a **HEALTH SCIENCE SPECIALIST** to teach **MAN ADAPTING AND EPIDEMIOLOGY**. Rank and salary commensurate with qualifications. Cross-appointment possible. Apply: **Professor N. J. Ashton, Department of Kinesiology, University of Waterloo, Waterloo, Ontario, Canada.**

LABORATORY SUPERVISOR

Applicants are sought for the position of Laboratory Supervisor at the **W. Alton Jones Cell Science Center, Lake Placid, New York**. Duties will include (i) supervision and management of course preparations, (ii) coordination of glassware and media preparation for course, and (iii) research in tissue culture.

Salary according to qualifications.

Apply to: **W. Alton Jones Cell Science Center**
Associate Director
P.O. Box 631
Lake Placid, New York 12946

MEDICAL PRODUCT VALIDATION

Position with major cardiovascular instrument manufacturer. Advanced degree preferred. Challenging position in final clinical validation program of a vital organ support system. Involves the exchange, assembly, and interpretation of clinical data. Work is with professional, technical personnel as well as with physicians and surgeons. Occasional travel involved. Knowledge of physiology, electronics, and statistics helpful. Salary commensurate with background. Complete benefit package. Relocation to Miami, Florida. Reply: **Technical Coordinator, P.O. Box 428, Buena Vista Station, Miami, Florida 33137.**

MICROBIOLOGIST needed 1 May 1972 to direct for 2 years the operations of a well-equipped and well-staffed leprosy research laboratory, Cebu, Philippines, that supports an active chemotherapeutic research program in leprosy. Antibactericidal effects of the drugs are being evaluated by the Shepard mouse foot pad method. Salary negotiable. Travel expenses for family provided. For further information write **C. H. Binford, M.D., Medical Director, Leonard Wood Memorial (American Leprosy Foundation), 1200 18th Street, NW, Washington, D.C. 20036.**

PRINCIPAL SCIENTIFIC ADVISER

The Assembly Scientific Staff of the New York State Legislature was established to bring scientific and technological expertise and perspective to the legislative process. Under a grant from the Office of Intergovernmental Science Programs of the National Science Foundation to expand the activities of the Staff, we are seeking a mature Ph.D. scientist with broad multidisciplinary professional interests including life sciences and health services; demonstrated proficiency in literature research, analysis, and exposition in straightforward English; motivation to develop information relevant to public affairs; and who relates well to people. For further information write to **Dr. Seville Chapman, Director, Assembly Scientific Staff, Assembly Chambers, Albany, New York 12224.** New York State is an equal opportunity employer.

POSITIONS OPEN

PHARMACOLOGIST

M.S. or equivalent with academic or industrial experience in gastrointestinal pharmacology. Midwest location, NYSE company.

BOX 81, SCIENCE

An Equal Opportunity Employer M/F

Physiologist

The Biochemistry and Metabolism Department of the Institute of Hormone Biology is seeking an experimental physiologist who will function closely with a group actively involved in studying the absorption, distribution, metabolism and elimination of potential new drugs. Opportunities will also be available for this individual to develop in vitro and in vivo models aimed at evaluating biologically active agents.

Position requires Ph.D in Physiology with a minor in Biochemistry or Pharmacology. Experience in animal surgery is essential.

Please send your resume in confidence to K. McCalla, Syntex, 3401 Hillview Avenue, Palo Alto, California 94304.

SYNTEX
Syntex Research

TOXICOLOGIST-PHARMACOLOGIST

D.V.M., M.D., or Ph.D. to develop a toxicology program; teach a basic course in toxicology for veterinary and biomedical students and initiate and develop a graduate-research program. Begin 1 September 1972. Send résumé to Department of Physiology and Biophysics, Colorado State University, Fort Collins, Colorado 80521. Equal opportunity for employment is provided through an Affirmative Action Program of the University.

VIROLOGIST

Challenging position in a group concerned with the development, improvement, and production of viral vaccines.

Experience in tissue culture, virus cultivation, and virus purification essential. Interest and experience in immunology and serology highly desirable.

Applicant should hold Ph.D. or an equivalent degree. Starting salary range, \$14,000 to \$17,706. Excellent Michigan Civil Service benefits.

Position in Lansing, Michigan, in a diversified public health laboratory complex. Contact Mr. Frank Krupiarz, Personnel Officer, Bureau of Management Services, Michigan Department of Public Health, 3500 North Logan Street, Lansing, Michigan 48914.

An equal opportunity employer

GRADUATE STUDY

PREDOCTORAL ASSISTANTSHIPS

Excellent opportunities are available for graduate students to pursue a Ph.D. in contemporary areas of Biological Sciences. Stipends are available up to \$3500 for 9 months. With up to \$800, in addition, for the summer. For details write to: Dr. C. P. Sward, Chairman, Life Sciences Department, Indiana State University, Terre Haute, Indiana 47809.

GRADUATE STUDY

GRADUATE STUDY IN IMMUNOLOGY, MICROBIOLOGY, VIROLOGY, AND MOLECULAR AND CELLULAR BIOLOGY

A program leading to the Ph.D. degree involving course work and research training in the above specialties. Some predoctoral assistantships, U.S. Public Health Service traineeships; part-time jobs and loans are available. Prerequisites, U.S. citizenship and recent bachelor's degree in biology, chemistry or related field with B average or better.

Early application for September 1972 is advised.

Contact: Chairman, Graduate Admissions Committee, Department of Microbiology, University of Illinois at the Medical Center, 835 South Wolcott, Chicago, Illinois 60612.

GRADUATE STUDIES IN AN ECOLOGICAL APPROACH TO REGIONAL PLANNING

University of Pennsylvania

Applications are invited from ecologists and systematic biologists (plant and animal) for graduate fellowships in support of graduate programs leading to the degree of Master of Regional Planning. Successful candidates should anticipate conducting field ecological research with practical applications. Address inquiries to: Graduate Research Committee, Center for Ecological Research in Planning and Design, Department of Landscape Architecture and Regional Planning, University of Pennsylvania, Philadelphia, Pennsylvania 19104.

FELLOWSHIPS

POLYMER SCIENCE AND ENGINEERING UNIVERSITY OF MASSACHUSETTS

Research fellowships up to \$4400 are available for September 1972, for students interested in obtaining an advanced degree in synthesis and characterization of polymers, physical chemistry of synthetic and biopolymers, as well as morphology and solid-state properties of high polymers and polymer processing. Applications for qualified students should be addressed to: Dr. Otto Vogl, Polymer Science and Engineering, University of Massachusetts, Amherst, Massachusetts 01002.

QUEEN ELIZABETH II FELLOWSHIPS IN THE PHYSICAL AND BIOLOGICAL 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 Fellowships 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 restricted to applicants who are not more than 30 years of age on the date when applications close.

STIPEND. \$7400 (Australian) per annum, increased to \$8000 per annum at age 28 years.

ALLOWANCES. Allowances are payable in respect of a Fellow's wife (\$500 p.a.), each dependent child (\$200), superannuation payments (up to 10 percent of stipend), appropriate insurance coverage and necessary travel expenses. Host institutions are paid an allowance toward the cost of setting up a Fellow and his research work.

APPLICATIONS. Persons interested in applying for the above fellowships should obtain application forms and a statement of the conditions of award from the Secretary, Queen Elizabeth Fellowships Committee, Department of Education and Science, P.O. Box 826, Canberra City, A.C.T. 2601, Australia; the Education Liaison Officer, Canberra House, Strand, London, W.C.2, England; or the Consul General, Australian Consulate General, 636 5th Avenue, New York, N.Y. 10020, U.S.A. Applications for the next round of awards, which will be announced in June 1972, close at the Canberra address on 13 March 1972.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP

Experimental neuropathologist, histologist, or neuroanatomist for work on neurotoxicity of bilirubin. Electron microscope or histochemistry experience desirable. Medical school in New York City. Position open now. Reply with curriculum vitae to:

BOX 73, SCIENCE

PREDOCTORAL FELLOWSHIPS leading to M.A. and Ph.D. in Chemistry, or M.S. in Natural Sciences (Interdisciplinary). Stipends \$2400 to \$5000 plus tuition. Bioorganic, medicinal chemistry, reaction mechanisms, hormone chemistry, vitamins and co-factors, immunochemistry, biophysical chemistry, biochemistry of carcinogenesis, chemical aspects of nuclear medicine, NMR, CD, ORD, mass spectrometry, x-ray, crystallography. Write to Admissions Director, Chemistry Program, Roswell Park Memorial Institute, Buffalo, New York 14203.

PREDOCTORAL FELLOWSHIPS at the Sloan-Kettering Institute for Cancer Research leading to the Ph.D. in Cornell University. Stipends \$2900 to \$3300 plus tuition. Biochemistry, biomathematics, bioorganic chemistry, cytology, endocrinology, genetics, immunology, microbiology, molecular and cell biology, pharmacology, radiation biophysics and chemistry, radiobiology, virology. Write: Associate Director, Sloan-Kettering Division, Cornell University Graduate School of Medical Sciences, 410 East 68 Street, New York, N.Y. 10021.

The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

Superior quality GC* hamsters; 25 inbred lines with and without disease models.

TELACO®

Bar Harbor, Maine 04609
(207) 288-3135

*gene-controlled®
Subsidiary of Bio-Research Consultants, Inc.
Cambridge, Mass.

Do You Need.....

SHIFT REAGENTS FOR NMR?
\$10/gram; \$45/5 x 1 gram

For lowest prices, call (415) 234-4130

BIO-RAD Laboratories

32nd & Griffin Ave., Richmond, CA 94804

NOCHROMIX

"DICHROMATE" SUBSTITUTE
METAL ION FREE

GLASS CLEANING REAGENT

1 Box (makes 10x9lb. with H₂SO₄)... \$12.50
GODAX LAB., 6 VARICK ST., N. Y. 10013

AGE DETERMINATION

Dating by

¹⁴C, ⁴⁰K/⁴⁰Ar, ⁸⁷Rb/⁸⁷Sr,

U/Pb and

other methods.

TELEDYNE ISOTOPES

50 VAN BUREN AVENUE
WESTWOOD, N. J. 07675
(201) 664-7070

Here's the answer to 5 of your biggest problems in feeding research animals...

SCIENCE DIET® FORMULAS

1 FORMULA VARIATIONS

Unlike regular commercial pet-market products, Science Diet® products maintain fixed formulas. All ingredients and their proportions are precisely formulated, and remain the same regardless of their market availability or cost. This eliminates food-induced variables which can nullify research findings.

2 NUTRITIONAL INADEQUACIES

Specifically developed for research animals, Science Diet® formulas provide completely balanced and controlled nutrition. No supplementation is needed.

3 CLEAN-UP OF LARGE FECAL VOLUME

The low-intake requirement, high digestibility

and caloric density of Science Diet® formulas, combine to reduce fecal volume to a fraction of that from commercial dry foods. Result: minimum clean up, better sanitation control.

4 FOOD WASTE

There is no costly guesswork when you use Science Diet® formulas. They are ready to feed... with nothing to add (not even water). No mixing means no waste of uneaten portions.

5 FEEDING COST/LABOR

Time is money. With Science Diet® formulas you save both because of the low-intake requirement, feeding convenience, reduced food waste and lower stool volume. Allows feeding at maximum nutritional levels for lower cost per animal.

Add up all the problem-solving advantages of Science Diet® foods...fixed formulas, optimal nutrition, reduced intake, no food waste, time-saving convenience. In sum you will find the over-all cost is *lower* than that of commercial foods.

When you consider the value of animals on test and the accuracy of results programmed for, the advantages of using Science Diet® formulas are far reaching. Far beyond commercial foods whose ingredients are selected to profitably serve the consumer market rather than meet exacting professional needs.

Feed Science Diet® formulas and see the difference...both scientifically and economically.

Formulations available:

FELINE/canned diet
PRIMATE/dry diet
PRIMATE/canned diet
CHIMPANZEE/dry diet
MARMOSSET/canned diet
CANINE GROWTH/dry diet
CANINE LACTATION/dry diet
CANINE MAINTENANCE/dry diet
MAXIMUM STRESS DIET/semi-dry

For further information contact:

INSTITUTIONAL PRODUCTS DEPARTMENT
Hill's Division Riviana Foods Inc.
401 Harrison Street, Topeka, Kansas 66601



Are You Drawing the Right Conclusions?

You've spent days, weeks, perhaps even months, gathering your experimental data. Don't waste it! Use the HP Series 9800/Model 10 for your statistical analysis and be sure the conclusions you draw are valid. Not only does the Model 10 insure your statistical reliability, it will *significantly* cut your problem-solving time as well. What is "significantly"? With a Model 10 Programmable Calculator System, you can perform a multiple linear regression analysis (up to 11 independent variables) in less than 10 minutes. That's everything—including entry of program and data, solution to the problem, and labeled output — complete with AOV table.

As powerful as the Series 9800 is, we think you and your colleagues will be even more excited by the new **HP Stat-PAC**. This two-volume package contains the sophisticated programs that you've told us are critical. Each is written for easy entry, including operating instructions, error correcting options (where applicable), and the appropriate output formatting. Typical programs include: **One Way ANOVA** (balanced or unbalanced), **Two Way ANOVA** (with Replicates or with Tukey Tests), **Latin Square Designs**, **Factorial Designs**, **Polynomial Regressions with Plots**, **Analysis of Covariance**, **Nested Designs**... These aren't some marketing man's

idea of how a stat program should be written—they were developed in conjunction with the statistics laboratory of a major university.

We realize that not all of your problems are this complex. For your smaller problems, use our exclusive **Statistics Function Block** to solve means, variances, and regressions directly on the keyboard.



Adding it all up, the Model 10 Programmable Calculator is the only desk-top computing system on the market that lets you customize the keyboard, lets you choose the memory and peripherals (X-Y Plotter, Tape Cassette, Typewriter . . .) that best fit your situation, and gives you alphanumeric print-out, right on the printer tape.

We've saved the best for last. You can put the Series 9800 Model 10 in your lab for as little as \$2975. Features. Price. Simple operation. We say the Series 9800 is the best statistical computing system now, and in the foreseeable future. But don't take our word for it. See for yourself. For more information or a "hands-on" demonstration, write: Hewlett-Packard, P.O. Box 301, Loveland, Colorado 80537. In Europe: 1217 Meyrin-Geneva, Switzerland.

Circle No. 8 on Readers' Service Card

HEWLETT  PACKARD

CALCULATOR PRODUCTS