Human BAC Library Personal Size Release

A subset of the BAC DNA pools - release IV, these pools are sized just right for individual researchers and small labs. The DNA pools chosen for this set have demonstrated consistent performance in PCR proving to be economical both in cost and practical use. Screening this set will yield, on average, three independent clone addresses. DNA sufficient for 25 PCR reactions at the superpool level is provided.

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> Catalog No. 96011A 96055

Description Human BAC DNA pools Set of 4 HD Human BAC Colony DNA Membranes

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(continued on page 731)



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(continued from page 729)

microcell. A key to the performance of the instrument is the use of a single xenon pulsedlight lamp source. Unlike other instruments that use two light sources that are always on, this single source is only on when the spectrophotometer is taking a reading. Varian Associates. For information call 800-926-3000 or circle 144 on the Reader Service Card.

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A SCIENCE Advertisement Directory

European

Careers Graduate Programs

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dvertising supplement Graduate

European Careers

by Michael Woods

M&E Biotech

F. Hoffman LaRoche, Ltd.

Pharmacia & Upjohn

University College London with industry leaders eyeing a tenfold increase in biotech jobs, the career outlook in western Europe has never been brighter.

The whole European biopharma scene is teeming with excitement, new ideas, new alliances between industry and academe, and fresh approaches to postgraduate and mid-career education. Keith McCullagh, vice chairman of EuropaBio, the European Association for Bioindustries, captured the new optimism in announcing results of a major study last year. "Europe is doing better," said McCullagh, who is also CEO of British Biotech PIC. "But America is still driving the worldwide bio-industry revolution. If we pull together, we can catch up."

The study concluded Europe could have 3 million biotech jobs by 2005, a huge leap from 400,000 in 1995.

We sensed the excitement in talks with biopharmas and graduate programs in the UK, Switzerland, Denmark, and Sweden. Here's the view from University College London, F. Hoffman LaRoche, Ltd., M&E Biotech, and Pharmacia & Upjohn.

Roche: Seeking Combination, Crossover Degrees

BASEL, Switzerland—Genomics. Bioinformatics. Combinatorial chemistry. Those are career fields that Professor Albert Fischli says are in especially great demand at F. Hoffman LaRoche, Ltd. (Roche). With more than 50,000 employees in 100 countries,

Roche seeks a broad spectrum of other scientists.

"We need experts from all the basic scientific disciplines, and from medicine," said Fischli. He is executive officer of the Roche Research Foundation, which supports biomedical research at universities, medical centers, and other facilities. Fischli also coordinates Roche's contacts with academia worldwide.



Albert Fischli

In especially great demand are personnel

with double degrees in science and "crossover degrees" that combine science and a non-science field. Roche is interested in people who combined M.D. and Ph.D., M.D. and M.B.A., and Ph.D. and M.B.A.

Fischli sees a growing need in industry for people who combine excellent scientific skills with the ability to help move products from lab to marketplace. "Scientists who come to industry must be open to developing skills required for innovation and launching products on the market. Commercial knowledge is important. Financial knowledge is important."

To fill this gap in the traditional training of scientists, Roche started the Roche M.B.A. Fellowship Programme for Medical and Science Graduates. It will fund Master's-level training in business for M.D. and Ph.D. graduates headed for research or management careers.

Fischli said experience working in Europe can give young scientists an edge in advancing into management in multinational companies. "It brings that global perspective that companies like

- continued >

Michael Woods writes frequently on the biotechnology and pharmaceutical industries.

I&V

The Foundation for Strategic Research has recently established a Swedish programme focused on Infection and Vaccinology.

I & V

INFEKTION & VACCINOLOGI INFECTION & VACCINOLOGY

Postdoctoral positions in Infection & Vaccinology

The Foundation for Strategic Research invites applicants for 6 post-doctoral positions through the Infection and Vaccinology Programme network. The position are for two years beginning during the spring of 1998 at the following universities and projects:

Antigen processing pathways for peptide and non-peptide specific CTL

Ref.no. 29/97

CLT responses may depend on uptake of exogenous antigen by APC cells. CTL can recognize peptides by classical MHC-1 but also other types of antigens such as membrane glycoproteins and glycolipids.

(See also: Immunity 5:295, 1996; Eur. J. Immunol 26:544, 1996).

New generations vaccines against infections disease Ref.no. 38/97

This project involves novel vaccines based on recombinant Semliki Forest virus RNA or DNA vectors as well as antigen-ISCOM complexes. A large portion of the project is devoted to defining the immune response and mechanisms for protection. (See also: Proc.Natl.Acad.Sei.USA 92:3009-3013, 1995; Gene 190:191-195, 1997).

"Invasive streptococcal infections: group B streptococci as a model system"

Ref.no. 114/97

A family of surface proteins with unique structure confer immunity to group B streptocoocal infection. These proteins are characterized with regard to their function during pathogenesis and as possible vaccine components. (See also: J.Biol. Chem. 271:18892-18897, 1996).

The Adhesome Project

Ref.no. 108/97

Identification of adhesins for *Helicobacter pylori* and other bacteria through bioinformatics search against the known genome sequence, based on 2D-gel electrophoresis, detection of protein by glycoconjugate receptor probe, trypsin digestion, and mass spectrometry of peptide masses. (See also: Curr. Opin. Struet, Biol. 5:622, 1995).

Antibacterial and cytolytic effector peptides in innate immunity and diease Ref.no. 137/97

Mechanisms underlying growth retardation of the kidney provoked by *Escherichia coli* induced pydelonephritis Ref.no. 46/97 Prof. Mikael Jondal tel. 46-8-728 66 90, fax 46-8-30 22 58 Microbiology and Tumorbiology Center Karolinska Institutet, Stockholm, Sweden E-mail: mikael.jondal@mtc.ki.se

Prof. Peter Liljeström tel. 46 8-728 63 06, fax 46-8-31 95 87 Microbiology and Tumorbiology Center Karolinska Institutet, Stockholm, Sweden E-mail: peter.liljestrom@mtc.ki.se

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Prof. Staffan Normark Microbiology and Tumorbiology Center Karolinska Institutet, Stockholm, Sweden E-mail: staffan.normark@smi.ki.se

Qualifications:

The applicant will have a Ph.D. in an area relevant to the project. To apply please, send a C.V. including a statement of research interest, a publication list, 3 relevant publications and the names and addresses of two referees.

General information:

For informal inquiries about the research programme contact Dr. Mats Wahlgren telephone: 46-8-735 14 31, e-mail: mats.wahlgren@smi.ki.se or Dr. Maria Grazia Masucci telephone: 46-8-728 67 55, e-mail: maria.gracia.masucci@mtc.ki.se. Please find additional information about the I&V research programme at our web-site (http://www.stratresearch.se).

Application:

Applications should be sent in three (3) copies to Registrator, Karolinska Institutet, Fogdevreten 2 A, S-171 77 Stockholm, Sweden. The closing date is the 24th of February 1998.

för Strategisk Forskning



Pharmacia & Upjohn is among the world's largest pharmaceutical companies. We are involved in areas such as Oncology and Infectious, Metabolic, Inflammatory and Central Nervous System Diseases to help people live longer and fuller lives. If you want to make a difference with Pharmacia & Upjohn, contact us.

Research in Sweden is focused on Metabolic Diseases and the Chemistry and Structural Chemistry departments play a key role in reaching our goals. The departments work closely together, and with colleagues in Biology and Pharmacology, to design and produce the drug candidates on which our success depends.

A world of opportunity

Last year we set out on a journey to create a new pharmaceutical company and to redefine the way we conduct research into the treatment of metabolic disorders. We were very successful in doing that and are now implementing our vision of the future. We have effectively doubled our strength in Chemistry during this time, a process which will continue for several years, and to continue this we are now looking for a number of very talented individuals in the area of the chemical sciences. At this time, therefore, we are seeking:

Group Leaders Medicinal Chemistry. These will be medicinal chemists who have a track record of drug discovery in an industrial setting, preferably for a major pharmaceutical company. You will have the ability to lead a group of up to 5 other chemists in a highly team based culture and the potential to do much more. As important will be a delight in hands on science, an extensive knowledge of medicinal chemistry and an ability to take on a project leading role. Head of Protein Crystallography Section in the Structural Chemistry department. The Protein Crystallography Section presently employs two experienced crystallographers and three molecular biologists/biochemists specialized in protein production. You have extensive post-doctoral experience in protein crystallography. A track record of biological problem solving and experience from the pharmaceutical industry are also desirable.

The conditions of employment, facilities and working environment are the equal of any in the industry. The positions are located in the dynamic international city of Stockholm or the medieval university city of Uppsala a short distance to the north and come with a competitive relocation package. To find out more about these positions informally, contact either *Dr. Roger Crossley*, Director of Chemistry (roger.crossley@eu.pnu.com) or *Dr. Johan Kördel*, Director of Structural Chemistry (johan.kordel@eu.pnu.com) as appropriate.

Alternatively, apply formally in writing enclosing a curriculum vitae, not later than 28th February 1998 to: Lotta Hansing, Pharmacia & Upjohn AB, S-112 87 Stockholm, Sweden.



Pharmacia &Upjohn to have," he said. "At Roche we have a lot of cultures interacting with each other in a positive sense, with openness and curiosity. It leads to great creativity."

Desperately Seeking Immunologists at M&E Biotech



C O P E N H A G E N, D e n m a r k — M & E Biotech is typical of dozens of smaller firms that are carving out niches in the European biopharmaceutical market. Formed in 1990 by sci-

Soren Mouritsen

entists at the University of Copenhagen, it grew from 4 employees to more than 30; marketed its first products; forged an alliance with a larger pharmaceutical firm, Feering; and is poised for further growth.

The emergence of smaller biotechs is a relatively new phenomenon in Europe, where big, established pharmas dominate the scene. "In Denmark, we've had very few start-up companies such as ours, but it is really moving very strongly forward now," said Soren Mouritsen, CEO of M&E. Mouritsen founded M&E along with Henrik Irgang Elsner, while a professor at the University of Copenhagen.

M&E is mainly seeking Ph.D. scientists who fit its two main R&D thrusts: development of therapeutic vaccines for chronic inflammatory diseases and cancer and intracellular screening of random-sequence peptides to identify lead compounds and drug targets for drug development.

"We are desperately looking for good immunologists in our areas of research," said Mouritsen. "Immunologists, molecular biologists, cellular biologists."

Smaller firms, Mouritsen said, do have advantages: a friendly work environment, where contributions get fast recognition and impact the firm's fortunes. Scientists may find themselves heading research teams years before it might be possible at a traditional pharma.

The environment at a smaller firm makes "people skills" especially valuable, Mouritsen observed. "Collaborative abilities are very high for us. We're looking very carefully at their ability to work together, share knowledge, and collaborate on a team."

Europe: An Applicant's Job Market

UPPSALA, Sweden—"In many parts of western Europe, it seems to be very much a job applicant's market right now. There are significant shortages of personnel. The best candidates can choose. It's quite difficult to get the really best candidate."

As director of chemistry for Pharmacia & Upjohn Inc.–Sweden, Roger Crossley sees career opportunities for life scientists and chemical engineers in Europe growing steadily into the 21st century. The overall imbalance of demand over supply probably will persist.

Pharmacia & Upjohn, formed by a merger two years ago, employs over 6,000 people in R&D and conducts research at three major sites in Sweden, Italy, and the United States. It spends over \$900 million annually on R&D.

"We're looking for scientists in many areas of the biological sciences and chemistry," said Crossley. The hot fields include medicinal chemistry, genomics, bioinformatics, cheminformatics, and structural chemistry. Openings mainly involve Ph.D.-level positions, but some are on the Master's and B.S. levels as well.

Is demand slackening in any traditional biopharma career segment? Crossley echoed what we heard throughout western Europe: "I don't see any areas where demand is slowing. We are shifting focus somewhat toward genomics, molecular biology, toward the informatics sides in biology. In the chemical science, we're expanding in combinatorial chemistry."

Larger European companies like Pharmacia & Upjohn probably will contract out more research, increasing demand for scientists at newer, smaller biopharmas. Also on the horizon are more collaborations between industry and academic science. For instance, Pharmacia & Upjohn recently joined with the Karolinska Institute to establish a genomics research center.

Biochemical Engineers At UCL

LONDON, England—University College London (UCL) has trained many UK biochemical engineers over the last 35 years, plus overseas students from 30 countries. "We need people with the ability to take biological science, join it with engineering, and apply the skill base in industry," said Michael Hoare. As director of training in UCL's Advanced Centre for Biochemical Engineering, Hoare sees strong demand for biochemical engineers. Fueling the demand is the UK biopharma industry's transition from research into manufacturing.

Tony Bradshaw, director of business development at the Centre, says other trends have increased pressure to move products into production faster. Among them, dramatic growth in small biotech



Professor Mike Hoare, director of training, and Tony Bradshaw, director of business development, at University College London's Department of Biochemical Engineering.

companies, with a keen interest in marketing their first products. "Everyone wants to reduce drug development time and speed up process development," said Bradshaw. "We need people with the biological science and engineering skills to do it."

Filling part of the need are "conversion courses," in which people with a degree in a biological science take a Master's or doctorate in engineering. They emerge as biochemical engineers.

The Advanced Centre has another approach, the Modular Training for Bioprocess Industries (MBI) Training Programme. MBI consists of short, accredited training courses for industrial scientists that can lead to UCL qualifications such as certificates, diplomas, or a full Master of Science degree.

"We developed MBI in collaboration with industry, as an industrial version of our Master's training," said Bradshaw. "MBI courses aim to keep industrial scientists and engineers at the forefront of bioprocess technology and regulatory developments, and speed products to market." ■



M&E Biotech is a privately held Danish biotech company specialized in immunology and combinatorial biology. M&E Biotech recently moved to 2,500 m² new laboratory and office facilities north of Copenhagen. The company presently employs 36 people and is still expanding. The company recently raised 15 mio USD.

Your application including curriculum vitae should be marked with the name of the desired position and sent to M&E Biotech by Febuary 23 1998.

M&E Biotech A/S Kogle Allé 6 DK-2970 Hørsholm Tlf. +45 45 16 25 25 Fax +45 45 16 25 00 E-mail: me@me.dk www.me.dk

Manager of Business Development

M&E Biotech seeks a Business Development Manager who has been employed for some years in the biotechnology industry, the pharmaceutical industry, or preferably both. You possess documented experience with the financial mechanisms of small biotech companies and with negotiations of R&D and licensing agreements.

An important aim for M&E Biotech is to establish R&D and licensing agreements as well as strategic alliances with the international pharmaceutical industry. Accordingly the work tasks will involve identification of and contacts to appropriate major pharmaceutical companies and you will participate actively in the negotiations, drafting and managing of the agreements. In general you will be an important part of the international roadshow and promotion of the company to investors, investment bankers, brokers and analysts prior to the entry of M&E Biotech on the stock exchange.

Immunology/Tumor Biology

M&E Biotech seeks two scientists with strong interests and proven experiences in the fields of immunology and/or cancer immunology holding a Ph.D. or an equivalent qualification. You are motivated for joining a research team of scientists with expertises in protein chemistry, pharmacology, immunology and molecular biology working with M&E Biotech's proprietary therapeutic vaccine technology. You are creative and you enjoy working with focus on both basal and applied immunology. You have documented experience with cellular techniques and/or animal models of human diseases including cancer.

Conditions

M&E Biotech offers employment in a dynamic and rapidly growing company with enthusiastic colleagues. We offer a competitive salary with the possibility of obtaining a three-year tax reduction period, a compensation for relocation costs, as well as an attractive employee stock programme. In Denmark health care, education and schools are free.



Pharmacokineticist

The Department of Pharmacokinetics within the Health Care Discovery and Development of Novo Nordisk has a position available for an experienced pharmacokineticist.

Located in modern laboratories in a rural area about 20 km from the centre of Copenhagen, the department carries out studies during the discovery as well as during preclinical and clinical development phases.

The department is manned with 10 academics and 15 technicians who works together in groups of one academic and 1 or 2 technicians. The groups have their own tasks within projects.

Key responsibilities:

- Participate in project groups together with representatives from other disciplines, in some cases also from other foreign companies.
- Develop and validate bioanalytical assays (HLPC, possibly LC/MS/MS).
- · Conduction of preclinical pharmacokinetic studies.
- Assay of samples from toxicological and clinical studies.
- Preparation of protocols for and reports of own studies.

Qualifications:

- Superior academic qualifications.
- Experience from drug development.
- Goal-oriented and able to take initiative and responsibility within multidisciplinary project groups.
- Experienced with development/validation of bioanalytical assays (HPLS, possibly LC/MS/MS).
- · Experienced with kinetic studies in laboratory animals.
- User knowledge of computers (PC) (e.g. controlling of analytical equipment, spreadsheet, word processing).
- Knowledge about regulatory requirements (also GLP) re. Pharmaco- and Toxicokinetics.
- · Good at writing and speaking English.

For further information about the position call Jens Aas Jansen, telephone +45 4444 8888, ext. 34840 or Steen Ingwersen, local 34847.

Written applications should be marked "Pharmacokinetics. 9000" and sent to Human Resources, Health Care, Builing 9P, 1.15, Krogshøjvej 41, DK-2880 Bagsværd.

Novo Nordisk A/S is the world leader in insulin and diabetes care and also the world's largest producer of industrial enzymes. The company also manufactures and markets a variety of other pharmaceutical and bioindustrial products. Headquartered in Denmark, Novo Nordisk employs more than 13,900 people in 61 countries and markets its products in 130 countries. More information can be obtained from our homepage: http://www.novo.dk

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POSTDOCTORAL RESEARCH FELLOWS

The above posts are sought as part of a European Union-Training and Mobility of Researchers network on "Complex Architectures in Diblock Copolymer Based Polymer Systems". Positions are available at The University of Leeds, U.K.; The University of Sheffield, U.K.; Risø National Laboratory, Denmark; University of Athens, Greece; Foundation for Research and Technology (FORTH), Crete, Greece; Max-Planck Institut für Polymerforschung, Mainz, Germany. Candidates must be citizens of an EU country. Applicants are not eligible to apply for positions in countries of which they are citizens, nor if they have carried out their normal activities within that country for 18 months within 24 months of taking up the appointment.

The positions in the U.K. will be predominantly concerned with structure and dynamics probed using x-ray scattering experiments at the Synchrotron Radiation Source, Daresbury, U.K. and the European Synchrotron Radiation Facility, Grenoble, France. In the School of Chemistry at Leeds, the work will also involve rheology experiments. At Sheffield (Dept of Chemistry), crystallization studies and collaboration with synthetic chemistrs at the University of Manchester will be involved. For either position, a Ph.D. in Chemistry, Materials Science, Physics or related field is required with some experience of x-ray scattering and/or polymer/soft solids rheology is preferred. The appointments are available for a fixed period of three years.

Salary will be on the scale for Research Staff Grade 1A within the range \$15,159 - \$20,103 p.a. according to qualifications and relevant experience. Application forms and further particulars for the post at Leeds can be obtained from Dr. I.W. Hamley, School of Chemistry, The University of Leeda, Leeds, LS2 9JT, tel. 0113 233 6430, fax 0113 233 6565, e-mail I.W.Hamley@chem.leeds.ac.uk, quoting the reference number 043-093-004-027. For the position at Sheffield, informal contacts can be made to Prof. AJ. Ryan (Tel. 0114 222 9306, fax 0114 273 8673, e-mail Tony.Ryan@sheffield.ac.uk).

Candidates for other positions should indicate the position for which they are applying. Dr. Hamley will forward applications to the Researchers involved. Closing date for applications: 1 March 1998.

SEMINAR

11th Protein Kinase Seminar

"CYCLIC NUCLEOTIDE-DEPENDENT SIGNALLING MECHANISMS"

Solstrand Fjord Hotel Bergen, Norway June 4–7, 1998

Speakers

P. Amieux	J. D. Corbin
W. Dostmann	S. Döskeland
B. A. Hemmings	F. W. Herberg
F. Hofmann	R. L. Idzerda
U. B. Kaupp	S. M. Lohmann
J. Lund	M. Montminy
R. Pilz	C. S. Rubin
P. Sassone-Corsi	J. D. Scott
K. Taskén	S. S. Taylor
R. Y. Tsien	U. Walter
M. R. Waterman	S. Ørstavik

Deadline for applications is Feb. 27, 1998. The total number of participants will be limited to 100. Application forms and further info can be obtained from: Johan Lund, Department of Anatomy and Cell Biology, Univ. of Bergen, Arstadveien 19, N-5009 Bergen, Norway.

Fax:+47-55-586360, johan.lund@pki.uib.no website:www.uib.no/med/meeting/kinase/

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GRADUATES.

Further information and application details can be obtained from:

Roche MBA Fellowship Programme c/o Roche Research Foundation CH-4070 Basel, Switzerland Tel.: +41-61-688 21 82 Fax: +41-61-688 14 60 Internet: research.foundation@roche.com



The Haartman Institute of the University of Helsinki is a center for biomedical and molecular biological research in Finland. Postdoctoral positions are available for 3 years on:

> Growth Factor Regulation of Angiogenesis and Lymphangiogenesis

Kari Alitalo, M.D., Ph.D. Research Professor of the Finnish Academy of Sciences Molecular/Cancer Biology Laboratory, Haartman Institute, University of Helsinki POB 21 (Haartmaninkatu 3), 00014 Helsinki, FINLAND Fax 358-9-1912 6448, E-mail: Kari.Alitalo@Helsinki.FI

The group has a multinational composition and belongs to the Biocentrum Helsinki Center of Excellence (http:// www.helsinki.fi/biocentrum/). Freshly renovated laboratories with excellent facilities and funding are located in a beautiful area of the city of Helsinki. The succesful candidates are expected to develop independent but interactive research projects. Experience in molecular biology is required. Applications should include CV and list of publications plus two letters of reference.

UNIVERSITY COLLEGE LONDON Centre for Molecular Medicine/Cruciform Project

Group Leader Postdoctoral Position Cytoskeletal proteins, Signal transduction

The laboratory is interested in understanding molecular mechanisms involved in electron transport by the NADPH oxidase electron transport chain of neutrophils, macrophages, and other "professional phagocytic cells".

An area of particular interest is the interaction between the NADPH oxidase and the cytoskeleton, with particular reference to the regulation of cytoskeletal interactions with coronin by the cytosolic phox proteins (Grogan et al J Cell Sci, 110, 3071, 1997) and signal transduction pathways regulating these interactions.

The laboratory is very well equipped and will be moving into the newly refurbished Cruciform Project building within 2 years. Strong collaborative links are maintained with a number of groups active in the protein structure/function and signal transduction fields, including the Ludwig Institute, at UCL, with the MRC - LMCB and with the Department of Crystallography at Birbeck College.

The successful applicant would be expected to have experience in the fields of protein chemistry and/or signal transduction. They must be independent and strongly motivated and would be expected to build up their own group. The appointment will be for 5 years on a salary of circa \$27,000, depending on age and experience.

Applications, including full CV and names and addresses of two referees, to Prof A W Segal, Department of Medicine, UCL, Rayne Institute, University Street, London WCIE 6JJ. Enquiries by telephone 0171-2096667. Fax 0171-2096211 or email dawn.hodgsonl@ucl.ac.uk will be welcome. Further information may be found on the website http://www.ucl.ac.uk.and http://www.ucl.ac.uk/CMM. Working toward Equal Opportunity

Roche



Université catholique de Louvain Faculty of Agricultural Sciences Department of Applied Biology and Agricultural Productions

Université catholique de Louvain Applications are invited for the following full-time tenure-track positions available September 1, 1998. Rank and salary will depend upon qualification and experience. Teaching experience will be useful. Ability to teach and to communicate in French within a 2-year period is required.

Associate Professor Plant Breeding (ref: AGRO 98/01)

Applicants must have a Ph.D. in plant breeding or a closely related field with a postdoctoral experience and a record of research achievements. The successful candidate is expected to develop a research program on enhancement of genetic resources of crop plants, in close collaboration with other research teams of the Faculty of Agricultural Sciences and the Department of Biology, Faculty of Sciences, working on biotic and abiotic stresses. Expertise in breeding for polygenic characters and in molecular marker assisted selection will be appreciated. Teaching duties will include graduate and postgraduate courses in plant breeding and related areas as well as advising undergraduate and graduate students.

Associate Professor Plant Virology (ref: AGRO 98/02)

Applicants must have a Ph.D. in plant pathology or a related area, a postdoctoral experience, and a record of research achievement in plant virology and molecular aspects of host-parasite interactions. The incumbent is expected to develop a research program in plant virology and molecular plant pathology, linked to the activities of the Unité de Phytopathologie. Expertise in molecular genetics and molecular biology of plant-microbe interactions and/or fungal transmitted viruses will be appreciated. Teaching responsibility includes graduate lectures and lab courses in plant virology and contribution to various courses in plant protection.

Applicants are invited to submit a letter of application, summary of research and teaching goals and interests, official transcripts of academic records, curriculum vitae, list of publications, abstracts of the 5 most significant papers, and names, addresses, and phone/fax numbers of 4 referees by February 15, 1998, to: The Rector, Universite catholique de Louvain, place de l'Universite 1, B-1348 Louvain-la-Neuve, Belgium.

For information visit our website at http://www.ucl.ac.be or contact Professor H. Maraite, Chairman, fax +32-10-478697, e-mail: maraite@fymy.ucl.ac.be.



Universität Zürich

The Faculty of Sciences (Philosophische Fakultät II) of the University of Zürich invites applications for a faculty position in

Experimental Physics Physics of Fundamental Systems

at the Physics Institute. The appointment will be made at the associate (Extraordinarius) professor level. There is a preference for candidates working in a field of Fundamental Systems like Astroparticle Physics, Atomic Physics, Gravitation, Neutrino Physics, or at the medium energy facilities of the Paul Scherrer Institute (PSI). Candidates should have demonstrated their ability to carry out independent research. The research topic should complement the activities of the existing particle physics groups working at DESY, CERN, and PSI.

The successful applicant is expected to participate in the teaching of basic courses in general physics and of particle and nuclear physics. The requirements are pedagogical experience, thesis, and Habilitation, or an equivalent qualification. Applicants should send their curriculum vitae (publication list indicating the five most important publications, a short statement of research interests, research plan, and teaching experience) before March 20, 1998, to:

Dekan der Philosophischen Fakultät II der Universität Zürich, Prof. Dr. H. Haefner, Winterhurerstr. 190, CH-8057 Zurich.

For further information please contact **Prof. Dr. R. Engfer, phone** +41 1 635 5720, fax +41 1 635 5704. Suggestions for suitable candidates are welcome.

This announcement replaces the announcement from December 19th, 1997

The

Max-Planck-Institut für Aeronomie in Katlenberg-Lindau (expected to be renamed Institute for Solar Physics and Planetary Science) is seeking an

Outstanding Scientist in Solar System Research

to be appointed as Director and Member of the Scientific Board of the Institute and Scientific Member of the Max Planck Society at the level of Full Professor (C4). The new Director will succeed **Professor Sir Ian Axford** and will be responsible for directing research in planetary science.

The Institute conducts experimental and theoretical research in the fields of planetary surfaces, atmospheres, ionospheres, magnetospheres, rings and satellites, and asteroids, dust, comets, and Kuiper belt objects, as well as in the field of solar and heliospheric physics. The experimental work in planetary sciences is carried out both *in situ* and by remote observations from spacecraft and from the ground. It involves detectors covering the full range of the electromagnetic spectrum, including imaging and spectroscopy, and particle detectors in a wide energy, charge, and mass range, including mass spectrometry.

The applicant should be a scientist with an international reputation and an excellent publication record. Younger scientists are encouraged to apply.

Please send your application for consideration in confidence, not later than 31 March 1998, to the Chairman of the Chemisch-Physikalisch-Technische Sektion of the Max-Planck-Gesellschaft, Prof. Dr. A. Simon, Heisenbergstr. 1, D-70569 Stuttgart, Germany. Please include a curriculum vitae, a list of publications, and copies of five of your most important publications. For further information, contact:

Professor Hagfors at the Max-Planck-Institut für Aeronomie, D-37191 Katlenberg-Lindau, Germany (phone: (49) 5556 979 414 fax: (49) 5556 979 410 Internet: hagfors@linmpi.mpg.de)

UNIVERSITY OF ST ANDREWS CENTRE FOR BIOMOLECULAR SCIENCES POSTDOCTORAL FELLOWSHIP AND POSTGRADUATE STUDENTSHIPS IN STRUCTURAL BIOLOGY

A 3 year BBSRC post is available in the laboratory of Dr J H Naismith. The project aims to build on our published work on the interaction between protein and carbohydrates. We will use protein crystallography, calorimetery and chemical synthesis. Experience in protein crystallography is essential, experience in protein purification and crystallisation would be desirable. Chemical synthesis is performed by our collaborators (Toone, Field, Jan-Boons). A special BBSRC studentship is also available in the general area of structural biology.

Informal enquiries for either the fellowship or studentship are encouraged; please contact e-mail: naismith@st-and.ac.uk, information on the group is available at http://speedy.st-and.ac.uk. The postdoc and student will be housed in new purpose built laboratories. St Andrews is part of the East of Scotland Centre for Structural Biology with Edinburgh and Dundee Universities.

Salary for the postdoctoral post will be at the appropriate point on the RA1A scale for research staff, i.e.: $\pounds 15,159 - \pounds 22,785$ per annum.

Applicants for the studentship must contact Dr R Randall, School of Biomedical Sciences, University of St Andrews, Fife KY16 9AL, quoting reference JHNSP1.

Reference No: ML148/ACH0/97 Closing Date: 16 February 1998

Application forms and further details from Personnel Services, University of St Andrews, College Gate, North Street, St Andrews, Fife KY16 9AJ, (tel: 01334 462571; fax: 01334 462570; e-mail: Jobline@st-andrews.ac.uk). Applications cannot be made by e-mail.

The University operates Equal Opportunities and No Smoking Policies



European Bioinformatics Institute (EBI)

The European Molecular Biology Laboratory (EMBL) has the following vacancy at its Outstation, the European Bioinformatics Institute in **Hinxton, near Cambridge, UK:**

GROUP LEADER IN BIOINFORMATICS

The European Bioinformatics Institute (EBI) is an Outstation of The European Molecular Biology Laboratory. The EBI is located in Hinxton, near Cambridge, UK, where it shares the site with the Sanger Centre (Wellcome Trust/MRC) and the Human Genome Mapping Project Resource Centre (MRC). The EBI (which includes the EMBL Data Library) offers a stimulating international environment for research in the area of bioinformatics as related to genome research and structural biology. Existing Group Leaders at the EBI are: Michael Ashburner, Thure Etzold, Liisa Holm, Christos Ouzounis and Shoshana Wodak.

The EBI is now seeking a scientist for a Group Leader position in the field of bioinformatics. The successful candidate will establish a small independent research group. Applications are encouraged in all fields of bioinformatics.

Applicants are expected to have a PhD (or equivalent degree) and considerable research experience as well as a publication record in bioinformatics. They will be expected to conduct independent research of a high standard.

Closing Date: 15 March 1998

Further information may be obtained from Professor Michael Ashburner, the chair of the search committee, at EMBL-EBI, Hinxton, near Cambridge, CB10 1RQ, UK (email: ashburner@ebi.ac.uk)

EMBL is an inclusive, equal opportunity organisation.

EMBL Web site: http://www.embl-heidelberg.de/

Please write, quoting reference number 98/02, and enclosing a CV and description of research experience and interests, and arrange for 3 letters of recommendation to be sent to:

The Head of Human Resources, EMBL, Postfach 10.2209, 69012 Heidelberg, Germany. Fax: +49 6221 387555 email: jobs@EMBL-Heidelberg.de



Aachen University of Technology (RWTH) Medical Faculty

University Professorship C3 (5 years) for "Cellular and Molecular Processes at Artificial Interfaces"

at the "Interdisciplinary Center for Clinical Research on Biomaterials and Tissue-Material Interactions of Implants" (BIOMAT.)



Requirements: Significant achievements in Basic Biomedical Sciences, preferably Molecular Biology and Biomaterial Research. (Ph.D./M.D./Habilitation)

<u>Facilities offered</u>: Well-funded Research Unit including laboratories, scientific and technical staff.

<u>Responsibilities</u>: High quality research. Supervision of advanced students and junior scientists

For further details, contact: Dean of the Medical Faculty; University Hospital, Pauwelsstrasse 30, D-52057 Aachen/Germany Phone: ++49-241-8089165/6 Fax: ++49-241-8888470

Deadline for applications: 6 weeks after publication.

ANNOUNCEMENT

Hamburg Outstation

CALL FOR SYNCHROTRON BEAM TIME 1998

The EMBL Outstation in Hamburg, Germany, is located at the DORIS storage ring, DESY. There will be about 30 weeks of beam time in 1998, starting in April. The Outstation operates four beam lines for protein crystallography (PX), two for scattering and diffraction experiments on non-crystalline systems (SAXS) and one for X-ray absorption spectroscopy (XAS):

		Wavelength/ Energy	Detector
X31	PX	tuneable	MAR (300 mm)
X11	PX	0.91 Å	MAR (345 mm)
BW7A	PX	tuneable	MAR (300 mm)
BW7B	РХ	0.83 Å	MAR (345 mm)
X33	SAXS	1.5 Å	Position sensitive gas detector
X13	SAXS	1.5 Å	Position sensitive gas detector
EXAFS	XAS	5 to 20 e V	13 element Ge detector

The deadline for proposals for 1998 is February 10th. The external Priorities Committee will assess the proposals. Applications from Europe including Israel will be given preference but some time is reserved for applications outside Europe.

Beam proposal and safety declaration forms are available through the World Wide Web (http://www.embl-hamburg.de). Submit one proposal for each project to Beam, EMBL, c/o DESY, Notkestr. 85, D-22603 Hamburg, Germany (fax ++49 40 89902 149). Further information can be obtained by tel. ++49 40 89902 0, Email beam@embl-hamburg.de (PX), koch@embl-hamburg.de or rapp@embl-hamburg.de (SAXS) and hermes@embl-hamburg.de (XAS).

NEN Life Science Products

NEN™ Life Science Products is a provider of radioactive, chemiluminescent and fluorescent labeling and detection products for life science and drug discovery. NEN™ offers exciting career opportunities for individuals who seek challenges and are motivated by business and personal growth:

Research Associate

Expansion, R&D investment and exciting market opportunities have created the need for a Ph.D. scientist to further the design and development of *in vitro* binding assays, cell culture and ultra high throughput testing applications for pharmaceutical research.

Demonstrated experience is required in developing Biochemical, Immunological or DNA/RNA assays in order to provide the technical leadership for project management, presentations and management of external research collaborations. Ideal candidates will possess a Ph.D. and 5 or more years' experience in the pharmaceutical or biotech industry. **Job Code: 97-09**

Visiting Research Scientists (3 Positions)

Utilizing novel, cutting-edge detection methods of molecular biology, biochemistry and/or pharmacology, these scientists will carry out labeling, detection and functional studies of proteins and nucleic acids. These individuals will also study applications in Life Science Research and Biotechnology and support product and technology development by collaborating with chemists, biologists and biochemists inside and outside the company involved in translating ideas into products. You will be encouraged to publish and present your results of the experimental collaborations.

To qualify, you must have a proven record of research achievement and scholarship, a Ph.D. in Biochemistry, Pharmacology, Immunology, Molecular Biology or equivalent. A strong research background and good interpersonal skills are required. Job Code: 98-1

NEN offers free parking at our South Boston location. We offer a competitive salary and comprehensive benefits package including 401K. Interested candidates, please send a cover letter and resume or curriculum vitae, indicating Job Code, to: NENTM Life Science Products, Inc., Human Resources, 549 Albany Street, Boston, MA 02118; Fax: (617) 338-9758. No telephone calls will be accepted regarding this position. NEN is an Affirmative Action/Equal Opportunity Employer M/F/D/V.



POST-DOCTORAL RESEARCH ASSOCIATE

NIH, NY State, Industry supported program in development of therapies for psychiatric and neurological disorders targeted at plasma regulation of neurotransmitter precursor metabolism seeks to fill post-doctoral/research associate position(s).

Successful candidate(s) will work in clinical studies in genetics, and in all phases of treatment development including trials, mechanistic studies, and meeting patent and regulatory agency requirements. Strong organizational/ communication skills and strong experimental backgrounds with demonstrated accomplishments in genetics, neurochemistry, or nutritional sciences required—MD/Ph.D. welcome. Excellent benefits.

Send CV and 3 academic/workrelated references to E-mail Zarychta@iris.rfmh.org or fax 914-359-3239. No calls accepted. Mary Ann Richardson, PhD., Nathan S. Kline Institute for Psychiatric Research, NY State OMH (AA/EOE), Orangeburg, NY

EUROPEAN OPPORTU<u>NITIES</u>



Postdoc and Ph.D. Student Opportunities

The Laboratory of Behavioral Biology situated at the Institute of Technology, Swiss Federal Institute of Technology, near Zurich, Switzerland, announces the availability as of January 1, 1998, of a Postdoc position (funded for 2 years) and Ph.D. positions (funded for 3 years).

The Laboratory is an international focus for innovative research on brain mechanisms of behavior and the development of animal models for psychiatric and neurological disorders.

Our scientific programmes embrace: classical and operant conditioning procedures, drug discrimination, memory and cognition models, acute and long-term pharmacological manipulations, *ex vivo* and *in vivo* (microdialysis) assessments, and neuronanatomical techniques, including immunocytochemistry, radioligand binding, and tract tracing at light and electron microscopic levels.

The Postdoc position requires the ability to independently work in an ultrastructural facility (electronmicroscope).

Applicants should submit a full curriculum vitae with a covering letter indicating their main interests and the names of three referees to: Jürg Wiesmann, Human Resources, ETH-Zentrum, 8092 Zurich.

For further information, please call to phone: 0041/1 825 74 16 or Fax-Nr. 0041/1 825 74 17. Visit our website at: http://www.toxi.ethz.ch/bbft.bbft.html.

SCHEPENS EYE RESEARCH INSTITUTE HARVARD MEDICAL SCHOOL

Post-Doctoral Research Fellowships in the Ocular Gene Therapy Program Project - "Promoting immune privilege and preventing blindness"

The Schepens Eye Research Institute, an affiliate of Harvard Medical School, seeks well qualified (Ph.D., M.D./Ph.D., or M.D.) applicants for the position of Post-Doctoral Research Fellow to participate in a basic research program project on ocular gene therapy. This program project will take advantage of the unique features of the eye in creating a gene therapy approach to several important eye diseases where the molecular and genetic basis is either known, or strongly suspected. Five investigators, each bringing a distinctive set of talents, skills, and experience, will conduct four separate but related research projects in which the newly discovered principles of immune privilege in the eye are used to develop gene therapies to (a) inhibit profiferation of retinal pigment epithelial cells underlying proliferative vitreoretinopathy, (b) inhibit proteases responsible for recurrent corneal epithelial resions, (c) confer immunospressive properties on donor corneas to be grafted in "high-risk" eyes with opaque corneas, and (d) re-establish immune privilege in eyes suffering blindness secondary to uveitis. Successful development of this type of therapy will lead the way to new treatments for other major blinding diseases (such as macular degeneration, diabetic retinopathy, and glaucoma) for which no satisfactory treatment now exists.

Resources for initiating this program (approximately \$500,000 for the first two years) have been provided by private philanthropy, and there is continuing financial commitments for at least the succeeding three years. Candidates should have graduate level research experience in either immunology, ophthalmology, cell biology, or molecular control of gene function. Applicants should send their curriculum vitae, a statement of research interests, and the names of three references to the program leader:

> J. Wayne Streilein, M.D. DeWalt and Marie Ankeny Director of Research Professor of Ophthalmology and Dermatology Harvard Medical School 20 Staniford Street Boston, MA 02114

SERI and Harvard Medical School are Equal Opportunity/Affirmative Action Employers. Women and minorities are encouraged to apply.



Bristol-Myers Squibb

Pharmaceutical Research Institute

Applied Genomics

Bristol-Myers Squibb is committed to using genomic technologies to drive both the discovery and the development of the next generation of drugs. This commitment is demonstrated by the recent formation of an industrial/academic consortium to develop the next generation of functional genomic technologies. In addition, Bristol-Myers Squibb is in the process of establishing an internal division of Applied Genomics at our Pharmaceutical Research Institute in Princeton, New Jersey. We are looking for Ph.D. and B.S./M.S. scientists to staff Departments of Bioinformatics, High-Throughput Melecular Biology, Proteomics, and Moleoular Genetics.

Molecular Genetics Model Organism Genomics

Ph.D. with 4 years post-doctoral experience studying the function of genes in yeast, drosophila or nematodes. B.S./M.S. candidates are also encouraged to apply for positions in this area. Code: PRSM4LGA

Statistical Genetics

Ph.D. in human or quantitative genetics and post-doctoral experience with statistical genetic software in the UNIX environment. Would perform analysis of human and animal genetic data for complex disease programs and would develop novel approaches in genetic data analysis. B.S./M.S. candidates are also encouraged to apply for positions in this area. Code: PRSM4LGB

Pharmacogenomics

M.D. or Ph.D. in relevant discipline. Previous experience required in the analysis of genetic factors affecting drug metabolism, including identification of drug metabolism enzyme (DME) genes, identification of gene mutations/polymorphisms, and analysis of gene structure/function. Experience in one or more of the following techniques: DME gene cloning, in vitro model systems to study drug metabolism and toxicology (including tissue lysates/fractions, tissue slices, and stable and transient cDNA expression in cell culture systems), and genetic association studies to identify role of genetic variants on drug metabolism and pharmacodynamic response. B.S./M.S. candidates are also encouraged to apply for positions in this area. Code: PRSM4LGC

Genotyping

M.D. or Ph.D. in relevant discipline and post-doctoral training. Experience with high-throughput technologies would be an advantage. B.S./M.S. candidates are also encouraged to apply for positions in this area. **Code: PRSM4LGD**

Proteomics Biochemist

Ph.D. with 3-5 years post-doctoral experience to study the functional aspects of cellular proteins. Expertise in protein biochemistry (including purification and structural analysis), bioassay development, intracellular signal transduction mechanisms, and molecular biology techniques required. Familiarity with mass spectrometry techniques desired. B.S./M.S. candidates are also encouraged to apply for positions in this area. **Code: PRSM4SHA**

Protein Chemist

B.S./M.S. in Biochemistry or related fields, with 3-5 years experience in protein chemistry, including purification and characterization of proteins and Edman sequencing. **Code: PRSM4SHB**

Bioinformatics Database Applications Programmer

B.S./M.S. with 4 years programming experience to provide bioinformatics support. Expertise in C/C++, SQL, and Perl; knowledge of Oracle on UNIX systems; experience in the development of HTML-cgi interfaces. Positions in Princeton, NJ and Wallingford, CT. Code: PRSM4DG

Bioinformatics Scientists

Ph.D. with post-doctoral experience to perform sequence analysis, analyze gene families, and search for novel therapeutic targets. Would also help design and analyze expression microarray experiments. Knowledge of the major sequence analysis software packages and PERL, and experience with the UNIX environment is required. Lab experience in molecular biology would be an advantage. Candidates must be willing to learn the relevant disease biology of a therapeutic area. B.S./M.S. candidates are also encouraged to apply for positions in this area. Code: PRSM4WCB

High-Throughput Molecular Biology Microarray Expression Technology

Ph.D. in relevant discipline and post-doctoral experience to apply microarray expression technology to the investigation of biochemical pathways and the mode of action of drug candidates. B.S./M.S. candidates are also encouraged to apply for positions in this area. **Code: PRSM4MNA**

Sequencing Manager

Ph.D. with 4 years of post-doctoral experience to establish and manage a laboratory for high-throughput sequencing. Experience in genomic sequencing and data analysis is required and supervisory experience would be an advantage. B.S./M.S. candidates are also encouraged to apply for positions in this area. Code: PRSM4WCA

Robotics Scientist

B.S./M.S. with experience with robotic laboratory work stations. Experience applying robotics to biochemical or molecular biology procedures would be an advantage as would expertise interfacing instrumentation to computers. **Code: PRSM4MNB**

Bristol-Myers Squibb uses resume scanning technology. Please submit on plain white bond paper, using standard type and fonts (no italics, graphics, or staples please), with Code#___ to:

Bristol-Myers Squibb Company Pharmaceutical Research Institute P.O. Box 4000 Princeton, NJ 08543-4000 FAX: 609-581-8841

SUGEN: The Cure is Out There.

Cancer. Diabetes. Life-threatening neurological and immune system disorders. Patients with these serious diseases can't wait for new answers. At SUGEN, we're working on those answers with a new class of small molecule drugs. Applying our signal transduction-based drug discovery platform to a number of disease targets, we already have several promising compounds moving through our product pipeline. Now, it's merely a matter of time... Join us as we find the answers and create the next era in biopharmaceutical research and development. The cure is out there...

GROUP LEADER – Oncology Signaling

We are looking for a PhD to act as Group Leader in the biochemistry of growth factor/hormone signaling. We will rely on you to establish a new group to determine the relevance of new genes as novel targets, surrogate markers, or selective substrates for drug development. In addition, you will integrate into existing programs involving known growth signaling pathways. The ideal candidate will have 3-5 years postdoctoral experience in elucidation of growth signal transduction pathways. Familiarity with the biochemistry of adapter proteins, serine/threonine kinases, and tryosine kinases is desirable. Strong communication, organizational, and problem solving skills, as well as some supervisory and industry experience, will be beneficial.

In addition to a competitive salary and comprehensive benefits including stock options, SUGEN offers an energetic team environment. To learn more, please forward your c.v./resume to: Human Resources, SUGEN, Inc., Dept. JB-SCI, 351 Galveston Drive, Redwood City, CA 94063. EOE.

SUGEN

DEAN FOR RESEARCH

The Harvard Medical School is seeking an individual to serve as Dean for Research. This position is responsible for advancing, promoting and supporting the Harvard Medical School's research enterprise. The Dean for Research will work with the Executive Dean for Academic Programs and basic science department heads to develop a strategic direction for research. The overall mission for the Office of the Dean for Research will be to strengthen research capabilities and performance, to provide executive leadership within the administration on issues of research policy, research administration, and to spearhead the design and execution of comprehensive strategies for enhancing resources and the environment to support research.

Candidates should have a doctoral degree with significant experience and record of accomplishment in research based in academia, government or industry. The Dean for Research may have opportunities to participate in teaching and research and may receive a senior HMS academic appointment commensurate with his/her academic experience. Candidates should also have senior level managerial experience in a complex scientific environment. Experience in dealing with the federal government in obtaining research funding and experience in negotiating agreements between academic and industrial sponsors is highly desirable, as well as knowledge of intellectual property issues. Women and minority candidates are particularly encouraged to apply.

Candidates should submit a letter of application and a curriculum vitae including a full list of publications to:

Dennis Kasper, M.D. Executive Dean for Academic Programs Harvard Medical School 25 Shattuck Street Boston, Massachusetts 02115. Harvard Medical School is an Equal Opportunity/Affirmative Action Employer.

HARVARD MEDICAL SCHOOL

Associate or Full Professor of Natural Sciences and Administrative Head of College Honors Program

Tenure-track position to begin September 1998 as a faculty member in the Department of Natural Sciences and as the administrative head of the College's Honors Program, Natural Sciences combines biology, chemistry, and physics, and the incumbent will teach courses in areas of his/her expertise. Preference for candidates with expertise in environmental studies. The Honors Program includes offerings from many departments in all areas of the College and is an important element in the College's focus on academic excellence. The position requires an established scholar with a record of superior teaching, administrative experience, and experience working in an honors program. Baruch College is a senior college of The City University of New York and is located in the historic, dynamic Gramercy Park/Flatiron area of Manhattan. Please send curriculum vitae and three letters of recommendation by March 15, 1998, to Professor Linda Hoffman, Chair, Department of Natural Sciences, Baruch College, 17 Lexington Avenue, Box A-0506, New York, NY 10010. An AA/EO/IRCA/ADA employer.

Baruch College

The City University of New York

MARINE INVERTEBRATE PALEONTOLOGIST CALIFORNIA ACADEMY OF SCIENCES

The California Academy of Sciences invites applications for the regular faculty position of Assistant Curator of Invertebrate Paleontology in the Department of Invertebrate Zoology and Geology. We seek someone who: 1. has a primary interest in and commitment to collection-based research in invertebrate paleontology, 2. is capable of applying a wide range of modern phylogenetic protocols and paleontological techniques to analysis of the fossil record, 3. will contribute to the curation, development, and publicizing of a major fossil collection, and 4. is fieldwork oriented. We are particularly interested in individuals who can complement the department's strengths in coelenterate, mollusc, crustacean, and echinoderm phylogenetics. Candidates must have a Ph.D. and an active research program. Responsibilities include original research as well as participation in curatorial, administrative, and educational activities of the Academy. Detailed position description and other information are available through the Academy's website: www.calacademy.org/research. Applicants should forward a curriculum vitae, description of research goals, the names, mail and e-mail addresses as well as telephone and fax numbers of three (3) references to the California Academy of Sciences, Human Resources Department #ACP, Golden Gate Park, San Francisco, CA 94118-4599. The application deadline is 3/31/98.

National Institutes of Health

A Senior Executive Service Vacancy

DIRECTOR DIVISION OF EXTRAMURAL RESEARCH National Institute of Dental Research

The Position: Director of the Division of Extramural Research (DER), National Institute of Dental Research (NIDR), the primary sponsor of support for research and research training on the causes, prevention, diagnosis, and treatment of craniofacial, oral, and dental diseases and disorders in the United States. The Director, DER, serves as a primary advisor to the Institute Director, and oversees, plans, and directs extramural and collaborative research and research training activities. Participates with the Institute Director in formulating general polices and administrative practices for the Division, and in determining program priorities and funding levels.

The Challenge: Provide leadership in the overall scientific administration of a comprehensive research program in oral health with a Fiscal Year 1998 budget of approximately \$161 million. Support a wide range of research in craniofacial, oral, and dental diseases and disorders, and explore new dimensions in funding approaches.

The Ideal Candidate: Demonstrated scientific leadership and management of a basic, clinical, or researchrelated program of national standing. D.D.S., M.D., or Ph.D., or comparable experience and training, in an area of relevance to the oral health sciences. Must have experience in an area related to the oral health sciences that meets the following requirements:

1. Knowledge and experience in the health sciences related to the causes, prevention, diagnosis, and treatment of craniofacial, oral, and dental diseases and disorders. Knowledge of the entire spectrum of research including basic, translational, patient-oriented, and community-based research. Experience developing new initiatives or restructuring health research programs to meet national research needs.

2. Ability to provide leadership and broad vision to a multidisciplinary research program that entails extensive managerial and executive-level responsibilities in a diverse organization. Experience that demonstrates the ability to: manage a large multidisciplinary research program; design policies and standards for the initiation and execution of multidisciplinary research; determine productivity and effectiveness of current research; develop and implement organizational vision; design and implement strategies that maximize employee potential and foster high ethical standards; make timely and effective decisions and produce results; acquire and administer human, financial, material, and information resources; explain, advocate, and express facts and ideas in a convincing manner.

Salary Range: This is a Civil Service position in the Senior Executive Service with a salary ranging from the ES-1 to ES-6 level, currently \$103,897 to \$123,100 per annum, including locality pay. Physicians and dentists may be eligible for a Physicians Comparability Allowance up to \$20,000 per year. A recruitment bonus of up to 25% of base pay may be available to a non-Federal applicant selected for this position, subject to individual approval. A relocation bonus of up to 25% of base pay may be available to a permanent Federal employee who must relocate to accept this position, subject to individual approval. A one-year probationary period must be served by the individual selected if not currently in the Senior Executive Service.

How to Apply: Applicants must submit a bibliography and a curriculum vitae, résumé, Application for Federal Employment, OF-612, or any other equivalent written format that addresses the requirements indicated in this announcement. Application materials must be submitted to, and further information may be obtained from:

Ms. Carol M. Beasley National Institute of Dental Research 31 Center Drive, MSC 2290 Bldg. 31, Room 2C-39 Bethesda, MD 20892-2290

OR via e-mail to: carol.beasley@nih.gov Phone: (301) 496-6971

Applications must be postmarked by March 20, 1998.

All application forms are subject to the provisions of the Privacy Act and become the property of the DHHS.

Selection for this position will be based solely on merit, with no discrimination for non-merit reasons such as race, color, religion, sex, national origin, politics, marital status, physical or mental disability, age, sexual orientation, or membership or non-membership in an employee organization. NIH is an Equal Opportunity Employer.



There's Excitement In The Journey



We're Breaking New Ground in Research & Development

Glaxo Wellcome, the world's largest pharmaceutical company, is an organization committed to fighting disease and bringing innovative medicines to patients throughout the world. If you would like to share our journey while testing the limits of your own potential, join us in the following opening at our Corporate Headquarters located in Research Triangle Park, N.C.

PROTEIN CRYSTALLOGRAPHER SENIOR SCIENTIST/ RESEARCH INVESTIGATOR II

Selected individual will have full responsibility for determining novel crystal structures for drug discovery. This position requires a Ph.D. in Structural Biology and at least 5 years relevant experience and at least 3 years of experience in all aspects of protein crystallography. The successful candidate will be able to crystallize proteins and improve on crystallization conditions, analyze diffraction data, determine crystal structures, and convey in relevant terms information of the crystal structures for drug discovery. Experience in subcloning, protein expression, and protein purification is a plus.

At Glaxo Wellcome, pride in our people is reflected in an excellent salary and a flexible benefits package, as well as in such amenities as an on-site fitness center and a work setting in which you will take pride. Research Triangle Park, North Carolina offers an academically enriched quality of life complete with a host of cultural and recreational attractions. In exchange for your considerable skills we offer an excellent salary and benefits package and the opportunity for career growth. For confidential consideration, send your resume, which must include position title and salary history to: Human Resources Department, Job #ASC9140-1, Glaxo Wellcome, P.O. Box 13398, Research Triangle Park, NC 27709. (No Phone Calls or Agency Referrals, Please) An Equal Opportunity Employer M/F/D/V

GlaxoWellcome

You'll Learn, You'll Create, You'll Discover

NEW ENGLAND BIOLABS

Positions Available

New England Biolabs, a world leader in the production of restriction endonucleases and other related products for the recombinant DNA field, seeks applicants for:

MOLECULAR BIOLOGIST (Phospho-Antibody Development): Responsibilities include characterization and development of phospho-specific antibodies and research on signaling pathways, tumor suppressors and transcription factors. Minimum requirements include a BS or MS degree in Cell or Molecular Biology. Experience with the use of antibodies and antibody characterization including western blotting, ELISA, protein A purification, peptide-affinity chromatography, immunocytochemistry, and immunoprecipitation techniques is essential. Experience with mammalian tissue culture, transfection, and purification of overexpressed fusion proteins in mammalian cells will also be helpful. Send a resume and three references to: Dr. Michael Comb.

POSTDOCTORAL FELLOW (Thermus Plasmid Replication and Thermoprotein Engineering): Position for a recent Ph.D. in Genetics or Biochemistry. Experience in gene cloning and mutagenesis, genetic selection/screening, and protein purification required. Send a resume and three references to: **Dr. Shuang-yong Xu.**

POSTDOCTORAL FELLOW: Position for a recent Ph.D. is available to study restriction-modification (R-M) systems in *Helicobacter pylori*, a human pathogen which causes gastritis and peptic ulcer. Projects involve characterization of putative R-M genes from *H. pylori* and study their biological significance. Candidates should have a strong background in molecular biology or microbiology. Experience with cloning/expression and basic biochemistry techniques are desirable. Send a resume and three references to: **Dr. Huimin Kong.**

FERMENTATION: Position available to work with a variety of microorganisms at a 25-100 litre scale. BS degree with some background in Microbiology, and good mechanical skills are essential. Send a resume and three references to: **Dr. David Wallace.**

New England Biolabs, Inc. 32 Tozer Road Beverly, MA 01915 An Equal Opportunity Employer

NEW ENGLAND BioLabs^{*}Inc.

The quest for the cure -There is no greater challenge, no more rewarding opportunity.

By any measure of performance, SmithKline Beecham's research prowess is impressive. In the past year alone, our efforts have led to the successful launch of breakthrough treatments for Parkinson's disease and ovarian cancer. We are also making significant strides in understanding the pathologies of Alzheimer's disease, asthma and osteoporosis — and the quest continues. The finest, most creative minds in pharmaceutical research are helping us enhance the quality of life for millions the world over. We seek candidates for the following positions to share in this important, highly rewarding challenge.

BIOSEPARATIONS SCIENTIST

The selected candidate will be responsible for conducting studies in purification process development, scale-up and validation to support production of Phase I, II and III clinical supplies of protein therapeutic agents. In addition, this individual will be responsible for addressing problems in and instituting improvements to recombinant protein purification processes running in a cGMP manufacturing environment, and will conduct studies towards process improvements. The position will involve work with HPLC, preparative chromatography, protein filtration, precipitation, extraction and analyses. Other responsibilities include providing significant data input to and/or authoring of CMC information in regulatory submissions; and offering critical expertise to R&D in protein purification, spaces scale-up and validation. Responsibilities may also include: managing a laboratory, supervising one or more lab scientists, and technology transfer to manufacturing groups.

A Ph.D in biochemistry, biology or biochemical engineering and a minimum of 2 years' experience in GMP biopharmaceutical operations, technology transfer, or process development is preferred, as is a high level of expertise in protein biochemistry. A BS or MS is acceptable with correspondingly greater levels of relevant work experience. Demonstrated skills in independent planning and conduct of experiments is required, as is a track record of preparation of scientific reports, patents or publications. Excellent oral communication skills are essential, including presentation of data to internal and external groups. Familiarity with regulatory requirements for biopharmaceuticals is also required. **Refer to Job Code K70650**.

SCIENTIST-MOLECULAR RECOGNITION

The selected individual will conduct successful laboratory work with minimal supervision and optimize experimental procedures in the following areas: general molecular biology and RNA techniques, cell biology and biochemistry, RNA/protein interactions and fluorescent based techniques.

Qualified candidates will possess a BS/MS in biochemistry or a related field and strong applied knowledge relating to RNA based research, including ribonucleoprotein analysis, reporter gene construction and fluorescent technologies, as well as solid practical knowledge of molecular and cellular biology. The successful candidate will also exhibit strengths in communication, design and conduct of experiments and demonstrated creativity and innovation, including new experimental approaches and contribution of general scientific ideas to the research of the group. **Refer to Job Code H70682S**.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package as well as a stimulating work environment in which to grow and excel. For confidential consideration, please send resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job Code (select one), P.O. Box 2646, Bala Cynwyd, PA 19004. For more information on SmithKline Beecham, please visit our Web site at www.sb.com/careers. We are an Equal Opportunity Employer, M/F/D/V.





ncredible people extraordinary science Genentech's people share some pretty UNCOMMON trâits. Not surprising when you consider the scope of our mission – creating breakthrough medicines for conditions like Cystic fibrosis, strokes, growth disorders, Cancer and heart attacks. It demands a very special kind of person. Someone who will take risks, accept responsibility, and constantly seek Creative solutions

Do you have the traits to contribute to making our Vision of longer, healthier lives for thousands of people a reality? Consider what you expect from a Career and from yourself. Expect the extraordinary? Then share your traits with us.

www.gene.com

Senior Scientist/Scientist

Lead a recovery group in Manufacturing Sciences and provide scientific and engineering expertise to support the production of marketed products. Work with various groups to identify opportunities for improvement in operations. A technically rigorous problem solving ability and strong communication skills will be necessary to win implementation of changes in operations. You will also transfer responsibility for commercial processes into Manufacturing Sciences. This is an excellent opportunity to evaluate and develop new technologies for improving operations. As a senior member of Manufacturing Sciences, your role will influence the direction of the department and of manufacturing. You will also be responsible for facilitating the professional development of members on your team.

To qualify, a PhD in Chemical Engineering or Biochemistry with 5+ years' experience, including largescale recovery processes, is required. Familiarity with new developments in recovery process technology and the ability to direct technical innovation is essential. Experience with guiding multidisciplinary, high performance groups plus the ability to work with different departments in the implementation of new processes is important.

We offer progressive benefits. Send your resume, indicating Job Code SCI009, to: Genentech, Inc., Human Resources, PO Box 1950, South San Francisco, CA 94083-1950. Plain typefaces, no faxes. E-mail your resume to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). We cannot accept faxed resumes. EOE

FACULTY POSITIONS JOHNS HOPKINS UNIVERSITY

The Department of Earth and Planetary Sciences invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level beginning July 1, 1998, or later. We seek applicants in the area of geomicrobiology, particularly those with expertise both in the Earth sciences and in biochemistry or microbiology. Candidates should have research interests that include, but may not be limited to, the role of microorganisms in geological processes ranging from those at low temperature such as in the oceans and sediments to those at levated temperature such as in oil fields and hot springs.

Applicants should have rigorous training in the geosciences and/or biosciences and broad process-oriented interests that would complement existing programs in the Department of Earth and Planetary Sciences and one or more of the Departments of Biology, Biophysics, and Geography and Environmental Engineering. Candidates whose research integrates combinations of field, laboratory, and theoretical approaches will be particularly favored. We expect successful applicants to develop a vigorous, independent research program and to participate fully in undergraduate and graduate teaching. A Ph.D. is required.

Interested persons should send a résumé, a couple of reprints or preprints, and a statement of research interests, plus the names, mail and e-mail addresses, and telephone numbers of at least three persons from whom the Department may request letters of recommendation to: Dr. John M. Ferry, Chair, The Morton K. Blaustein Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, MD 21218 USA. The search will close March 1, 1998, but later applications may be considered. Johns Hopkins University is an Equal Opportunity/Affirmative Action Employer. Women and members of minority groups are encouraged to apply.

TENURE-TRACK FACULTY POSITION UNIVERSITY OF LOUISVILLE DEPARTMENT OF SURGERY

The Cardiovascular Research Institute in the Department of Surgery at the University of Louisville has a TANT/ASSOCIATE PROFESSOR level effective July 1, 1998. To further strengthen its successful research program and complement the stimulating intellectual environment, candidates must demonstrate ability to perform productive research (as evidenced by a strong publication record), demonstrate potential to secure extramural funding, and interact with colleagues as a team player in ongoing research projects including minimally invasive coronary heart bypass graft surgery, partial left ventriculectomy surgery, cardiomyoplasty, ventricular assist device, and medical instrumentation. A Ph.D. in cardiovascular physiology, bioengineering degree (with experience in biomedical applications), or molecular biology is preferred. Please submit a curriculum vitae, three letters of reference, a one-page description of research accomplishments, and a two-page summary of research objectives to: Hiram C. Polk, Jr., M.D., Chairman and Professor, Department of Surgery, and Laman A. Gray, Jr., M.D., Director, Division of Thoracic and Cardiovascular Surgery, Department of Surgery, University of Louisville, Louisville, KY 40292. Application cut-off is March 16, 1998. The University is an Equal Opportunity/Affirmative Action Employer.

ENVIRONMENTAL SCIENCES

The University of Tennessee at Chattanooga, beginning August 1, 1998, pending final budgetary approval. ASSISTANT PROFESSOR toxicology (full-time, tenure-track). Responsibilities include lectures/laboratories in introductory environmental science, environmental chemistry, general toxicology, environmental toxicology and risk assessment, and hazardous and toxic wastes. Scholarly activities and a productive research program involving graduate and undergraduate students are expected. Preference given to candidates with demonstrated excellence in effective classroom teaching. Send curriculum vitae, transcripts, and three reference letters to: Dr. Charles H. Nelson, Head, Department of Biological and Environmental Sciences, 615 McCallie Avenue, The University of Tennessee at Chattanooga, Chattanooga, **TN 37403**. Screening of credentials will begin on February 15, 1998, and will continue until the position is filled. The University of Tennessee at Chattanooga is an Equal Employment Opportunity/Affirmative Action/Title VI/ Title IX/Section 504/ADA/ADEA Institution

POSITIONS OPEN

BACTERIAL PATHOGENESIS FACULTY POSITION DEPARTMENT OF MICROBIOLOGY Dartmouth Medical School

The Department of Microbiology invites applications for a **TENURE-TRACK** faculty position to expand the Bacterial Pathogenesis Program at Dartmouth. The successful applicant will join a faculty that has strong research and teaching credentials in pathogenesis, immunology, and parasitology. Junior or Senior applicants specializing in molecular analysis of bacterial pathogenesis or hostmicrobe interactions are preferred. Senior candidates should have a strong record of research accomplishment with sustained program growth and funding. Junior candidates will be expected to develop a strong, independent research program with long-term growth potential. Teaching components would include participation in medical microbiology, undergraduate microbiology, and a graduate course in the Molecular and Cellular Biology (MCB) Graduate Program.

This position affords the opportunity to utilize the state-of-the-art facilities and resources associated with a major research and teaching institution while enjoying the quality of life characteristic of the area of New England surrounding the Dartmouth community. For further information on Dartmouth, the Department of Microbiology, and the MCB program, see the medical school and graduate program listings at website: www. dartmouth.edu/.

Applications should consist of a curriculum vitae, a brief statement of research interests and plans, and three letters of reference to: Dr. Ronald K. Taylor, Department of Microbiology, Dartmouth Medical School, Vail Building, Hanover, NH 03755-3842. Dartmouth Medical School is an Affirmative Action/Equal Opportunity Employer.

FACULTY POSITION IN HEMATOPOIESIS/ LYMPHOCYTE DEVELOPMENT

The Department of Microbiology and Immunology in conjunction with the Division of Hematology and Oncology and the Sylvester Cancer Center at the University of Miami School of Medicine invite applications for a tenure-track faculty position at the **ASSISTANT** or **ASSO-CIATE PROFESSOR** level for Investigators with research interests in the development of hematopoietic stem cells. The preferred areas of investigation are either at the level of primitive stem cells or the development of lymphoid (B, T, NK) cells. Candidates who are also interested in oncogenesis and stem cell manipulation are encouraged to apply. The chief criteria for candidates are proven excellence in research and the potential to develop an externally funded research program.

All applicants who wish to be considered for the position at the level of Associate Professor should have an established, funded research program. Interested applicants should send a current curriculum

Interested applicants should send a current curriculum vitae, a statement describing research achievements and future research plans, and the names and addresses of three references to:

Dr. Thomas Malek Chairman, Hematopoiesis Search Committee Department of Microbiology and Immunology University of Miami School of Medicine P.O. Box 016960 (R-138) Miami, FL 33101

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

FACULTY POSITION RESEARCH SCIENTIST

The Division of Nephrology and Hypertension at Harbor-UCLA Medical Center, Torrance, California, seeks an individual (Ph.D. or M.D.) with an established research program in cell/molecular biology, protein biochemistry, or genetics whose work is either directly or indirectly applicable to renal pathology, physiology, pathophysiology, or ontogeny. A generous recruitment package and substantial protected time are available. The ideal candidate would currently be nationally funded, and have an academic rank at the ASSOCIATE **PROFESSOR** level. Please send curriculum vitae to: Sharon Adler, M.D., Division of Nephrology, C-1 Annex, Harbor-UCLA Medical Center, 1000 West Carson Street, Torrance, CA 90509. E-mail: adler@harbor2.humc.edu.

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POSITIONS OPEN

NEUROBIOLOGY CARNEGIE MELLON UNIVERSITY

The Department of Biological Sciences at Carnegie Mellon University seeks to fill the first of three TEN-URE-TRACK FACULTY POSITIONS as part of an expansion in the area of neurobiology in collaboration with the Center for the Neural Basis of Cognition (CNBC). At least one appointment each is expected in invertebrate and vertebrate neurobiology. The successful candidates are expected to develop independent research programs and to participate in the teaching of undergraduate and graduate students. Preference will be given to candidates who use interdisciplinary approaches including molecular and genetic methods in tractable model systems. Specific research interests can include problems in developmental neurobiology, neuronal function, learning, memory, or other areas of cognitive/functional neuroscience. The successful candidates will benefit from the strengths of the CNBC in neurophysiology, functional imaging, behavioral analysis, and computational modeling of the neural basis of cognition, from existing strengths of the Department of Biological Sciences in cellular and developmental biology, genetics/molecular biology, microscopy, biological detection, imaging, and computing, and from the full breadth of the neuroscience community at Carnegie Mellon and the University of Pittsburgh. Applicants must have a Ph.D. and relevant postdoctoral experience. Please send a curriculum vitae and a description of the proposed research program and have three letters of recommendation sent to: Biological Sciences Search Committee, Carnegie Mellon Univer-sity, Mellon Institute, Box L, 4400 Fifth Avenue, Pittsburgh, PA 15213.

Our department is eager to diversify its faculty; we encourage women and minorities to apply. Carnegie Mellon University is an Equal Opportunity/Affirmative Action Employer.

JUNIOR AND SENIOR FACULTY POSITIONS IN BIOCHEMISTRY AND MOLECULAR GENETICS University of Virginia School of Medicine

The Department of Biochemistry and Molecular Genetics at the University of Virginia School of Medicine is undergoing a major expansion and is committed to developing into a center of excellence in all aspects of nuclear function. Applications are being accepted from outstanding Junior and Senior Scientists whose research programs address contemporary problems in chromatin structure, transcriptional regulation, DNA replication and repair, genome rearrangement, or related areas. At least one position will be filled by an individual studying macromolecular structure of nuclear components. Candidates should hold a Ph.D. and/or M.D. in an appropriate discipline and should have demonstrated the capacity to develop and/or maintain a high-quality research program. Support for these positions includes attractive laboratory space and start-up packages, as well as a first-rate and exceptionally interactive research community.

Interested individuals should submit biographical materials and have three letters of recommendation forwarded no later than March 15, 1998, to:

Chairperson Molecular Biology Search Box 440 Jordan Hall University of Virginia Health Sciences Center Charlottesville, VA 22908

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

DEAN COLLEGE OF NATURAL RESOURCES University of Wisconsin–Stevens Point

Nominations and applications are invited for the position of Dean of the College of Natural Resources. The Dean is the chief administrator of the largest undergraduate natural resources program in the United States. For full consideration, applications should be received by March 15, 1998. Applications must be accompanied by a résumé with the names, addresses, and telephone numbers of at least five references. The successful candidate will begin the position in August, 1998, or as soon as possible thereafter. For a complete position description, contact: M. S. Boyce, University of Wisconsin–Stevens Point, Room 202 Main Building, Stevens Point, WI 54481. E-mail: mboyce@uwsp.edu. The University of Wisconsin–Stevens Point is an Equal Opportunity/Affirmative Action Employer.



VION PHARMACEUTICALS, INC.

Vion Pharmaceuticals, Inc. is a biopharmaceutical company engaged in the discovery, development, and commercialization of cancer treatment and antivirals. We are seeking qualified individuals for the following positions:

Research Scientist — Molecular and **Cellular Biology**

Research involved with intratumoral prodrug conversion systems and peptide displays. Ph.D. required, preferably with concentration of research in drug metabolism and protein purification. Postdoctoral experience is preferred (molecular biology experience helpful); however, academic achievement will be considered in lieu of postdoc.

Senior Research Associate -**Chemical Process Research &** Development

Responsible for large-scale production of drug candidates through participating in the synthesis and characterization of target compounds using modern separation and spectroscopic techniques. B.S. in organic chemistry required (M.S. preferred), with a minimum of 3 years industrial experience in multistep synthesis.

Research Associates — Microbiology and Molecular Biology/Biochemistry

Performs scientific experiments with minimal supervision. Fluency in molecular biology/biochemistry is required. Academic preparation and/or experience in bacterial genetics, enzyme assays, and protein analysis would be a plus. B.S. with minimum of 2 years experience is required; would consider M.S. with less than 2 years experience.

Research Associates - In Vivo Tumor Biology

Responsible for in vivo tumor biology experimentation, including cell culture and in vivo drug screening. Candidates must have at least 2 years experience in tumor modeling, and be skilled at IV/IP injections. B.S. in a biological science is required; M.S. preferred.

Please send résumé with salary requirements and letters of reference to:

> Vion Pharmaceuticals, Inc. Four Science Park New Haven, CT 06511 **Attn: Human Resources**

Vion is an Equal Opportunity/Affirmative Action Employer.

Working on the molecular level to conquer, treat, or prevent debilitating diseases.

CNS DISCOVERY RESEARCH **AT SCHERING-PLOUGH**

At the Schering-Plough Research Institute in Kenilworth, NJ, scientists are discovering innovative therapeutic agents that challenge humankind's most debilitating diseases. If you are seeking an opportunity to be on the cutting edge of pharmaceutical discovery, become part of an advanced multidisciplinary research group focused on CNS disorders.

ASSOCIATE SCIENTIST Behavioral Pharmacology

We seek a talented scientist to join a team focused studying behavioral pharmacology in in vivo models of CNS disorders. To qualify, you will need a BS degree in Biology or a related field and at least 4 years of experience in behavioral pharmacology, or an MS and at least 2 years of experience. The ideal candidate will have had experience with the dopamine and cholinergic systems, and previous research experience investigating the mechanism of action of CNS drugs. To be considered for this position, please reference Dept. DD97-VC-BG.

SCIENTIST **CNS** Pharmacology

We seek a highly motivated team player to be responsible for performing in vivo experiments in a variety of CNS and metabolic disease areas. To qualify, you will need a BS degree in Biology or a related field and at least 7 years of experience, or an MS degree and at least 5 years of experience. Background must include prior laboratory experience using in vivo techniques and radiolabeled substances. Previous experience using models of blood/brain barrier and/or gastrointestinal-renal function is preferred. To be considered for this position, please reference Dept. DD97-PJC-BG.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to apply on-line at http://www.sp-research.com or send a scannable resume and cover letter, original copy only, referencing the Dept. Code for your position of interest, to: Schering-Plough Research Institute, MS #1250, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.



Research Institute

Using Science for Human Advantage

FACULTY POSITIONS STANFORD UNIVERSITY SCHOOL OF MEDICINE Department of Genetics

The Department of Genetics at the Stanford University School of Medicine is seeking qualified applicants for tenure-track positions at the **ASSISTANT PROFESSOR** level.

The Department is moving into newly renovated laboratories and has established programs in genetic studies of a wide variety of eukaryotic and prokaryotic organisms.

Candidates should have a strong record of research accomplishment in any field of genetics, and should expect to become involved in teaching human and/or general genetics to medical students and graduate students.

Candidates should send their curriculum vitae, bibliography, statement of research interests, and the names of three references to: Dr. David Cox, Search Committee Chairman, c/o Louann Kosmerl, Department of Genetics, School of Medicine, Stanford University, Stanford, CA 94305-5120.

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

PHYSICS FACULTY POSITION INDIANA UNIVERSITY

Applications are invited for a TENURE-TRACK faculty position in physics, available in the fall of 1998. We seek outstanding candidates with demonstrated ability to initiate and lead a vigorous and innovative program of interdisciplinary experimental research at the interface of physics with chemistry and biology. We are especially interested in candidates with experience in scanning-probe and imaging methods and/or optical-trapping and manipulation techniques. An appointment at a more senior level could be considered for a truly exceptional candidate. Each application should include a curriculum vitae, a description of research interests and accomplishments, and a list of publications. Candidates should also have at least three letters of reference sent to: Professor Alan Kostelecký, Chair, Attn: Faculty Search, Swain Hall West 117, Department of Physics, Indiana University, Bloomington, IN 47405 USA. Applications received before March 15, 1998, may receive preference. Indiana University is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

The Pennington Biomedical Research Center at Louisiana State University invites applications for a faculty position at the **RESEARCH ASSISTANT PROFES SOR, INSTRUCTOR, or RESEARCH ASSOCI-ATE** level. Applicants should have a Ph.D. or equivalent degree with a strong background and expertise in molecular and cell biology. The individual selected will participate in ongoing studies aiming to understand the role of cyclooxygenase in tumorigenesis at **Dr. Daniel Hwang's** lab. Rank and competitive salary will be commensurate with the applicant's qualifications. Further information may be obtained by **Telephone: 504-763-2518**; e-mail: hwangdh@mhs.pbrc.edu.

Evelyn P. Bennett, Assistant Director, HRM Ref: Hwang Pennington Biomedical Research Center 6400 Perkins Road

Baton Rouge, LA 70808

Lonisiana State University/Pennington Biomedical Research Center is an Equal Opportunity/Affirmative Action Employer.

AOUATIC SYSTEMS ECOLOGIST/LIM AQUATIC SISTEMS ECOLOGIST, James NOLOGIST, Texas A&M University System (TAMUS) invites applications for a tenure-track ASSISTANT PROFESSORSHIP, with joint appointment in wildlife and fisheries sciences (90 percent) and oceanography (10 percent). The appointee will hold an earned doctorate in aquatic ecology, limnology, or related discipline. She or he will teach an undergraduate course in limnology and a graduate specialty course, annually; mentor graduate students; conduct extramurally funded research in aquatic systems ecology; and otherwise participate in one or more of TAMUS' acclaimed programs in fisheries science, estuarine ecology, and aquaculture (website: http://www. tamu.edu/). Send application letter, résuné, and names/addresses of three references by 10 March 1998 to: Dr. W. H. Neill, Department of Wildlife and Fisheries Sciences, Texas A&M University System, College Station, TX 77843-2258. E-mail: wneill@ tamu.edu. TAMUS is an Equal Opportunity Employer and encourages applications from women and minorities

POSITIONS OPEN

CHRONIC DISEASE EPIDEMIOLOGISTS

The Columbia School of Public Health is seeking one or two Chronic Disease Epidemiologists to fill faculty positions in the Division of Epidemiology. Responsibilities will include participating in existing divisional research, developing and obtaining funding for new research, and contributing to an active Master's and doctoral teaching program. Qualifications include a Ph.D. or Dr. P.H. in epidemiology or related area or M.D. with a Master's degree in epidemiology or related field and a minimum of several years of postdoctoral experience.

While areas of particular interest include molecular/ genetic epidemiology and radiation epidemiology, we are seeking to attract the most outstanding candidates in any area of chronic disease epidemiology.

This is a tenure-track appointment, which could be made at the ASSISTANT, ASSOCIATE, or FULL PROFESSOR level.

Assistant Professor of epidemiology experience: clearly demonstrates the potential to achieve national and international prominence through publication record and established research.

Associate Professor of epidemiology experience: nationally and internationally recognized as having an exceptional impact on his/her field of study. Strong publication record and clear leadership record.

Professor of epidemiology experience: nationally and internationally recognized as having an exceptional impact on his/her field of study. One of the world's leading experts who would bring to Columbia a unique and unquestionable research achievement as evidenced by publications, honors, and peer review.

Please send applications in writing to: Geoffrey R. Howe, Ph.D., Professor and Division Head, Division of Epidemiology, Columbia School of Public Health, 600 West 168th Street, Room PH 18-119, New York, NY 10032. Federal Express street address: 622 West 168th Street. FAX: 212-305-9413; e-mail: gh68@columbia.edu.

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ASSISTANT PROFESSOR IMMUNOLOGIST/VIROLOGIST SOUTHEASTERN LOUISIANA UNIVERSITY

The Department of Biological Sciences at Southeastern Louisiana University invites applications for a tenure-track Assistant Professor of immunology and/or virology available August 1998. Applicants are required to have a Ph.D. in biological sciences and postdoctoral training. The incumbent will maintain an active research program, direct undergraduate and graduate students (M.S. candidates), and participate in teaching at the undergraduate and graduate level in immunology, virology, genetics, and/or cell biology. Visit our website: http://www. selu.edu/biology for more information on the department. Salary is commensurate with experience and qualifications. Deadline for applications is February 27, 1998. Applicants should submit a curriculum vitae, summary of research interests and teaching philosophy, three current letters of reference, and a copy of all transcripts (originals required upon employment) to: **Dr. Gary T. Howard**, Chair, Immunology/Virology Faculty Search Committee, Department of Biological Sciences, Southeastern Louisiana University 736, Hammond, LA 70402. Southeastern Louisiana University is an Affirmative Action/ADA/ Equal Employment Opportunity Employer

FACULTY POSITION IN LIVER RESEARCH UNIVERSITY OF CALIFORNIA, SAN FRANCISCO Liver Center Laboratory San Francisco General Hospital

Position available for an ASSISTANT/ASSOCIATE PROFESSOR of medicine in residence with an interest in inflammation or immunology as it relates to liver disease. Candidates may have M.D. or Ph.D. degree. Position allows 80 percent time for bench research; 20 percent time will be devoted to clinical or teaching activity. Applicants must have an independent research program. Please forward a curriculum vitae and summary of research interests to: D. Montgomery Bissell, M.D., University of California, San Francisco, Box 0538, San Francisco, CA 94143-0538. University of California, San Francisco is an Affinative Action/Equal Opportunity Employer. The University undertakes Affirmative Action to assure Equal Employment Opportunity for underutilized minorities and women, for persons with disability, and for Vietnam-era vetevans and special disabled veterans.

POSITIONS OPEN

MEDICAL UNIVERSITY OF SOUTH CAROLINA

ASSISTANT or ASSOCIATE PROFESSOR. The Division of Pediatric Cardiology and Department of Cell Biology invite applications for a tenure-level faculty position. Applicants must have a Ph.D. and/or M.D. degree with at least two years of postdoctoral research experience. Applications in any area of human or mouse molecular genetics will be considered, but we are particularly interested in candidates with experience in the molecular genetics of cardiovascular development. The candidate is expected to maintain an active and ongoing research program in the genetics of cardiovascular malformations. Candidates should initially provide a statement of interest and qualifications, a summary of research objectives, a curriculum vitae, and the names, addresses, and telephone numbers of at least three references.

RESEARCH ASSISTANT PROFESSOR. Research Assistant Professor position for a Ph.D. available immediately for research on genetic basis of human cardiac malformations. Use genetic linkage analysis, positional cloning, gene mapping, and automated sequencing to identify mutations that cause congenital heart defects. Manage laboratory operations and assist preparation of grant proposals. Potential for eligibility for faculty appointment. Send curriculum vitae and the names, addresses, and telephone numbers of at least three references.

All information should be addressed and sent directly to: D. Woodrow Benson, M.D., Ph.D., Director of Cardiovascular Genetics, The Children's Heart Center, Medical University of South Carolina, Charleston, SC 29425-0680.

The Medical University of South Carolina is an Equal Opportunity/Affirmative Action Employer. Women and other minorities are encouraged to apply.

NEUROBIOLOGIST MARINE BIOLOGICAL LABORATORY

The Marine Resources Center of the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts invites applications and nominations for a Neurobiologist at the ASSISTANT or ASSOCIATE SCIENTIST level (equivalent to Assistant or Associate Professor). Preference will be given to candidates who use marine or aquatic organisms as models in biomedical or basic biological research. The general area of interest is broad-brain function and behavior-but should include some aspect of molecular or cellular neurobiology. The Center has superb new facilities for experimentation on, and culture of, aquatic organisms. Resident and visiting MBL scien-tists provide excellent opportunities for collaboration in many areas of neuroscience, especially in sensory biology. A Ph.D. and strong postdoctoral experience are required. The successful candidate will be expected to establish, or to continue, a vigorous extramurally funded research program. An attractive start-up support package is provided. Applicants should supply a letter explaining their research interests and professional goals, a curriculum vitae, and names and addresses of three references. The search will remain open until filled, but initial review of applications will begin on 3 April 1998. Please apply to: Human Resources, Marine Biological Laboratory, 7 Marine Biological Laboratory Street, Woods Hole, MA 02543. Telephone: 508-289-7422; e-mail: resume@ mbl.edu.

Equal Opportunity/Affirmative Action/Nonsmoking workplace.

ASSISTANT PROFESSOR NEPHROPATHOLOGY

Columbia University College of Physicians and Surgeons in New York City seeks M.D. or M.D.-Ph.D. for Assistant Professor-level position in the Department of Pathology, available July 1, 1998. Applicants must have completed a residency in anatomic pathology and at least one year of formal fellowship training in nephropathology, with expertise in clinical (light microscopy, immunofluorescence, electron microscopy) and research aspects of renal pathology. Candidates must be prepared to handle clinical responsibilities of busy nephropathology practice and establish productive research program. Applicants should send curriculum vitae, two-page summary of research interests and plans, and two letters of recommendation to: Dr. Vivette D'Agati, Renal Pathology Laboratory, VC14-224, Columbia University College of Physicians and Surgcons, 630 West 168th Street, New York, NY 10032. Columbia University takes Affirmative Action to ensure Equal Opportunity.



EMPLOYMENT OPPORTUNITIES Salt Lake City, UT

Myriad Genetics is an innovative genomics company focused on the isolation of significant disease-causing genes. Our scientific achievements include elucidating the role of the p16 tumor suppressor gene in cancer and identifying genes involved in breast, ovarian, and brain cancer. We currently have major programs in asthma, cancer, central nervous system disorders, coronary heart disease, obesity, and osteoporosis. Expansion of our gene identification and gene characterization efforts provides a number of exciting opportunities for highly motivated individuals. To learn more, visit our Web Page at: www.myriad.com.

Statistics and Informatics

Myriad is searching for applicants to join its Statistics and Informatics group. The group, currently 12 people, is led by Dr. Alun Thomas and works in computer support, databases, software development and statistics. Salaries dependent on qualifications and experience.

Statistician

The successful candidate should have an MSc in statistics with a significant computational emphasis. Experience in problems in genetics or epidemiology would be an advantage, as would experience with UNIX, Splus, and C, C++ or Java programming.

Programmer

The successful candidate should have a BSc in Computer Science, or equivalent and have two years' experience in C, C++ or Java programming on a UNIX platform. Knowledge of Sybase and GUI programming would be a considerable advantage.

Sequence Analysts

You will be part of a team that is analyzing molecular sequence data curating a database of biological information. Requires a M.S. or B.S. degree in biology and relevant computer (UNIX, MacOS) experience. Familiarity with GenBank, search algorithms (e.g. Blast), assembling molecular sequence data, and Sybase/SQL is preferred.

We offer an attractive compensation package and a stimulating, interactive research environment. Please mail or fax a cover letter, specifying the position you are applying for, a complete resume, and the names of three professional references to: Human Resources Department, Myriad Genetics, Inc., 320 Wakara Way, Salt Lake City, UT 84108. FAX: 801-584-3640. EOE.



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And we're even more focused on the future. That's why our entire organization from agricultural biotechnology to pharmaceuticals to food ingredients, is dedicated to life sciences. Now, we can answer the questions, needs and demands of our ever-changing planet. After all, the world's resources are finite, but our vision for the future is limitless. We're currently seeking the following professionals to join our organization:

POSTDOCTORAL: HEMATOPOIESIS AND SIGNAL TRANSDUCTION (Searle Research and Development Sector)

The selected individual will study novel growth factors mediated signal transduction, and participate in team-based science which includes involvement with growth factors mediated gene regulation using molecular and advanced genomics approaches. We require a Ph.D. with demonstrated knowledge of molecular and cell biology. Experience in cell culture is essential. Publications and presentations at scientific meetings are highly encouraged. **Job Code: PD-HST**

POSTDOCTORAL: PLANT PHYSIOLOGY (Ag Sector)

The selected individual will be a highly motivated team player interested in potato physiology. Working experience with potatoes, water relations, plant nutrient requirements, growth regulators, and/or isotope labeling beneficial. We require a Ph.D. and demonstrated experience in growth physiology, plant development or seed physiology. Job Code: PD-PP

RESEARCH SCIENTIST, CARDIOVASCULAR & DIABETIC DISEASE (Pharma Sector)

The selected individual will conduct biomedical research aimed at identifying novel therapeutic agents to treat diabetes mellitus, specifically, non-insulin dependent diabetes and its associated vascular complications. Additional responsibilities include planning/performing experiments using both biochemical and cellular models of diabetes to identify new approaches to the treatment of the disease. Must be self-motivated, independent and possess a strong background in biomedical techniques and a high level of understanding of the biochemical defects in non-insulin-dependent diabetes mellitus. Record of prior accomplishments in the area of diabetes and post doctoral experience preferred. Job Code: RS-CDD

RESEARCH BIOLOGIST, CARDIOVASCULAR & DIABETIC DISEASE (Pharma Sector)

The selected individual will conduct biomedical research aimed at identifying novel therapeutic agents to treat diabetes mellitus, specifically non-insulin dependent diabetes and its associated vascular complications. Additional responsibilities include planning/performing experiments using cellular and biochemical models of diabetes to identify new approaches to the treatment of this disease. We require a BS/MS in Biology/Biochemistry or related discipline, as well as two year's experience in biochemical assay development or enzymology. Must be able to critically analyze experimental data and coordinate/plan scientific studies to meet aggressive timelines. Job Code: RB-CDD

ANALYTICAL/NATURAL PRODUCTS CHEMIST (Pharma Sector)

The selected individual will join our Discovery Research Program as a Research Chemist in our High Throughput Screening (HiTS) Group. Your major responsibility will be to isolate and elucidate structures of biologically active small molecules from natural products and combinatorial chemistry. This position relies heavily on applied laboratory research to accomplish these objectives. The independently motivated individual will be computer literate with solid database searching skills, have extensive experience in HPLC chromatography method development, and possess a broad knowledge of spectral analysis. Specifically, significant experience in NMR and other spectroscopic techniques with 1D NMR interpretation skills required and 2D NMR interpretation skills a plus. Synthetic chemistry skills are also desirable. Development and innovation of technologies is an ongoing effort of our group. The qualified candidate will have a Ph.D. or equivalent industrial experience. Good organizational, communication, and interpresonal skills are required as you will be working in an interdisciplinary team atmosphere, collaborating with biologists, biochemists, and pharmacologists. Job Code: NPC

We offer market salaries and excellent benefits including tuition reimbursement, matching 401(k) programs, incentives based on company performance and success sharing programs! For consideration, please forward your resume to: Monsanto Company, Job Code: ______ (select from above), 700 Chesterfield Pkwy, Mail Code: BB5B, Chesterfield, MO 63198. EEO/AA Employer M/F/D/V. Visit our website at www.monsanto.com



ASSISTANT PROFESSOR FOOD MICROBIOLOGY DEPARTMENT OF ANIMAL SCIENCE University of Connecticut

The University of Connecticut invites applications for an Assistant Professor of food microbiology in the Department of Animal Science. This is a nine-month, tenure-track position with a 70 percent research, 30 percent teaching appointment. The individual's research focus is open, but should emphasize modern and classical approaches to contemporary problems in food safety and microbiology (e.g., identifying modes of pathogenicity, attachment or invasion, and/or detection methods). The successful applicant is expected to develop a vigorous independent, extramurally funded research program, an undergraduate course in food microbiology, and will participate in a team-taught food safety class. Participation in outreach programs of the Department and the Center for Environmental Health is expected. The successful applicant will have a Ph.D. in microbiology/food microbiolo-gy, biochemistis, or related disciplines, with preference given to candidates with postdoctoral experience. Information on the department and its programs may be found website: http://www.canr.uconn.edu/ansci/. Highly competitive salary/benefits and laboratory startup packages are available. Applicants should submit a curriculum vitae, a brief statement (two pages or less) of research and teaching interests, and the names of five individuals (including FAX number and e-mail) willing to provide letters of recommendation, to: Dr. Lawrence Silbart, Food Microbiology Search Committee Chair, The University of Connecticut, Department of Ani-mal Science, Box U-39, Storrs, CT 06269. Evaluation of applications will begin on March 13, 1998, and will continue until a suitable candidate is identified. We encourage applications from underrepresented groups including minorities, women, and people with disability. (Search# 98A278)

ASSISTANT PROFESSOR PHYSIOLOGY SOUTHEASTERN LOUISIANA UNIVERSITY

The Department of Biological Sciences at Southeastern Louisiana University invites applications for a tenuretrack Assistant Professor in the discipline of animal physiology available August 1998. The specific area of re-search is open. Applicants are required to have a Ph.D. in biology and postdoctoral research experience. The incumbent will teach an undergraduate course in comparative physiology, as well as undergraduate and graduate courses in his/her specialty. The incumbent will establish a research program that involves both undergraduate and graduate students (M.S.-level program). For specific information concerning the Department of Biological Sciences, refer to our website: http://www.selu.edu/ biology. Salary is commensurate with experience and qualifications. Deadline for applications is February 27, 1998. Send letter of application, curriculum vitae, the names and addresses of five references, three current letters of reference, a description of research and teaching interests, and a copy of all transcripts (originals required upon employment) to: Dr. Nick Norton, Head, Department of Biological Sciences, Southeastern Louisiana University 335, Hammond, LA 70402. Southeastern Louisiana University is an Affirmative Action/ADA/Equal Employment Opportunity Employer.

ASSISTANT PROFESSOR LIPID BIOCHEMIST

A non-tenure-track position is available immediately for a Ph.D. to join a program at the University of Texas Medical School-Houston, examining changes in lipid metabolism following experimental traumatic brain injury. The Medical School is located in the Texas Medical Center, a leading biomedical research location. The candidate would interface closely with an established program examining molecular and biochemical mechanisms of brain injury focusing on the development of new therapies. Previous experience in studies of lipid second messengers and metabolites as well as a strong interest in therapy development is preferred. Position includes salary and fringe benefits.

Please send curriculum vitae and names of three references to: Dr. Ronald L. Hayes, Ph.D., Department of Neurosurgery, University of Texas-Houston Medical School, 6431 Fannin, Suite 7.154, Houston, TX 77030. E-mail: rhayes@hcart.med.uth.tmc.edu; FAX: 713-500-7787. The University of Texas-Houston is an Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR ANIMAL GENETICS DEPARTMENT OF ANIMAL SCIENCE University of Connecticut

The University of Connecticut seeks an Assistant Professor of animal genetics in the Department of Animal Science. This is a nine-month tenure-track position with 70 percent research and 30 percent teaching responsibilities in the area of molecular genetics of animals. The successful candidate is expected to establish a vigorous extramurally funded program in the area(s) of molecular genetics and (or) gene expression. Teaching responsibilities include an undergraduate course in animal genetics and a course in the candidate's area of expertise. Candidate must have a Ph.D. in animal genetics, molecular genetics, or a closely related field. Postdoctoral experience and demonstration of success in attracting extramural funds is preferred. Information on the department and its programs are maintained at website: http://www.canr. uconn.edu/ansci/. Applicants should submit a curriculum vitae, a brief statement (two pages or less) of research and teaching interests, undergraduate and graduate transcripts, list of publications, and the names and addresses (including FAX and e-mail) of at least five individuals willing to provide letters of recommendation. Applications should be sent to: Dr. Steven A. Zinn, Chairman, Animal Genetics Search Committee, University of Connecticut, Animal Science Department, 3636 Horsebarn Road Ext., Storrs, CT 06269-4040. Telephone: 860-486-0861; FAX: 860-486-4375; e-mail: szinn@anscl.cag.uconn.edu. Screening will begin February 28, 1998, and continue until a suitable candidate is identified. The University of Connecticut encourages applications from underrepresented groups including minorities, women, and people with disability. (Search# 98A264)

IMMUNOLOGIST

The Department of Biological Sciences at DePaul University seeks an Immunologist with a strong commitment to undergraduate education for a tenure-track position at the ASSISTANT PROFESSOR level beginning September 1, 1998. Ph.D. is required; postdoctoral and previous teaching experience are preferred. Teaching respon-sibilities include intermediate-level undergraduate course in immunology (with lab) and microbiology (with lab); graduate/advanced undergraduate course(s) in candidate's area of expertise; and teaching general education courses for non-majors, including lab. An active and productive research program in immunology is required. All subdisciplines will be considered, and use of molecular or cellular techniques in research program desirable. Animal care facilities in a new Biology/Environmental Sciences Building will be available. Applications will be accepted until position is filled. Please send curriculum vitae, three letters of reference, statement of teaching and research interests, statement of educational philosophy, and list of equipment/supply needs with cost estimates to: Immunologist Search Committee, Department of Biological Sciences, DePaul University, 1036 West Belden Avenue, Chicago, IL 60614. Additional inquiries to above address, or FAX: 773-325-7596; e-mail: jdean@condor.depaul.edu. DePaul University, the employer of choice, is committed to diversity and equality in education and employment.

University of Alaska–Fairbanks Department of Anthropology and University of Alaska Museum seek BIO-LOGICAL ANTHROPOLOGIST for a joint, tenuretrack ASSISTANT PROFESSOR/CURATOR of biological anthropology to begin August 1998. Normal teaching load is two courses per semester, with undergraduate and graduate courses in physical and biological anthropology. Develop and secure funding for a research program involving students.

Expertise in human evolution and human biology; any specialization within biological anthropology considered. Expertise and demonstrated research experience in forensics, paleopathology, or any research on health and/or disease over variable periods of time preferred. Ph.D. at time of hire required; postdoctoral and teaching experience preferred. Circumpolar research interests preferred; other areas of geographic interest considered.

Letter of application, curriculum vitae, three letters of reference, publication reprints, and documentation of teaching experience to: S. Craig Gerlach, Ph.D., University of Alaska-Fairbanks, Department of Anthropology, P.O. Box 757720, Fairbanks, AK 99775-7720 by Monday, March 16, 1998. Women and minorities are encouraged to apply.

POSITIONS OPEN

ASSOCIATE PROFESSOR OR PROFESSOR POSITION STANFORD UNIVERSITY SCHOOL OF MEDICINE Department of Health Research and Policy Division of Biostatistics

Stanford University School of Medicine has opened a full-time position at the rank of Associate Professor or Professor with tenure in the Division of Biostatistics, Department of Health Research and Policy. We are interested particularly in candidates who received a Ph.D. degree (or equivalent) no more than 15 years ago and who have outstanding records in methodologic research and in collaboration and consultation with others in biomedical research. The candidate will be expected to develop a program of research and to participate in teaching programs for medical students, graduate students, and Postdoctoral Fellows in the School of Medicine. Participation in the programs of the Department of Statistics in the School of Humanities and Sciences, including instruction of graduate students, will be encouraged. Salary and rank will be commensurate with qualifications and experience. If you are interested in this position, send a copy of your curriculum vitae, a brief letter outlining your interests, and the names of three references to: Mark Hlatky, M.D.

Mark Hlatky, M.D. Chair, Department of Health Research and Policy Stanford University School of Medicine HRP Redwood Building, Room T150 Stanford, CA 94305-5405

Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.

BIOCHEMISTRY AND CELL/ MOLECULAR BIOLOGY AUBURN UNIVERSITY

Tenure-track ASSISTANT PROFESSOR. Minimum requirements are a Ph.D. and postdoctoral training in biochemistry or cellular/molecular biology and competence with contemporary molecular approaches relevant to agricultural and biomedical sciences. The successful candidate will establish an independent, extramurally funded research program on molecular mechanisms of growth and development (emphasis on lipid metabolism preferred) in animals and work collaboratively with other researchers and contribute to excellence in biochemistry instruction. Teaching duties include courses in advanced metabolism. Position includes competitive salary, start-up funds, space, and technical support. Applicants should submit a letter of interest, current curriculum vitae, list of coursework, research plan, teaching experience, selected reprints, and names, addresses, and telephone numbers of three professional references to: Biochemis-try Search, Dr. Werner G. Bergen, Department of Animal and Dairy Sciences, 209 ADS Building, Au-burn University, AL 36849-5415. Telephone: 334-844-1523; FAX: 334-844-1519; e-mail: wbergen@ acesag.auburn.edu. Review of applications will begin April 15, 1998, and continue until a qualified applicant is selected and recommended for appointment.

Aubum University is an Equal Opportunity/Affirmative Action Employer; Minorities and women are encouraged to apply.

APPLIED MICROBIOLOGY TEXAS A&M UNIVERSITY-COMMERCE

ASSISTANT PROFESSOR. Ph.D. required in microbiology. Beginning August 1998. Must be qualified to teach in two of the areas of applied, environmental, or systematic microbiology. Must also participate in the overall teaching of a biological sciences curriculum. Strong commitment to teaching, research, service, and the ability to attract external research funds must be documented. Must have a desire and capability to enhance and support the newly developing interdisciplinary envi-ronmental science program. Experience in thermophilic aerobic microbial decomposition to join a funded existing team studying composting of by-products and wastes of modern agriculture and industry is preferred. Responsibilities include teaching, research, and student advising and service. Proof of eligibility to work in the United States is required of all job applicants. Send an application letter, résumé, transcripts, research agenda, teaching philosophy, and names and addresses of three references to: Dr. Don Royce Lee, Chair of Search Committee, Department of Biological and Earth Sciences, Texas A&M Univer-sity-Commerce, Commerce, TX 75429-3011. Deadline March 1, 1998. Equal Opportunity/Affirmative Action Employer

UCLA: BIOGEOCHEMICAL CYCLES (2 POSITIONS)

The Institute of Geophysics and Planetary Physics at UCLA invites applications for two faculty positions in biogeochemistry/geobiology, as applied to the study of global biogeochemical cycles. The appointments are offered at a junior level, but senior appointments are not excluded. They will be made jointly with one or two of the Departments of Atmospheric Sciences, Biology, Chemistry & Biochemistry, Earth & Space Sciences, Microbiology & Molecular Genetics, and the Institute of the Environment, depending on the interests of the successful candidates. Specializations in light isotope geochemistry, marine or terrestrial ecosystems, Earth history, climate, or life in extreme environments are especially welcome.

Applications should include a curriculum vitae, a list of publications, a short statement of teaching and research interests, and the names of three or more individuals familiar with the candidate's work. Formal consideration of applications will commence after February 1, 1998, and the positions will remain open until filled. UCLA is an Affirmative Action/Equal Opportunity Employer. Minorities and women are encouraged to apply.

Applications to: Professor Michael Ghil, Director, Institute of Geophysics and Planetary Physics, University of California, Box 951567, Los Angeles, CA 90095-1567

Enquiries to: Co-Chairs of Search Committee, Professors James C. McWilliams (jcm@atoms. ucla.edu) and Bruce Runnegar (runnegar@ ucla.edu)



Bigelow Chair of Consciousness Studies

The College of Sciences of the University of Nevada, Las Vegas invites applications for a one-year visiting appointment as the Bigelow Chair of Consciousness Studies. We seek candidates who represent scholarly endeavor within the full range of interests in the developing scientific inquiry into human consciousness, from the neurobiological to the consideration of the persistence of consciousness following bodily death. The ap-pointee will be an established scholar and teacher of exceptional talent; further, we expect the chairholder to foster a discussion, teaching, and research environment concerning this subject that is objective and firmly grounded in the scientific method. Appointment as the 1998-99 Bigelow Chair of Consciousness Studies is intended to start in time for the Fall 1998, academic semester. Salary commensurate with qualifications and experience. Review of applications will begin February 20, 1998, and will continue until the position is filled. For more information, see the UNLV World Wide Web site at http://www. unlv.edu

Applications should be directed to the **Bigelow Chair** Search Committee, Office of the Associate Dean, College of Sciences, University of Nevada, Las Vegas, 4505 S. Maryland Parkway - Box 454001, Las Vegas, NV 89154-4001.

The University of Nevada, Las Vegas is an Affirmative Action/Equal Opportunity Employer. Applications from women, veterans, the disabled, and from members of underrepresented minority groups are particularly encouraged.

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to achieve unparalleled excellence, quality and prosperity in our business. We offer an environment that seeks a balance between work and life activities, reflected in our comprehensive benefit package which includes on-site fitness facilities, daycare and an informal work environment. Currently we are seeking these individuals to join our team in Madison, WI:

R & D Senior Scientists and Scientists-Molecular Genetics and Molecular Biology

As an established world leader in biotechnology and consistently recognized as a progressive employer, we are significantly expanding our successful efforts in research and product development. This growth will focus on nucleic acid purification, amplification, fluorescent detection and automation of these processes with special application to molecular diagnostics, forensic science and paternity determination. Several experienced individuals are needed at all levels to support growth:

Senior Project Leader-Genetic Analysis

A Ph.D. and 7+ years' industrial/clinical R&D experience related to nucleic acid analysis in a molecular biology or related industry are required. Demonstrated success in leading projects resulting in development of products used in instrumentation and 2+ years' team leadership experience over multidisciplinary

Senior Scientist-Molecular Genetics

teams is essential.

You will play an integral role in the development of products and technologies for analysis of genetics and infectious diseases and cancers. A Ph.D. and 2+ years' post-doctoral laboratory experience (preferably American Board of Medical Genetics Certified in Clinical Genetics or related field) are reauired.

Senior Scientist - Molecular Biologist

A Ph.D. and two years postdoctoral experience for development of new technologies and products related to nucleic acid purification, amplification, detection, and preferably automation of these techniques are required. Proven organizational and communication skills required, and experience in forensic science given special consideration.

Scientists-Molecular Biologists

An MS or BS in Molecular Biology or related field and 2 years' full-time laboratory experience (with an interest in the methods described above) are essential.

For these positions a background in Molecular Genetics, Molecular Biology or related area and experience with the analysis of nucleic acids (i.e. purification, amplification, detection, automated formats) with a demonstrated record of success are required. The ability to interpret and communicate scientific results while interacting independently/productively with a team of Scientists; and excellent oral and written English communication skills are also required. Preference will be given to candidates with experience handling clinical or forensic materials and to those who possess familiarity with computer-based analyses such as national genome databases, DNA analysis software and common software packages such as Word, Excel, FoxPro and PowerPoint.

Production Manager

A BS in Molecular Biology, Biotechnology, Microbiology or related discipline; 5-8 years' experience in production and process/systems optimization in a health science, biotechnology or pharmaceutical manufacturing environment; 5+ years' supervisory experience required as well as experience with molecular biology/in vitro translation techniques are required. Experience leading projects; knowledge of biologicals manufacturing QC system; a record of improving manufacturing processes in a multi-product manufacturing environment; and experience planning for resource and equipment manufacturing needs are essential.

Preference will be given to those who possess an MS/Ph.D. in a biological or engineering field; demonstrated knowledge using statistical and process mapping tools to increase the efficiency of experimental design, process monitoring and process control; good business/management understanding; and experience working in an ISO or GMP environment. Job Code: 12104-LMSCI

For confidential consideration, please mail or e-mail your resume with salary requirements, indicating the job code or position title of interest, to: Promega Corporation, P.O. Box 7879, Madison, WI 53707-7879. E-mail: hr@promega.com. To find out about other opportunities at Promega call our Career Opportunities Line at (800) 356-9526 option 9. Visit our website at www.promega.com EOE

Team Leader/Supervisor-Production

Using experience interacting with R&D as well as outside vendors to facilitate product transfer and development, you will supervise and manage daily activities within our Molecular Biology Reagents group in production. Two years' supervisory and project management experience; an MS or Ph.D. in Molecular Biology, Microbiology, Biochemistry or related field; demonstrated experience with enzyme assay development and optimization for molecular biology applications (preferably more than one assay) are required. A proven record of experimental design along with problem solving skills is essential. Job Code: 12104-LMREPSCI

Senior R&D Scientist-Cell Regulation

A Ph.D. in Cell Biology or related discipline, 2 years' post-doctoral experience and demonstrated knowledge and experience in cell signaling are required. Immunological experience is preferred. Job Code: 11104-CellReg



MATHEMATICAL/STATISTICAL MOLECULAR BIOLOGY, BIOINFORMATICS

The Biomathematics Graduate Program of the Department of Statistics at North Carolina State University invites applications for a tenure-track position at the AS-SISTANT PROFESSOR level. The successful candidate will have a Ph.D. in a relevant field such as statistics, mathematics, or genetics, and a record of achievement in the application of computational, mathematical, and statistical techniques to research in molecular biology, with special consideration given those with experience in functional genomics. He or she will be prepared to teach mathematical biology and statistics at the undergraduate and graduate levels as well as to continue to conduct high-quality research. Additional information about the department and the relevant programs can be found at website: http://www.stat.ncsu.edu/ and the links from there to Statistical Genetics and Biomathematics. Please send application letter, curriculum vitae, and arrange to have three letters of recommendation sent to: Biomathematics Search Committee, CB 8203, Department of Statistics, North Carolina State University, Raleigh, NC 27695-8203. Applications will be accepted by e-mail: kepler@unity.ncsu.edu. Application deadline is 20 February 1998 or until position is filled. Affirmative Action/Equal Opportunity Employer. Minority and women candidates are encouraged to apply.

ASSISTANT PROFESSOR MOLECULAR BIOLOGY/GENE THERAPY

A non-tenure-track position is available immediately for a Ph.D. to join an established program developing non-viral vectors for potential gene therapies for traumatic brain injury and spinal cord injury at the University of Texas Medical School-Houston. The Medical School is located in the Texas Medical Center, an internationally recognized biomedical research location. The candidate would interact extensively with an established interdisciplinary program examining molecular and biochemical mechanisms of brain injury focusing on the development of new therapies. Previous experience with plasmid constructs, viral and non-viral vectors systems, assessments of mRNA and protein, as well as a strong interest in therapy development is preferred. Position includes salary and fringe benefits.

Please send curriculum vitae and names of three references to: Dr. Guy L. Clifton, M.D., Professor and Chairman, Department of Neurosurgery, University of Texas-Houston Medical School, 6431 Fannin, Suite 7.148, Houston, TX 77030. FAX: 713-500-7787. The University of Texas-Houston is an Equal Opportunity/Affirmative Action Employer.

The Department of Chemistry at the University of Alabama is seeking an outstanding individual to fill a tenuretrack **ASSISTANT PROFESSOR** position in biochemistry starting August 16, 1998. The successful applicant is expected to have a Ph.D. and postdoctoral experience in chemistry, biochemistry, or a related field and to teach and develop a vigorous externally funded Ph.D.-level research program in biochemistry. The area of biochemistry is open, but the applicant will be expected to participate in the University's biochemistry/molecular biology coalition and potentially other areas of interdisciplinary research. All interested applicants are asked to send a curriculum vitae, publications list, and statement of research plans and to arrange for three letters of recommendation to be sent to: Chairman, Biochemistry, Sox 870336, The University of Alabama, Tuscaloosa, AL 35487-0336. Review of applications will begin January 1, 1998, and continue until the position is filled. *The University of Alabama is an Equal Opportunity/Affimative Action Employer.*

ASSISTANT EDITOR

Nature Medicine seeks an Assistant Editor for a sixmonth period, starting immediately. The ideal candidate should have a solid biomedical research background combined with an interest in editing and publishing. The primary qualifications are a Ph.D. in the biological sciences and a broad interest in science. Please submit a curriculum vitae, names and addresses of three references, a concise letter stating your qualifications and interest in the post, and a 500-word News and Viewsstyle article on a subject of your choice to: The Editor, Nature Medicine, 345 Park Avenue South, 10th Floor, New York, NY 10010-1707. FAX: 212-683-5751; e-mail: medicine@natureny.com.

The Laboratory of Immunopathology (LIP), National Institute of Allergy and Infectious Dis-eases seeks an M.D. or Ph.D. INVESTIGATOR at the Professor level to serve as HEAD of a section within the Laboratory. The LIP conducts basic research in murine retroviral pathogenesis and immunopathology. Preference will be given to individuals whose area of research provides interaction with other programs of LIP. The select-ed individual will be provided with a tenured position with a salary ranging from \$77,798 to \$133,600, depending on training and qualification. Funding necessary to establish and maintain an independent research program will be provided. Space, technical, and Postdoctoral Fellow support, supply, budget, and salary are committed. Applicants must be U.S. citizens or permanent residents. A curriculum vitae, bibliography, three letters of reference, a detailed statement of research interests, and selected publications should be submitted by March 20, 1998, to:

> Ms. Joann Martin National Institutes of Health 31 Center Drive, MSC-2520 Building 31, 7A27 Bethesda, MD 20892 Telephone: 301-496-4634 FAX: 301-496-1940

NIH is an Equal Opportunity Employer.

CHIEF ANIMAL RESOURCES BRANCH

The Centers for Disease Control and Prevention, Atlanta, Georgia is seeking applications for the position of Chief Laboratory Animal Veterinarian to serve as the Chief of the Animal Resources Branch, Scientific Resources Program, National Center for Infectious Diseases. The Animal Resources Branch supports a wide variety of animal species including both New and Old World primates, dogs, cats, ferrets, rodents, and others as required. These are housed in three different facilities, each with its own attending veterinarian and a support staff that comprises 41 employees. The program currently serves approximately 50 investigators, and this includes BSL-3 and BSL-4 level facilities. The facility is AAALAC accredited.

The duties include directing the management of animal resources and support staff, strategic planning and providing active leadership, and providing veterinary support when necessary. Also included is working with the senior veterinarians and NCID management to ensure continued AAALAC accreditation and compliance with applicable laws and regulations as well as serving on the Institutional Animal Care and Use Committee and consulting with investigators on development of research protocols. In addition, the incumbent will serve as Executive Secretary of the CDC Animal Policy Board.

Qualifications include a doctorate in veterinary medicine (D.V.M./V.M.D.), postdoctoral training in laboratory animal science, and management experience. Experience with primates is required. Excellent communication and interpersonal skills, along with a record of publications and national and international recognition, are essential.

Candidates must be a U.S. citizen since this is a career position. Civil service salary range for the position is \$77,007 to \$100,114 per annum. Salary and benefits are commensurate with education and experience. Interested individuals are invited to send a curriculum vitae with publications to: Ms. Janie Oddy, CDC-HRMO, 4770 Buford Highway, Mailstop K15, Atlanta, GA 30341-3724. The Centers for Disease Control is an Equal Opportunity Employer and has a smoke-free environment. All applicants will receive equal consideration without regard to race, religion, color, national origin, sex, sexual orientation, political affiliation, age, or any nonmerit factor.

BIOLOGIST. Tenure-Track, Ph.D. **ASSISTANT PROFESSOR** at University of South Carolina–Aiken. Teaching duties among human physiology, general biology, and major course. Normal load 12 hours per semester with reductions possible for external funding. Competitive salary. Send applications with names and addresses of at least three references by February 27, 1998, to: Dr. William Pirkle, Department of Biology and Geology, University of South Carolina–Aiken, 171 University Parkway, Aiken, SC 29801. Website: www.usca.sc.edu. An Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

RESEARCH OPPORTUNITIES IN ASTROBIOLOGY AND ORIGINS

The Space Science Division at NASA Research Center anticipates one or more future career civil service positions for **RESEARCH SCIENTISTS**, and is soliciting letters of interest from potential candidates. Outstanding scientists are being sought in the fields of origins of stellar and planetary systems and NASA's new initiative in astrobiology.

Consideration will be given to scientists with expertise in developing theoretical models of star and planet formation, theoretical studies of the physical and chemical evolution of interstellar and circumstellar dust, development of instrumentation and observational studies of solar and extrasolar planets, and theoretical models of the geophysical, geochemical, and atmospheric evolution of planetary bodies, with emphasis on research related to the formation, evolution, and detection of environments suitable for life.

Consideration will also be given to candidates with expertise in the following areas: microbiology and biochemistry applicable to studies of the origin and evolution of metabolic processes; molecular and structural biology connected to the origin of cellular life; molecular genetics to evaluate the fossil record for timing of major evolutionary events; and analytical tools to identify and characterize molecular and isotopic biomarkers in ecosystems in extreme environments.

Candidates should have a Ph.D. degree, and should have either a demonstrated record of achievement in the field, or postdoctoral experience with an exceptional promise of developing an active research program in the above areas. These positions will require the candidate(s) to conduct independent, peer-reviewed research and to interact and collaborate with a broadly based multidisciplinary group of researchers in the Space Science Division. In addition, Ames is NASA's Center of Excellence for Information Systems Technology, encompassing research in supercomputing, networking, artificial intelligence, and intelligent systems. Candidates would be encouraged to develop or apply information technology methods in their research to the extent appropriate.

Letters of interest, accompanied by a curriculum vitae, list of publications, names of three professional references, and a statement of research interests should be sent to: Dr. Richard E. Young, NASA Ames Research Center, MS 245-3, Moffett Field, CA 94035-1000. For more information visit our website: http://www-space.arc. nasa.gov. Only U.S. citizens will be considered. Salary and GS level will be commensurate with experience. NASA/Ames is an Equal Opportunity Employer.

CELL BIOLOGIST/BIOENGINEER

One to two research-level positions available immediately at the University of Texas Medical School-Houston, and the Texas Heart Institute, for Cell Biologists and/or Bioengineers with significant background and experience in cell biology. Successful candidates will have a doctorallevel degree (M.D., Ph.D., M.D.-Ph.D., or equivalent) and background experience in one or more of the following areas: angiogenesis, atherosclerosis, immunology, or photonics, and an interest or background in the use or measurement of heat or thermal energy *in vivo* to study or control physiological processes. Interest and experience with molecular pathology is helpful. Projects involve the use of infrared imaging of vascular plaques to predict plaques. Send curriculum vitae as well as names and points of contact of three references to: **Ward Casscells, M.D., c/o Ms. Carolyn Williams, Texas Heart Institute, De partment of Vascular Cell Biology, P.O. Box 20345, Mail Code 2-255, Houston, TX 77225.**

PART-TIME MICROSCOPE SALES/SCIENTISTS

Manufacturer of a new, high-resolution optical 3-D microscope seeks Microscopists with discretionary time interested in supplementing income through equipment sales and application development. Ideal candidate will continue to perform research in a discipline benefiting from 3-D analysis. Compensation based on ability to develop and publish new applications for technology and to assist in sales of microscopes to other scientists. Send résumé to:

> InGen Corporation 235 Montgomery Street Suite 300 San Francisco, CA 94104

Cellular Immunology and Treatment of Childhood Cancers

The Pediatric Oncology Branch (POB) is searching for a tenure-track scientist to conduct a cutting-edge research program to develop novel approaches to the treatment of childhood cancer using cellular immunology approaches and an understanding of the unique cellular immune system in children. The successful candidate must have demonstrated expertise in cellular immunology and the ability to run an independent laboratory-based research program. In addition, the candidate must have an interest in developing a translational research program capable of developing new treatment protocols based upon leads generated in the laboratory. Resources include laboratory space, shared facilities, equipment, and supplies, and the support of two postdoctoral fellows and one technician. Candidates must have an M.D. degree with training and experience in Pediatric Hematology/Oncology and Cellular Immunology. The POB is committed to improving the outcome of children with cancer through translational research. Ongoing areas of research include sarcomas, lymphomas/ leukemias, brain tumors, developmental therapeutics, and supportive care. The POB website can be accessed at http://wwwicic.nci.nih.gov/ pedpage/PedBrHomeR.html. Interested candidates should send a cover letter, CV, statement of research interests, and three letters of reference to Chairman, Search Committee, Pediatric Oncology Branch, NCI, Building 10, Room 13N240, 10 Center Drive MSC 1928, Bethesda, MD 20892-1928. All application materials must be received by close of business on February 27, 1998. NIH is an Equal Opportunity Employer.



Research & Development Inc. is engaged in basic studies of human behavior in the context of driving. Research projects include perceptual and computational analyses in the areas of navigation, attention, situation awareness, intentionality, cognitive loads, decision making, and motor control. The lab has a close working relationship with faculty at MIT and Harvard, and houses a variety of experimental facilities, including the Nissan CBR driving simulator. [For more information, see http://pathfinder.cbr.com/].

Temporary assignments will be for 2-3 years, renewable. Ph.D. required. Level of appointment open. Please send resume, a statement of research objectives and names of three references to: Dr. Akio Kinoshita, Director, Nissan CBR, 4 Cambridge Center, Cambridge, MA 02142. Applications will be accepted until the positions are filled.

Nissan R&D, Inc. is the North American automotive development arm of Nissan Motor Co. Ltd., and is an Equal Opportunity Employer. Established in 1943, the Los Alamos National Laboratory is an unparalleled research facility that has been responsible for some of the most profound scientific advances of this century. Under the long-term management of the University of California, we have a proud tradition of free inquiry and debate. This ensures an environment where both professional and personal goals have virtually unlimited growth potential. If you'd like to be a part of this ground-breaking team, consider joining us as a:

DEPUTY LABORATORY DIRECTOR Business Administration and Outreach

SUMMARY: Reporting to the Laboratory Director, serve as a member of the Laboratory's top management team. Laboratory-wide responsibilities include: strategic planning and implementation, interfacing with external organizations at the highest levels, and overall responsibility for all Laboratory business administration and community interactions. Scope of responsibilities includes all Laboratory business administrative matters including development and implementation of Laboratory policies and management oversight of financial performance, contracts, procurement, property management, human resources, public affairs, community relations, regional economic development, and all business information systems. Involves direct line management of the Business Operations and Human Resources Divisions and offices that focus on audits & assessments, community involvement & outreach, public affairs, diversity, and legal services. Responsible for development and implementation of institutional plans and programs aimed at meeting or exceeding University of California/Department of Energy contractual requirements and performance measures in the above areas and satisfying all relevant state and federal laws. (For complete text of Summary, see our web site).

REQUIRED SKILLS, KNOWLEDGE, ABILITIES: Successful experience managing the administrative activities of a large technical organization, including human resources and business functions such as procurement and financial performance. A strong record of demonstrating the following leadership characteristics: personal integrity and accountability, commitment to teamwork, commitment to quality and excellence in science and technology, commitment to diversity and excellence in the workforce, excellent communication skills, trustworthiness in relationships, broad institutional motivation and focus, and people development. Strong skills in the following management areas: planning and implementation, performance-based management, customer and stakeholder interactions.

DESIRED SKILLS, KNOWLEDGE, ABILITIES: Successful demonstrated experience working with local and state business and government leaders in developing new community relations programs is desired. Successful experience dealing with the University of California Office of the President, and the Department of Energy at the headquarters or field office levels.

EDUCATION, TRAINING, OR LICENSING: Master's degree in Business Administration or equivalent combination of education and experience.

Ability to obtain a DOE "Q" Clearance, which normally requires U.S. Citizenship, is required. Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements for access to classified matter.

We offer an excellent compensation and benefits package including medical/ dental insurance, 403(b) and more. For consideration, please send your resume referencing Science 983201 to: jobs@lanl.gov (no attachments, please); or mail to: Los Alamos National Laboratory, Human Resources Division, Science 983201, Mail Stop P286, Los Alamos, NM 87545.

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OPERATED BY THE UNIVERSITY OF CALIFORNIA FOR THE DEPARTMENT OF ENERGY

Oncormed is a genomics services company that characterizes genes to establish their medical relevance and provides molecular profiling of patients for pharmacogenomic and therapeutic purposes. We are seeking RE-SEARCH SCIENTISTS, a TECHNOLOGY TRANS-FER MANAGER, and LAB TECHNICIANS and TECHNOLOGISTS for our Genomics, Clinical, Research and Development, and Contract Sequencing Departments. All positions require a B.S. Some positions require an M.S. or Ph.D.

Research Scientists: Genomics and Research and Development Departments. Candidates must have threeplus years of experience in genomic discovery and high throughput gene expression and gene function analysis. RNA isolation, library construction and subtraction, RT-PCR, Northern blots, differential display, non-isotopic methods of gene analysis, and computer competency is required; robotics and laboratory automation a plus.

Laboratory Technicians/Technologists: Clinical, Research and Development, and Contract Sequencing Departments. Candidates must have two-plus years of experience (clinical experience required for some positions) and must have experience in DNA/RNA isolation, PCR, nucleic acid hybridization, and DNA electrophoresis. Automated DNA sequencing expertise is preferred; computer skills and robotics experience a plus. Technology Transfer Manager: the candidate must be a

Technology Transfer Manager: the candidate must be a Ph.D. with two-plus years of postdoctoral experience in molecular biology with emphasis in mutation detection methodologies (automated DNA sequencing, heteroduplex or SSCP analysis, and/or array-based hybridization methods) and robotic automation. Responsibilities will include technology assessment, scale-up, implementation, and validation of new tests in a clinical diagnostic setting and interfacing with various departments.

Oncormed offers an excellent compensation package and a team environment. Please feel free to visit our website: http://www.oncormed.com. For consideration, please send your résumé with the names of three references to: OM/Human Resources, P.O. Box 3418, Gaithersburg, MD 20885-3418. An Equal Opportunity Employer.

The United States Department of Agriculture (USDA). Agricultural Research Service (ARS), Beltsville Human Nutrition Research Center (BHNRC), Nutrient Data Laboratory, is accepting applications for a permanent, full-time **NUTRITIONIST**. The objective of this position will be to compile, validate, manage, and disseminate food composition data. The scientist must be qualified by training and experience to develop and execute a research program to provide representative and accurate estimates for nutritional components in foods. The ideal candidate would have the ability to conduct research and to publish results in professional or technical journals. Experience in evaluating the quality of nutrient composition data is essential. Candidates must have strong working knowledge of nutrition and food technology, mathematics, statistics, and database management. Knowledge of recent developments in analytical methodology and analytical quality control techniques is required. Salary range is \$47,066 to \$72,758. For a copy of Announcement Number ARS-D8B-061 and an application package, please call: USDA, ARS, Human Resources Division, Telephone: 301-344-4638; website: http://www.ars.usda.gov/afm/ hrd/vacancy/reevacancy.html. Specific questions regarding the position may be directed to: **Ms. Joanne M. Holden, Telephone: 301-734-8491.** The closing date for this announcement is March 2, 1998. USDA, ARS is an Equal Opportunity/Affirmative Action Employer.

PROGRAM DIRECTOR TOXICOLOGY

The National Research Council's Board on Environmental Studies and Toxicology is seeking a Program Director for its Risk Assessment Program. Candidates should have a Ph.D. or equivalent and at least four years of professional experience in toxicology, risk assessment, environmental health sciences, or a closely related biological or biomedical field. Position requires demonstrated abilities to plan and manage the activities for the Risk Assessment Program, supervise staff, schedule deliverables to sponsors, interact with sponsors, develop new studies, and prepare and review reports and proposals. Excellent oral and written communication skills also required. For consideration, please send résumé to: National Research Council/BEST, HA 354 (CM), 2101 Constitution Avenue N.W., Washington, DC 20418. Visit us at website: http://www.nas.edu. *Equal Opportunity Employer*.

POSITIONS OPEN



AgraQuest, Inc. needs an individual to Head the worldwide Regulatory Affairs function. Requires B.S., M.S., or Ph.D. in a technical field. At least five years of experience in pesticide registration, preferably biological pesticides. AgraQuest is a dynamic, fast-paced, venturecapital-backed company that started operations in 1995. AgraQuest discovers, develops, and markets environmentally friendly, safe, and effective natural products for farm, home, and public health pest management.

Send letter and curriculum vitae to: Pam Marrone, President, 1105 Kennedy Place, Davis, CA 95616. Email: agraquest@aol.com; website: www.agraquest. com.

ENVIRONMENTAL BIOLOGIST UNIVERSITY OF MASSACHUSETTS LOWELL

University of Massachusetts Lowell's Department of Biological Sciences is seeking an Environmental Biologist to fill a tenure-track position starting in the fall, 1998. Applicants are expected to establish an extramurally funded research program and will play a leading role in the development of an Environmental Biology Option within our program. Teaching duties will include general ecology, and the supervision of undergraduate and graduate research students. While research areas are not specified, the Lowell region may be of particular interest to biologists with expertise in areas related to human-industrial impacts on natural systems. Possibilities exist for collaboration with faculty and students in the Departments of Environmental, Earth, and Atmospheric Sciences, Civil and Environmental Engineering, as well as several of the multidisciplinary Research Centers located on campus. Proximity to the academic and industrial communities in Boston, Cambridge, and Worcester facilitates collaboration with area scientists. Dedication to teaching and research is essential. Rank is open; salary and start-up funds are competitive. A curriculum vitae with a statement of research interests, reprints of three representative publications, as well as the names, addresses, and telephone numbers of at least three referees should be forwarded to: Robert D. Lynch, Sc.D., Chairman, Department of Biological Sciences, University of Massachusetts Lowell, One University Avenue, Lowell, MA 01854. E-mail: robert_lynch@uml.edu. For further informa-

tion visit our website: http://www.uml.edu. Applications will be accepted until the position is filled. Positions are contingent upon funding. The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action/ Title IX/Disabled/Veterans/ADA 1990 Employer.

RESEARCH LANDSCAPE ECOLOGIST

Applications are invited for a permanent GS-12/13/ 14 position with the United States Forest Service PSW Research Station, 'Conservation of Wildlife Populations in Managed Landscapes,' Redwood Science Lab in Arcata, California. Conduct research on ecological processes and functions at the landscape scale such as disturbance dynamics, wildlife habitat relations, population dynamics, and succession processes. Experience with multivariate statistics, modeling, research in applied issues in forestry or wildlife biology. GIS and spatial statistical analyses are desired. The vacancy announcement PSW-DEMO-025-97 and application procedures are available from: The **Personnel Office, Telephone: 510-559-6350; web**site: www.usajobs.opm.gov. Closing date is March 20, 1998. The United States Forest Service is an Equal Opportunity Employer.

BIOCHEMIST/PATHOLOGIST/ PHYSIOLOGIST

Basic scientist(s) needed for the newest medical school set in the mountains of eastern Kentucky. Pikeville College is currently seeking candidates for three (3) new positions in medical education and whose professional goal is primarily teaching. We encourage applications from people with unique concepts of teaching. The position entails approximately 50 percent teaching and 50 percent service/research. Send résumés in confidence to: Office of the Dean of Basic Sciences, Pikeville College School of Osteopathic Medicine, 214 Sycamore Street, Pikeville, KY 41501.

Pikeville College is an Equal Opportunity Employer.

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POSITIONS OPEN DIRECTOR OF

RESEARCH AND CONSERVATION

The Zoological Society of San Diego (ZSSD) is seeking a scientific leader to direct its programs in research and conservation. This individual will be responsible for the Center for the Reproduction of Endangered Species (CRES) with its eight laboratories and for the Society's various field research and conservation projects and programs. A strong record of accomplishments in laboratorybased scientific research and management is a require-ment and additional international field experience with wildlife research or conservation biology is preferred. The Director must possess strong communication skills and will be expected to foster productive collaborative activities involving staff of the Society's Departments of Animal Collections, Applied Conservation, Education, Horticulture, Pathology, Research, and Veterinary Services. Du-ties will include scientific oversight of ZSSD activities involving interactions with other conservation organizations and fund raising. The appointee is expected to continue their own laboratory and/or field-based research program.

The ZSSD is a not-for-profit organization which operates the San Diego Zoo, the San Diego Wild Animal Park, and the Center for the Reproduction of Endangered Species. It is the largest such organization in the world and has over 250,000 supporting member households and an annual budget of approximately \$5 million is devoted to research applied to conservation. The Society's commitment to biodiversity conservation will continue to grow A prominent scientist is needed to lead that effort to ensure that managed populations are self-sustaining.

The review of applications will begin immediately and the search will remain open until the position is filled.

Submit curriculum vitae, a list of four professional references, and a summary of research, teaching, and administrative accomplishments to: The San Diego Zoo/Human Resources Office, P.O. Box 551, San Diego, CA 92112-0551. Attn: CRES. #172004.

Equal Opportunity Employer.

AGRICULTURAL RESEARCH SERVICE UNITED STATES DEPARTMENT OF AGRICULTURE

The U.S. Horticultural Research Laboratory, Orlando, Florida seeks an ENTOMOLOGIST RESEARCH AS-SOCIATE, GS-11 (\$36,609 plus COLA) to be located at the Tropical Agriculture Research Station satellite lo-cation in St. Croix, U.S. Virgin Islands. The individual will conduct research on biological control of pink hibiscus mealybug in the Caribbean and the southern United States, assist in efforts to identify PHM sex phermone, evaluate phytotoxic effects of feeding on host plants, and determine potential for use of induced plant defenses. Candidates must have a recent Ph.D. in entomology or directly related discipline of the biological or physical sciences that included at least 16 semester hours of entomology. Applicants should demonstrate knowledge and experience in biological control, ecology, insect behavior, chemistry, and statistics. Applicants should provide a curriculum vitae and names of three references to: Dr. Steve Lapointe, USDA, ARS, 2120 Camden Road, Orlan-do, FL 32803. FAX: 407-897-7309. Closing date: February 27, 1998. USDA-ARS is an Equal Opportunity Employer

RESEARCH ASSOCIATE position in ecosystem modeling and GIS analysis, investigating and developing strategies for wildlife conservation, and economic development in East Africa. Duties: adaptation/modification of a spatial simulation model—GIS system. Qualifications: Ph.D. in natural resource science, experience in use of simulation models, programming, and GIS. \$35,000 per 12 months and benefits. Deadline: February 16, 1998. Send letter, résumé, and contact information for three references to: A. Boaman, Natural Resource Ecology Laboratory, Colorado State University, Ft. Collins, CO 80523-1499. Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available in signal transduction to study kinase and phosphatase regulating NF- κ B, CD28 signaling, JNK kinase cascade, and apoptosis (website: http://condor.bcm.tmc.edu:80/Mi-cro-Immuno/faculty/tan.html). Experience in molecular biology is required. Send applications to: Dr. Tse-Hua Tan, Department of Microbiology and Immunology, M929, Baylor College of Medicine, Houston, TX 77030. Baylor College of Medicine is an Affirmative Action/ Equal Opportunity/Equal Access Employer.



Then let SCIENCE open some doors for you by attending the **SCIENCE Career Fairs.** SCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies, and institutions. The Philadelphia Career Fair is being held in conjunction with the 1998 AAAS Annual Meeting.

UPCOMING 1998 SCIENCE CAREER FAIR

Philadelphia, PA at the Pennsylvania State Convention Center 1101 Arch Street, Room 108 17 February: 11 am – 4 pm

Registration is on site. Remember to bring multiple copies of your CV or résumé with you to the Career Fair; a copy will be necessary to gain admission to the hall.

For more information call (202) 326-7018 or check SCIENCE Career Fair Information Online: www.sciencemag.org. Admission to the event is FREE.

Sciencemag.org (Choose Science Professional Network from the menu) Established in 1943, the Los Alamos National Laboratory is an unparalleled research facility that has been responsible for some of the most profound scientific advances of this century. Under the long-term management of the University of California, we have a proud tradition of free inquiry and debate. This ensures an environment where both professional and personal goals have virtually unlimited growth potential. If you'd like to be a part of this ground-breaking team, consider joining us as a:

DEPUTY LABORATORY DIRECTOR Science, Technology and Programs

SUMMARY: Reporting to the Laboratory Director, serve as a member of the Laboratory's top management team. As the Principal Deputy, act for the Director with full responsibility and authority in his absence. Laboratory-wide responsibilities include: strategic planning and implementation, interfacing with external organizations at the highest levels, and ensuring integration and quality of Laboratory science, technology and programs. Scope of responsibilities include all Laboratory technical and programmatic matters, including development and implementation of Laboratory policies and the technical and management oversight of all scientific, technical and programmatic activities. Will be the first point of contact for the Director's Office on these matters. Involves direct line management of four offices and shared line management responsibility for several technical divisions and program offices. Responsible for development and implementation of institutional plans and programs aimed at meeting or exceeding University of California/Department of Energy contractual requirements and performance measures in science and technology. (For complete text of Summary, see our web site).

REQUIRED SKILLS, KNOWLEDGE, ABILITIES: Successful experience leading a large technical organization involved in government-sponsored research and development programs. Distinguished track record as a research scientist or engineer as evidenced by publications, honors, awards, etc. A strong record of demonstrating the following leadership characteristics: personal integrity and accountability, commitment to teamwork, commitment to quality and excellence in science and technology, commitment to diversity and excellence in the workforce, excellent communication skills, trustworthiness in relationships, broad institutional motivation and focus, and people development. Strong skills in the following management areas: planning and implementation, performance-based management, customer and stakeholder interactions.

DESIRED SKILLS, KNOWLEDGE, ABILITIES: Successful demonstrated experience in working with the University of California Office of the President, the Department of Energy program offices and programmatic secretarial officers (PSO) is desired.

EDUCATION, TRAINING, OR LICENSING: Ph.D. in Science or Engineering, or equivalent combination of education and experience.

Ability to obtain a DOE Q-clearance, which normally requires U.S. Citizenship, is required. Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements for access to classified matter. This position is subject to the requirements of the Personal Security Assurance Program (PSAP). Candidate invited to interview for the position will be subject to a pre-employment screening check, medical examination and drug test, and must consent to be in the program at the time of interview.

We offer an excellent compensation and benefits package including medical/ dental insurance, 403(b) and more. For consideration, please send your resume referencing Science 983203 to: jobs@lanl.gov (no attachments, please); or mail to: Los Alamos National Laboratory, Human Resources Division, Science 983203, Mail Stop P286, Los Alamos, NM 87545.

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OPERATED BY THE UNIVERSITY OF CALIFORNIA FOR THE DEPARTMENT OF ENERGY

WASHINGTON UNIVERSITY SCHOOL OF MEDICINE POSTDOCTORAL RESEARCH FELLOWSHIP

Applications are invited from individuals with interests in skeletal development and cartilage biology. Candidates for this position should have a Ph.D. in biochemistry or molecular/cell biology and experience with growth factors, extracellular matrix genes, or cell-matrix interactions. Send résumé and names of three references to: Dr. Linda Sandell, Department of Orthopaedic Surgery, 216 South Kingshighway, 704 Yalem Building, St. Louis, MO 63110. E-mail: sandelll@msnotes. wustl.edu.

ASSISTANT PROFESSOR

Department of Orthopaedic Surgery invites applications for a position of Assistant Professor. The position is open to applicants with a record of productive, highquality research in any competitive area of musculoskeletal research. Caiqdidates should provide a résumé, a description of research interests, and the names of three references to: Dr. Linda Sandell, Director of Research, Department of Orthopaedic Surgery, 216 South Kingshighway, 704 Yalem Building, St. Louis, MO 63110. E-mail: sandelll@msnotes.wustl.edu.

POSTDOCTORAL RESEARCH SCIENTIST

A two-year position is available immediately at Children's Memorial Institute of Education and Research, an affiliated member of Northwestern University Medical School. Our research interest is to study the roles of HIV-1 Vpr in cell cycle control, pathogenesis, and cancer gene therapy in fission yeast and mammalian cells. The applicant should have a Ph.D. degree in molecular virology or related disciplines. Experience with tissue culture, animal handing, and gene therapy is desired. Innovative thinking is encouraged. We offer a competitive salary and an attractive fringe benefit. Interested candidate should send résumé to: Dr. Y. Zhao, 2430 North Halsted Street, #218, Chicago, IL 60614. Telephone: 773-880-6009; e-mail: yzhao@nwu.edu. Equal Opportunity Employer.

POSTDOCTORAL POSITION in neurophysiology available to study how oxidation affects ion channel and other neuronal properties. Electrophysiology experience using single-channel and macroscopic patchclamp recordings as demonstrated by publication is required. Knowledge of molecular biology, optical methods, and organ-level physiology is desirable. Send curriculum vitae, names of references, and description of previous research experience to: T. Hoshi, Ph.D., Department of Physiology and Biophysics, The University of Iowa, Iowa City, IA 52242. FAX: 319-335-7330. E-mail: toshinori-hoshi@uiowa.edu. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

POSTDOCTORAL FELLOWSHIP beginning spring, 1998. Cellular biology of G protein-coupled receptors, Ph.D. or M.D.-Ph.D. with knowledge of molecular biology, Department of Medicine and Microbiology, University of California, San Francisco. Project: genetic manipulation of receptors for lysophosphatidic acid and sphingosine-1-phosphate or selected neuropeptides. Résumé and references to: Edward J. Goetzl, M.D., University of California, San Francisco, UB8B, Box 0711, San Francisco, CA 94143-0711. FAX: 415-476-6915; e-mail: chude@itsa.ucsf.edu.

POSTDOCTORAL POSITIONS in immunology immediately available for recent Ph.D. or M.D. interested in cellular and molecular aspects of lymphocyte development, repertoire establishment, and differentiation into memory. Current research areas include B cells (Hardy) and CD4 T cells (Hayakawa). Please forward curriculum vitae and names of two or three references to: Dr. Kyoko Hayakawa or Dr. Richard R. Hardy, Institute for Cancer Research, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111. Equal Opportunity Employer.

POSTDOCTORAL POSITION is available to determine X-ray crystal structures of metal-requiring enzymes in critical biosynthetic pathways (e.g., see: *PNAS* 93:13589, 1996; *Nature* 383:554, 1996; *Science* 277:1820, 1997). Proficiency in protein biochemistry and crystallography required. Send curriculum vitae and the names of three references to: **Prof. David W. Christianson, Roy and Diana Vagelos Laboratories, Department of Chemistry, University of Pennsylvania, Philadelphia, PA 19104-6323 by February 28, 1998.**

POSITIONS OPEN

POSTDOCTORAL RESEARCH opportunities (two) in cancer genetics are available at the Jake Gittlen Cancer Research Institute, Penn State College of Medicine. We are using the zebrafish as a new vertebrate model system to study genomic instability, cell differentiation (not development), and cancer. Fellows are sought to characterize our recently identified zebrafish mutants (unpublished). One Fellow with experience in molecular biology, cell biology, cancer biology, and/or histopathology is needed no later than June 1 to study our cellular differentiation mutants and to determine their potential role as tumor suppressor genes. A second Fellow with experience in genetics, molecular biology, and/or DNA repair is wanted any time after July 1 to develop novel molecular genetic techniques for genetic mapping, mutation detection, and gene expression, especially as applied to recently isolated zebrafsh genomic instability muta-tions. Candidates must be highly motivated team players with excellent thinking and communication skills. We are in a growing academic medical center with a superb living environment. Eligibility for independent fellowships is required for these funded positions. Send curriculum vitae, statement of short- and long-term career goals, and references to: Keith C. Cheng, M.D., Ph.D., The Jake Gittlen Cancer Research Institute H059, Penn State University College of Medicine, P.O. Box 850, Hershey, PA 17033. E-mail: kcheng@psu.edu for follow-up only please. Affirmative Action/Equal Opportunity Employer

POSTDOCTORAL FELLOW to study the mechanism of regulation of DNA replication in *E. coli*. The highly motivated, recent Ph.D. or M.D. will become expert in modern methods of nucleic acid enzymology from one of several projects on the steps in initiation of DNA replication (see website: http://www.bch.msu.edu/ faculty/kagunij.htm). A Ph.D. trained in molecular biology or biochemistry is preferred; salary will be commensurate with experience. Submit a curriculum vitae, statement of career goals, and the names of three references by February 21, 1998, to: Jon M. Kaguni, Ph.D., Department of Biochemistry, Michigan State University, East Lansing, MI 48824-1319. FAX: 517-353-9334; e-mail: kaguni@pilot.msu.edu.

POSTDOCTORAL POSITIONS/ RESEARCH INSTRUCTORS

Available immediately for protein engineering. Preference given to those with a strong background in chemical synthesis of large peptides and proteins. Send curriculum vitae and names of three references to:

> Dr. James P. Tam Microbiology and Immunology Vanderbilt School of Medicine A5119 MCN 1161 21st Avenue South Nashville, TN 37232-2363

An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available in the Department of Medicine, Stanford University to investigate apoptotic signaling pathways in cancer cells modulated by drugs and cytokines (*JBC* 272:26056, and *Amer. J. Phys.* 273:L921). A background in cellular and molecular biology is required. Send curriculum vitae and e-mail addresses of three references to: Glenn D. Rosen, M.D., Stanford University Medical Center, 300 Pasteur Drive, Stanford, CA 94305-5236. E-mail: grosen@leland. stanford.edu. Stanford University is an Affinative Action/ Equal Opportunity Employer.

POSTDOCTORAL RESEARCH FELLOW-SHIPS in cardiovascular biology at Harvard School of Public Health. Seeking Ph.D's or M.D's experienced with biochemistry, cell/molecular biology, physiology, etc. to assist with NIH-funded research of molecular (structurefunction) interactions and *in vivo* mechanisms that regulate blood clot formation and dissolution. Send curriculum vitae and three reference names to: **Dr. Guy Reed**, **Harvard School of Public Health II-127, 665 Huntington Avenue, Boston, MA 02115. E-mail:** reed@cvlab.harvard.edu.

POSTDOCTORAL POSITIONS are available to study the molecular mechanisms by which muscle activity and nerve-derived neuregulins regulate muscle gene expression. Candidates must have received their Ph.D. within the past two years and have demonstrated expertise in molecular biology. Send résumé and references to: Dr. Daniel Goldman, University of Michigan, Mental Health Research Institute, 205 Zina Pitcher Place, Ann Arbor, MI 48109. FAX: 313-647-4130.

POSITIONS OPEN

POSTDOCTORAL POSITION IN CELL AND MOLECULAR BIOLOGY St. Louis University School of Medicine

A Postdoctoral position is available for an individual with a Ph.D. degree in biochemistry or cell and molecular biology to study the physical and molecular mechanisms of protein transport within the mammalian Golgi complex. This research employs several different *in vitro* reconstitution systems, recombinant protein and protein purification techniques, and a three-dimensional replica technique for high-resolution transmission electron microscopy. A strong background in basic cell and molecular biology techniques would be advantageous. The position is available immediately and fully funded for a minimum of two years.

For further information, contact: Dr. Peggy Weidman, Telephone: 314-577-8179; e-mail: weidmanp@ wpogate.slu.edu. Applicants should send a curriculum vitae, a description of research experience, and e-mail addresses or letters from three referees to: Dr. P. Weidman, Department of Biochemistry and Molecular Biology, St. Louis University School of Medicine, 1402 South Grand Boulevard, St. Louis, MO 63104 USA.

Saint Louis University, a Catholic Jesuit institution dedicated to education, research, and health care, is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS IN MOLECULAR PHARMACOLOGY AND TUMOR BIOLOGY

The Prostate Cancer Program of the University of Michigan Comprehensive Cancer Center has two vacancies for Postdoctoral Fellows. Both positions require experience with molecular biology techniques. The following projects are available: (1) Studies on the interaction of prostate cancer cells with bone marrow endothelial cells. (2) Studies on the induction of apoptotic pathways in prostate cancer cells.

Applicants must be eligible for NIH funding. Only U.S. citizens and permanent residents are eligible. Applicants should direct their credentials to: Kenneth J. Pienta, M.D., 1500 East Medical Center Drive, Room 7303 CCGC, Ann Arbor, MI 48109-0946. FAX: 734-647-9480.

POSTDOCTORAL POSITIONS

Available immediately to study the host-microbial interactions pertaining to central nervous system infections in the following areas: molecular biology including protein expression, transfection, and mutagenesis; signal transduction pathways including molecular approaches; and vascular endothelial biology including protein trafficking. Applicants should have a Ph.D. with relevant knowledge in one of the above research areas. Send curriculum vitae and the names of three references to: Dr. K. S. Kim, Head, Division of Infectious Diseases, Mailstop #51, Childrens Hospital Los Angeles/USC School of Medicine, 4650 Sunset Boulevard, Los Angeles, CA 90027. FAX: 213-660-2661.

A **POSTDOCTORAL POSITION** is available to study the human immunodeficiency virus (HIV-1) envelope glycoproteins. Ongoing research projects investigate envelope glycoprotein structure, virus entry and receptor interactions, viral pathogenesis, and virus-neutralizing antibodies. Send curriculum vitae and the names of three references to:

Dr. Joseph Sodroski JFB 824 Dana-Farber Cancer Institute 44 Binney Street Boston, MA 02115 E-mail: joseph_sodroski@dfci.harvard.edu We are an Equal Opportunity Employer.

TELOMERE STRUCTURE AND FUNCTION

POSTDOCTORAL POSITIONS available immediately to study ciliate and vertebrate telomeres. Ongoing projects include studies of telomere-binding proteins, telomerase, telomere replication, and *de novo* telomere synthesis. See website: http://www.chem.unl.edu/price/ price.html for more details. Experience in molecular biology or protein biochemistry required. Send curriculum vitae, description of research experience, and three reference letters to: Dr. Carolyn Price, Department of Chemistry, 610 Hamilton Hall, University of Nebraska, Lincoln, NE 68588. FAX: 402-472-9402; e-mail: cprice@unlinfo.unl.edu.

Grant

NEUROSCIENCE THE EJLB FOUNDATION SCHOLAR RESEARCH PROGRAMME

The EJLB Foundation awards each year up to seven (7) grants for research projects in all areas of neuroscience that pertain directly or indirectly to schizophrenia and mental diseases. Specific areas of support in the past have included: developmental neurobiology, synaptic mechanisms, systems and cognitive neuroscience, and clinical studies on the genetic and physiopathologic aspects of neurological and psychiatric disorders.

Eligibility for such grants is restricted to young scientists who are pursuing an independent research career and have given evidence of having significant potential. It is also a requirement that these scientists (i) have earned an M.D. and/or a Ph.D. degree; (ii) have completed their postgraduate training; and (iii) have been admitted after **June 15**, **1993**, as faculty members of a leading university, or an affiliated nonprofit research centre, in Canada or elsewhere in the world.

Each grant is of CAN\$300,000, is disbursed over three (3) years, and is nonrenewable. The next closing date for receipt of letters of intent is **May 1**, **1998**.

Full details regarding this programme and required letter of intent forms may be obtained from:

The EJLB Foundation 1350 Sherbrooke Street West-Suite 1050, Montréal, Québec H3G 1J1 CANADA. Fax (for inquiries only) 514-843-4080.



Established in 1943, the Los Alamos National Laboratory is an unparalleled research facility that has been responsible for some of the most profound scientific advances of this century. Under the long-term management of the University of California, we have a proud tradition of free inquiry and debate. This ensures an environment where both professional and personal goals have virtually unlimited growth potential. If you'd like to be a part of this groundbreaking team, consider joining us as a:

DEPUTY LABORATORY DIRECTOR Laboratory Operations

SUMMARY: Reporting to the Laboratory Director, serve as a member of the Laboratory's top management team. Laboratory-wide responsibilities include: strategic planning and implementation, interfacing with external organizations at the highest levels, and overall responsibility for all Laboratory operational matters. Responsible for management oversight of environment, safety, and health (ES&H), facilities and plant management, construction project management, and safeguards and security. Involves direct line management of the Environment, Safety & Health Division, the Facilities, Safeguards and Security Division, and the Integrated Safety Management (ISM) Office. Focus on strategic planning for all operational and infrastructure needs of the Laboratory. Responsible for development and implementation of institutional plans and programs aimed at meeting or exceeding University of California/Department of Energy contractual requirements and performance measures related to ISM, environmental management, and safeguards/security and for satisfying all relevant state and federal laws. (For complete text of Summary, see our web site).

REQUIRED SKILLS, KNOWLEDGE, ABILITIES: Demonstrated successful experience managing the operations of a large technical organization with particular emphasis in managing technical activities and related ES&H activities in a large nuclear facility or in a related industry of comparable complexity. A strong record of demonstrating the following leadership characteristics: personal integrity and accountability, commitment to teamwork, commitment to quality and excellence in science and technology, commitment to diversity and excellence in the workforce, excellent communication skills, trustworthiness in relationships, broad institutional motivation and focus, and people development. Strong skills in the following management areas: planning and implementation, project management, performance-based management, customer and stakeholder interactions.

DESIRED SKILLS, KNOWLEDGE, ABILITIES: Experience working with the University of California Office of the President, with the Department of Energy at the headquarters or field office level, and with state and federal regulators. Facilities engineering experience in a highly technical environment. Demonstrated experience in managing safeguards and security for a large nuclear facility or installation. Successful experience in managing large-scale construction projects.

EDUCATION, TRAINING, OR LICENSING: Master of Science in a technical field or equivalent combination of education and experience.

Ability to obtain a DOE Q-clearance, which normally requires U.S. Citizenship, is required. Applicants selected will be subject to a Federal background investigation and must meet eligibility requirements for access to classified matter. This position is subject to the requirements of the Personal Security Assurance Program (PSAP). Candidates invited to interview for the position will be subject to a pre-employment screening check, medical examination and drug test, and must consent to be in the program at the time of interview.

We offer an excellent compensation and benefits package including medical/ dental insurance, 403(b) and more. For consideration, please send your resume referencing Science 983202 to: jobs@lanl.gov (no attachments, please); or mail to: Los Alamos National Laboratory, Human Resources Division, Science 983202, Mail Stop P286, Los Alamos, NM 87545.

Equal Opportunity Employer.



OPERATED BY THE UNIVERSITY OF CALIFORNIA FOR THE DEPARTMENT OF ENERGY

An exciting opportunity for a molecular/neuro/cellular biology Ph.D. **POSTDOCTORAL POSITION** is available immediately to study receptor- and ethanolmediated PKC and PKA signal transduction cascades. Highly motivated candidates with background in one of the following: biochemistry, cell biology, neuroscience, and/or molecular biology are encouraged to apply. Experience in signal transduction and protein-protein interaction is a plus. For more information, website: http:// egcrc.ucsf.edu. Send curriculum vitae and names of three references to:

Adrienne Gordon, Ph.D., Professor Departments of Neurology and Cellular and Molecular Pharmacology University of California, San Francisco School of Medicine Gallo Center San Francisco General Hospital Building 1, Room 101 San Francisco, CA 94110 Telephone: 415-648-7111, ext. 305 FAX: 415-648-7116 E-mail: adrienn@itsa.ucsf.edu

POSTDOCTORAL POSITION available for a recent Ph.D. in molecular microbiology or related field to study the role of envelope proteins in virulence of the obligate intracellular bacterial pathogen, *Chlamydia tradnomatis*. Experience in standard molecular biology techniques and protein analysis is required. Some expertise in tissue culture is preferred. Send curriculum vitae and the names, addresses, and telephone numbers of three references to: Jane E. Raulston, Ph.D., Department of Microbiology and Immunology, University of North Carolina School of Medicine, 804 M. E. Jones Building, CB #7290, Chapel Hill, NC 27599-7290. Women and minorities are encouraged to apply and to identify themselves. The University of North Carolina at Chapel Hill is an Equal Opportunity/Affinative Action Employer.

POSTDOCTORAL POSITION

Available to study vascular endothelial cell interactions with endotoxin and other soluble microbial proteins pertaining to sepsis/septic shock or to various systemic infections. Applicants should have a Ph.D. with relevant knowledge and solid background in vascular endothelial cell biology, molecular biology including transfection and protein overexpression, receptor biology, and signal transduction. Send curriculum vitae and names of three references to: Dr. Moshe Arditi, Division of Infectious Diseases, Mailstop #51, Childrens Hospital Los An geles/USC School of Medicine, 4650 Sunset Boulevard, Los Angeles, CA 90027. FAX: 213-660-2661.

POSTDOCTORAL POSITION to investigate butane monooxygenases. Ph.D. in biochemistry or related discipline with demonstrated skill in protein purification and enzyme characterization required. Salary range: \$22,000 to \$26,000 per year plus benefits. Apply by February 13, 1998, for full consideration. To apply, send curriculum vitae, statement of research interest, representative reprints, names and addresses of three references to: D. J. Arp, Botany and Plant Pathology, Oregon State University, 2082 Cordley, Corvallis, OR 97331. Email: arpd@bcc.orst.edu. Oregon State University is an Affirmative Action/Equal Employment Opportunity Employer and has a policy of being responsive to dual-career needs.

POSTDOCTORAL POSITION available to study regulation of cell lineage commitment during hematopoiesis. Areas of study include signal transduction, with an emphasis on *in vino* models, and cell and developmental biology (see website: http://dbbs.wustl.edu/RIB/ Longmore.html). Experience in molecular biology and cell biology preferred. Send curriculum vitae to: Dr. Gregory Longmore, Division of Hematology-Oncology, Washington University School of Medicine, 660 South Euclid Avenue, Box 8125, St. Louis, MO 63110. E-mail: longmorg@medicine.wustl.edu. Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION is available to study polyhedron formation, replication, and the basis for viral potency in the Lymantria dispar nuclear polyhedrosis virus (JV 71:8133; JV 71:1097; JGV 76:2933), and to develop enhanced viral strains for use as insect control agents (JIP 67:153). Applicants must have experience in molecular biology. Must be a U.S. citizen. Starting salary at \$39,135. Send curriculum vitae and the names, addresses, and telephone numbers of three references to: Dr. James M. Slavicek, U.S. Forest Service, 359 Main Road, Delaware, OH 43015. The U.S. Forest Service is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION YALE UNIVERSITY SCHOOL OF MEDICINE

Our laboratory is interested in understanding how small RNA molecules are folded, processed, assembled with proteins, and sorted within cells. Our focus is on RNA-binding proteins that play critical roles in these processes (see: *Cell* **89**:393– 402; *RNA* **2**:769–784; *Genes and Dev.* **8**:2891– 2903; *J. Cell Biol.* **129**:1181–1193). Candidates should possess a recent Ph.D. degree and have experience in biochemistry, genetics, or molecular biology. Please send curriculum vitae, a brief summary of research experience, and the names of three references to: Dr. Sandra L. Wolin, Departments of Cell Biology and Molecular Biophysics and Biochemistry, Howard Hughes Medical Institute, Yale University School of Mediciene, 295 Congress Avenue, New Haven, CT 06536.

Two **POSTDOCTORAL POSITIONS** are available to identify and characterize proteinases, especially matrix metalloproteinases, implicated in various tissue remodeling processes from embryonic development to cancer. Current approaches include genomics-based gene discovery, recombinant protein expression, and functional validation in knockout mouse. Stipends are highly competitive. Our lab is housed in a newly constructed \$67 million facility with excellent supports. Applicants should have recent Ph.D. or M.D. in molecular biology, protein biochemistry, or cell biology. Please send curriculum vitae and three references to: Duanqing Pei, 3-249 Millard Hall, 435 Delaware Street S.E., University of Minnesota, Minneapolis, MN 55455-0347. FAX: 612-625-8408.

POSTDOCTORAL POSITION available in molecular hematology. Investigations involve the study of myeloid-specific gene regulation and signal transduction events relevant to myeloid hematopoiesis, leukemogenesis, and the inflammatory response. Projects involve protein purification, gene transduction, and molecular cloning techniques. Backgrounds in molecular biology, gene regulation, and protein chemistry are desirable. In adherence to NRSA guidelines, the individual must be a permanent resident or U.S. ditzen. Send curriculum vitae and three letters of reference to: Dr. E. Eklund, 558 Wallace Tumor Institute, University of Alabama at Birmingham, 1824 6th Avenue South, Birmingham, AL 35294. FAX: 205-934-9573. Equal Opportunity Employer.

A POSTDOCTORAL POSITION is available immediately to study the role of retinoids and their nuclear receptors in carcinogenesis with an emphasis on retinoid signal transduction and novel retinoid-regulated genes. Applicants with strong background in gene expression and regulation are preferred. Salary commensurate with experience. Please send a letter of interest, curriculum vitae, and names of three references to: Dr. Xiaochun Xu or Dr. Reuben Lotan, Department of Clinical Cancer Prevention, University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Box 236, Houston, TX 77030. FAX: 713-792-0628; e-mail: xxu@notes.mdacc.tmc.edu. Equal Opportunity Employer.

RESEARCH ASSOCIATE/POSTDOCTORAL FELLOW positions available to investigate the molecular/biochemical regulation and cell biology of the nitric oxide-guanylyl cyclase signaling pathway. Positions available involve applications to lung vascular remodeling, to ciliary motility, and to mechanisms of analgesia and anesthesia. Significant experience in molecular biology and biochemistry essential. Please submit your curriculum vitae and three references to: Roger A. Johns, M.D., University of Virginia Health Sciences Center Box 10010, Charlottesville, VA 22906-0010 USA. The University of Virginia is An Equal Opportunity Employer.

EVOLUTIONARY PRIMATOLOGY (ONE) POSTDOCTORAL POSITION

The Wildlife Conservation Society seeks a Postdoctoral candidate to work with one or more members of its staff for one year beginning September 1998, under the auspices of New York Consortium in Evolutionary Primatology (NYCEP). Applications are encouraged from those interested in issues of primate conservation, both in the field and captivity. See detailed notice in February and March American Anthropological Association Newsletter or e-mail: cnccann@wcs.org.

POSITIONS OPEN

POSTDOCTORAL POSITIONS (TWO)

Two Postdoctoral positions are available in the Department of Radiation Oncology.

Highly motivated candidates with an interest in improving gene therapy are sought for position to study DNA damage and recombination. Experience in molecular biology, tissue culture, DNA recombination, and virus/plasmid construction required. Send curriculum vitae and the names and addresses of three references by mail to: **Dr. Craig Stevens** at the address below, or e**mail:** stevens@xrt.upenn.edu.

Highly motivated candidates are sought for position to study genetic changes associated with Ras transformation in a human prostate cancer model. Experience in molecular biology, tissue culture desirable. Send curriculum vitae and names of three references by mail to: **Dr. Amit Maity** at the address below, or **c-mail: maity@xrt. upenn.edu**.

Address: Department of Radiation Oncology, University of Pennsylvania, 195 John Morgan Building, Philadelphia, PA 19104-6072. The University of Pennsylvania is an Equal Opportunity Employer.

POSTDOCTORAL POSITION

To study novel mechanisms of multidrug resistance in breast cancer cells. Isolation and characterization of a novel drug resistance gene(s), mechanisms of action, regulation of expression, role in clinical drug resistance, development of reversal agents and animal models. Prospective candidate should have experience in cell and molecular biology techniques. Please submit curriculum vitae, names of three references, and summary of past research and future plans to: Dr. Frasmus Schneider, Wadsworth Center, Empire State Plaza, Albany, NY 12201. E-mail: schneid@wadsworth.org.

Compensation administered by Health Research Inc., a nonprofit Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION is available immediately to study characterization and transplantation of retinal progenitor cells. Experience with cell cultures and molecular techniques, such as cloning, transfection, and expression analyses required. Experience with surgical techniques desirable. Please send a curriculum vitae and the names of three references to: Iqbal Ahmad, Ph.D., Department of Cell Biology and Anatomy, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, NE 68198-6395. FAX: 402-559-7328; email: iahmad@molbio.unmc.edu.

The University of Nebraska Medical Center is an Equal Opportunity Employer. Applications from women, members of underrepresented minorities, disabled persons, and veterans are encouraged.

POSTDOCTORAL POSITION MRI AND MRS

A two-year Postdoctoral position is available immediately to study muscle morphology, function, and metabolism using correlative MRI and MRS (spectroscopy). Related muscle diseases are also under investigation. In order to apply, please send your curriculum vitae including the names and addresses of two references to: Dr. Jane H. Park, Department of Radiology, MCN-D-1121, Vanderbilt University Medical School, Nashville, TN 37232-2675. Telephone: 615-343-1352; FAX: 615-322-3794; e-mail: parkjh@ctrvax.vanderbilt.edu.

POSTDOCTORAL POSITIONS. Retinoids and nuclear receptors in cancer: available immediately to study function and mechanism of retinoids, retinoid receptors, and nuclear orphan receptors in the regulation of apoptosis and cell cycle progression in breast cancer and lung cancer cells. (*MCB* 16:1138; *EMBO* 16:16565; *MCB* 17: 6598). Candidates should have a recent Ph.D. in molecular biology and cancer biology. Send curriculum vitae and the names of three references to: Xiao-kun Zhang, Ph.D., The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037. FAX: 619-646-3195; e-mail: xzhang@burnham-inst.org.

POSTDOCTORAL POSITION available to study (1) the role of glycation in long-term diabetic complications and (2) alpha-crystallins as molecular chaperones. Recent Ph.D. or M.D. with training in protein biochemistry and molecular biology is desirable. Applicants should send a curriculum vitae and names, addresses, and e-mails of three references to: Dr. E. C. Abraham, Professor, Department of Biochemistry and Molecular Biology, Medical College of Georgia, Augusta, GA 30912-2100. B-mail: eabraham@mail.mcg.edu. Medical College of Georgia is an Equal Opportunity/Affirmative Action Employer.

NEUROSCIENCE FACULTY POSITIONS

McLean Hospital and the Department of Psychiatry, Harvard Medical School, are inviting applications for faculty positions at the Assistant or Associate Professor level from qualified applicants with research interests relevant to psychiatric neuroscience. We are looking for investigators to complement the existing benchtop research program in the Mailman Research Center as it undergoes a major expansion of 23,500 sf of new space. Appropriate areas of interest would include basic neuroscience and laboratory based research related to schizophrenia, major mental disorders, and Alzheimer's disease. Opportunities exist for development of strong collaborations within the facility and across Harvard Medical School and Partners HealthCare System, including the Massachusetts General Hospital and Brigham and Women's Hospital.

Applicants should have a Ph.D. and/or professional doctorate, appropriate postdoctoral experience and a publication record indicative of a demonstrated expertise in the area of specialization. The positions offer new, fit-out laboratory space, affiliation with a large clinical and neuroscience research program, and extensive research support infrastructure.

The successful candidates will be expected to develop competitive, independent, and largely externally funded programs. Salary and recruitment packages offered will be commensurate with qualifications and experience.

Applicants should submit a curriculum vitae, a concise statement of research interests and the names and addresses of three references to the search committee co-chairs:

Bruce M. Cohen, MD, PhD Joseph T. Coyle, MD Neuroscience Search Committee McLean Hospital 115 Mill Street Belmont, MA 02178





Review of applications will begin April 1, 1998 and continue until the positions are filled.

McLean Hospital is an Affirmative Action/ Equal Employment Oportunity/ADA Employer.

A member of the PARTNERS HealthCare System



Call for Nominations

The 1998 William B. Coley Award for Distinguished Research in IMMUNOLOGY or TUMOR IMMUNOLOGY

The Cancer Research Institute invites nominations for the 1998 William B. Coley Award for Distinguished Research in the Fields of Immunology or Tumor Immunology. Established in 1975 in honor of Dr. William B. Coley, the award is presented each year to one or more scientists who have made outstanding contributions to the understanding of the immune system or the role of the immune system in cancer.

Recent past recipients of the William B. Coley Award include: Robert L. Coffman (1997), Tim R. Mosmann (1997), Stuart F. Schlossman (1997), Giorgio Trinchieri (1996), Ferdy J. Lejeune (1995), Malcolm A.S. Moore (1995), Timothy A. Springer (1995), Pamela Bjorkman (1993), John Kappler (1993), Philippa C. Marrack (1993), Alvaro Morales (1993), Jack Strominger (1993), Don Wiley (1993), Howard Grey (1989), Alain Townsend (1989), Emil Unanue (1989), Rolf M. Zinkernagel (1987), Thierry Boon (1987)

Nominations will be accepted through February 23, 1998, and should be in the form of a letter explaining the basis for the nomination. A copy of the nominee's curriculum vitae is also required.

Send nominations to:

Selection Committee 1998 William B. Coley Award Cancer Research Institute 681 Fifth Avenue, 12th Floor New York, NY 10022-4209

Founded in 1953, the Cancer Research Institute is a nonprofit organization that provides funding for research projects and individual scientists working to increase our understanding of the immune system with the ultimate goal of developing immunoloigcal methods for the prevention and treatment of human cancer.

RESEARCH ASSOCIATE POSTDOCTORAL POSITIONS IN EXPERIMENTAL HEMATOLOGY

Two Postdoctoral positions are available in the research laboratory of **Dr. Ian McNiece**, Director of Research, Bone Marrow Transplant Program at the University of Colorado Health Sciences Center (UCHSC). The laboratory has basic and applied projects in experimental hematology with a focus on stem cell biology and cellular therapy. Both positions require a Ph.D. and appropriate experience.

Position One: Will study the signaling events involved in proliferation and differentiation of hematopoietic stem cells. Experience in basic cellular and molecular biology is required with a background in hematopoiesis and second message signaling events.

Position Two: Will study gene transduction of hematopoietic cells. Experience in basic cellular and molecular biology is required. A knowledge of gene transduction methodologies, hematopoietic *in vitro* assays, and small animal models is desirable.

Starting salary will be commensurate with experience. Please submit a letter of interest and curriculum vitae to: Lance Goudzwaard, Administrator, University of Colorado Health Sciences Center Bone Marrow Transplant Program, Box B-190, 4200 East Ninth Avenue, Denver, CO 80262. FAX: 303-372-9003.

UCHSC is an Equal Opportunity and Affirmative Action Employer; we encourage minorities and women to apply for these positions.

POSTDOCTORAL POSITION NEUROGENETICS, MOLECULAR BIOLOGY, AND NEUROPHARMACOLOGY

The Brain Function Research Institute (BFRI) is seeking laboratory staff to join fundamental research of dementia and related brain disorders. BFRI was newly founded in 1997 and is supported by the government. The main project is to make fundamental research for developing new antidementia drugs. Positions are available for individuals with Ph.D. in biochemistry or related field with experience in protein chemistry and/or molecular biology and interest in brain cell damage. BFRI offers a reasonable salary. For additional information, please contact: The Brain Function Research Institute, Executive Director: Tohru Sawada, M.D., Ph.D., c/o National Cardiovascular Center, 5-7-1 Fujishirodai, Suita, Osaka 565 Japan. Telephone: +81-6-834-7646; FAX: +81-6-872-8761.

POSTDOCTORAL POSITION. Candidates with experience in oncogenes and transformation/G proteins/signal transduction to study function and mechanism of transformation of the *lbc* oncogene, a multidomain regulator of the Rho small GTP binding protein that mediates actin cytoskeletal organization and cell proliferation via a novel signaling pathway. Research focuses on how dysregulation by *lbc* and associated proteins leads to malignancy. Position requires Ph.D. and U.S. *citizenslip/ pennaneut residency*. Send curriculum vitae to: **Dr. D. Toksoz, Department of Physiology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111. E-mail: dtoksoz@infonet.utfts.edu. Equal Opportunity/Affinative Action Employer.**

POSTDOCTORAL POSITIONS (TWO) AVAILABLE IMMEDIATELY ROCKEFELLER UNIVERSITY, New York, New York

Recent M.D., Ph.D., or M.D.-Ph.D. with strong background in molecular biology and/or biochemistry to study anti-inflammatory drugs and colon carcinogenesis. Curriculum vitae and list of references to: Dr. Steven J. Shiff, The Rockefeller University, 1230 York Avenue, Box 330, New York, NY 10021-6399. FAX: 212-327-7453; e-mail: shiffs@rockvax.rockefeller.edu. Equal Opportunity/Affiniative Action Employer.

MICROBIAL EVOLUTION

A POSTDOCTORAL POSITION is available beginning about June 1st to study the molecular mechanisms underlying the effects of environmental stress on transcription and mutations (*FEBS Letters* **402**:4-8, 1997). Candidates must have a strong background in genetic engineering techniques. Salary is \$25,000 to \$30,000 plus benefits. Please send curriculum vitae and three letters of reference to: Dr. Barbara Wright, Division of Biological Sciences, University of Montana, Missoula, MT 59812-1002.

POSITIONS OPEN

POSTDOCTORAL POSITIONS. Synthesis and enzymology of novel nucleosides and nucleotides, antiviral compounds. Send curriculum vitae and at least two letters of recommendation to: Prof. V. Nair, University of Iowa, Department of Chemistry, Iowa City, IA 52242. The University of Iowa is an Equal Employment Opportunity/Affirmative Action Employer. Minority and women candidates are encouraged to apply.

Ph.D. POSTDOCTORAL POSITION FRED HUTCHINSON CANCER RESEARCH CENTER

A Postdoctoral position is available in the Transplantation Biology Program at the Fred Hutchinson Cancer Research Center to study the canine major histocompatibility complex. Current projects include the study of the expression of canine MHC class I molecules through the production of monoclonal antibodies and characterization of new genes by screening a newly created BAC library.

The laboratory is dedicated to using the canine model to study hematopoietic stem cell transplantation. This position provides an opportunity to interact with an internationally known research group that has been performing work in transplantation biology for over 25 years. Experience in all aspects of monoclonal antibody production and immunohistochemistry is required; experience in molecular biology (pulsed-field gel electrophoresis, PCR, ribonuclease protection assay) is preferred. The position will last for two years with an option for extension an additional two years.

To apply please send a curriculum vitae, names of three references, and a summary of experience to:

Dr. John L. Wagner Fred Hutchinson Cancer Research Center Program in Transplantation Biology 1100 Fairview Avenue North M318 P.O. Box 19024 Seattle, WA 98109-1024 Telephone: 206-667-6212 FAX: 206-667-6124 E-mail: jlwagner@fherc.org

Applications will be accepted until March 30, 1998. Fred Hutchinson Cancer Research Center is an Equal Opportunity Employer committed to work force diversity.

UNIVERSITY OF CALIFORNIA, SAN DIEGO DEPARTMENT OF BIOLOGY

POSTDOCTORAL POSITION is available to study structure/function relationships in thermophilic cytochrome *c* oxidases. Candidate must have a Ph.D. in biochemistry/molecular biology and be strongly motivated toward a career in academic research. The direction and scope of the project are revealed in recent publications: *J. Biol. Chem.* **270**:20345–20358, 1995; *Biodhemistry* **35**: 3387–3395, 1996; and *J. Am. Chem. Soc.* **119**:6135– 6143, 1997. Salary will be commensurate with background and experience and based on the University of California pay scale. Please send curriculum vitae and names of two references to: James A. Fee, Department of Biology, **0368, University of California**, San Diego, **9500 Gilman Drive, La Jolla, CA 92093-0368**.

POSTDOCTORAL POSITION DUKE UNIVERSITY MEDICAL CENTER

The cellular basis of hepatic fibrosis, emphasizing cytoskeletal regulation, and the role of the cytoskeleton in cellular contraction, is being studied. Applicants should have a Ph.D. or M.D.-Ph.D. degree or equivalent in biochemistry, molecular biology, or a related field and less than five years of postdoctoral experience. Please send cover letter, curriculum vitae, and three references to: **Don Rockey, Director, Hepatology, Duke University Medical Center—3083, Durham, NC 27710.** Position available immediately.

Three-year **POSTDOCTORAL RESEARCH** position available July 1998 at the National Institutes of Health in Phoenix, Arizona, to identify and characterize type 2 diabetes susceptibility genes. Experience in molecular biology required. Send curriculum vitae and a summary of relevant experience to: **Dr. Leslie Baier**, **Clinical Diabetes and Nutrition Section**, **NIDDK**, **NIH**, 4212 **North 16th Street**, **Phoenix**, **AZ 85016**. **FAX:** 602-200-5225.

POSITIONS OPEN

POSTDOCTORAL POSITIONS HENRY M. JACKSON FOUNDATION BETHESDA, MARYLAND, USA Program in Molecular Biology/Bioremediation

Applications are invited for Postdoctoral positions to work on the bacterium Deinococcus radiodurans, the most DNA-damage-resistant organism known. Specific areas include (1) bioremediation of waste sites containing both organic toxins (e.g., toluene/TCE/PCBs) and radionuclides. Toxin-degrading D. radiodurans strains are being constructed using cloned catabolic pathways of Pseudomo *nas*, in collaboration with Larry Wackett (University of Minnesota); (2) bioremediation of waste sites containing radionuclides and heavy metals. Metal-reducing/resistant D. radiodurans strains are being constructed using cloned metal-reduction/resistant bacterial pathways, in collaboration with Jim Fredrickson (PNNL); (3) basic biology of D. radioduraus DNA repair pathways; and (4) genomic informatics of the D. radiodurans genome (which has been fully sequenced) for insight into repair processes, in collaboration with Eugene Koonin (NCBI). Appointments will be for three years and salary will be commensurate with experience. The work will be conducted in Bethesda, Maryland in the laboratory of Dr. Michael Daly and Dr. Kenneth Minton, whose specialty is the genetics of the radiation-resistant bacterium D. radioduraus. A curriculum vitae including a list of publications, a brief discussion of past research activities, and a list of references should be sent to: Dr. Daly, Department of Pathology, Uni-formed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Telephone: 301-295-3750 (Daly); 301-295-3476 (Minton); FAX: 301-295-1640; e-mail: mdaly@usuhs.mil, kminton@usuhs.mil. For more information contact Dr. Daly and Dr. Minton.

POSTDOCTORAL POSITIONS IN SIGNAL TRANSDUCTION AND VASCULAR BIOLOGY

Adrenergic and angiotensin receptor mediated signal transduction mechanisms involved in the regulation of phospholipases coupled to the release of arachidonic acid and its contribution to vascular biology including contraction, hyperplasia, and hypertrophy. *Applicants must be a U.S. citizen or permaneut resident* and have a Ph.D., M.D., or D.V.M. degree with strong background in cell culture and molecular biology. Please send curriculum vitae and the names of three references to: Dr. K. U. Malik, Department of Pharmacology, University of Tennessee, Memphis, 874 Union Avenue, Memphis, TN 38163. University of Tennessee is an Equal Employment Opportunity/Affinnative Action/Title VI/Title IX/Section 504/ADA/ADEA Employer.

POSTDOCTORAL POSITION vertebrate developmental biology available at the University of Pennsylvania, School of Veterinary Medicine to study the cellular and molecular mechanisms of pattern formation during *Xenopus* embryogenesis (*Science* **275**:1652–1654, 1997; *Proc. Natl. Acad. Sci.* **94**:13713–13718, 1997). Candidates with experience in molecular biology and/or developmental biology are encouraged to apply. Send a letter describing your interests, a curriculum vitae, and list of references to: Jean-Pierre Saint-Jeannet, Department of Animal Biology, School of Veterinary Medicine, University of Pennsylvania, 3800 Spruce Street, Philadelphia, PA 19104.

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POSTDOCTORAL POSITIONS available to study integrins and disintegrins, integrin signaling in cell proliferation and survival, and cross-talk between cell adhesion and growth factor receptor signaling. Experience in molecular biology is essential, and cell/developmental biology background is preferred. Send curriculum vitae and names of three references to: Dr. Kristina Vuori, La Jolla Cancer Research Center, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 92037.

POSTDOCTORAL POSITIONS available to carry out structure-function studies of antibodies and/or T cell receptors (e.g., *Science* 270:1821; *Nature Biotech* 15: 637). Experience in immunology and/or biophysical techniques desirable. Please send curriculum vitae and details of three referees to: Dr. E. Sally Ward, Department of Microbiology, University of Texas Southwestern Medical Center, 5323 Harry Hines Boulevard, Dallas, TX 75235-8576 USA. E-mail: sally@ skylab.swmed.edu.



Chair Department of Biochemistry and Molecular Biology

The Medical College of Ohio invites applications for the position of professor and chair of the Department of Biochemistry and Molecular Biology. Candidates must have an outstanding record of

scientific accomplishments, research funding, graduate and medical education and evidence of administrative and leadership ability. The successful candidate will lead a department with strengths in molecular biology, enzymology, peptide chemistry and regulation of cell growth.

The Medical College of Ohio is a free-standing, state-supported institution with outstanding modern educational, research and clinical facilities. We seek an energetic and highly interactive chair who will promote the future growth of the department to implement the missions of the School of Medicine and the college. To apply, send a curriculum vitae and the names of three references to: Jeffrey A. Brown, M.D., Chair, Biochemistry Search Committee Professor and Chair, Department of Neurological Surgery Medical College of Ohio Dowling Hall 3065 Arlington Ave. Toledo, Ohio 43614-5807

Home page address: http://www.mco.edu

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FACULTY POSITIONS Center for Molecular & Cellular Biology

Queens College of the City University of New York seeks applications for **two** positions at the rank of **Associate or Full Professor** for its new Center for Molecular & Cellular Biology. Areas of specialization: 1) **virology and molecular biology of HIV; 2) Preclinical and clinical vaccine development.**

Qualifications: Ph.D. or M.D./Ph.D. degree, substantive postdoctoral experience, record of publication in quality journals, extensive record of extramurally funded research projects. Will be expected to develop funded research programs, work in collaboration with the Director of the Center, and teach in the Department of Biology. Salary based on qualifications/experience. Excellent benefits.

For consideration, please send letter, detailed curriculum vitae, and 3 letters of reference by 3/15/98 to: Dr. Luc Montagnier, Gloria & Bernard Salick Distinguished Professor and Director, Center for Molecular & Cellular Biology, Queens College, Flushing, NY 11367-1597. AA/EOE/ADA

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GLOBAL CAREER OPPORTUNITIES



Assistant Professor in Ecology and Biodiversity

Applications are invited for appointment as Assistant Professor in the Department of Ecology and Biodiversity (RF-97/98-33) tenable from 1 August 1998 or as soon as possible thereafter. Appointment will initially be made on a two- to three-year fixed-term basis, with a possibility of renewal.

Applicants should have a PhD degree, teaching experience and a strong research background. Preference will be given to those with expertise in aspects of Applied Ecology such as Ecotoxicology, Ecophysiology, Environmental Impact Assessment and Environmental Microbiology. Applicants with demonstrated research abilities in related fields will also be considered. Ability to apply ecological approaches to real-world problems of conservation and environmental management, or experience with GIS, will be regarded as a particular advantage, as will familiarity with the flora and fauna of the Asian region.

Annual salary [attracting 15% (taxable) terminal gratuity] for an Assistant Professor (in the grade of Lecturer) is on an 11-point scale, with starting salary depending on qualifications and experience: HK\$522,780 - HK\$873,360 (approx. US\$104,556 - US\$174,672 - US dollar equivalents as at 5 January 1998). An appointee with an annual salary at HK\$698,520 (approx. US\$139,704) or above may be considered for the award of the title of Associate Professor.

At current rates, salaries tax will not exceed 15% of gross income. Leave, medical benefits, an allowance for children's education in Hong Kong, and, in most cases, a financial subsidy for private tenancy are provided, the last at a charge of a percentage of salary, currently 7.5%.

Further particulars and application forms can be obtained on WWW at http://www.hku.hk; or from the Appointments Unit, Registry, The University of Hong Kong, Hong Kong (Fax (852) 2540 6735 or 2559 2058; E-mail: APPTUNIT@REG.HKU.HK). Closes 31 March 1998.

The University is an equal opportunity employer and is working towards a smoke-free environment

SENIOR CELL BIOLOGIST Natural Products Drug Discovery

The Company: AMRAD Discovery Technologies (ADT) is a wholly-owned subsidiary of AMRAD Corporation Ltd., an Australian pharmaceutical company based in Melbourne. During the past three years, ADT has established a major programme of natural products drug discovery, drawing on the unique and extensive biological diversity of Australia and SE Asia. The Company develops and prosecutes high-capacity biological screens and identifies novel lead molecules in a range of therapeutic areas, partly in association with other research groups within AMRAD and partly in collaboration with partners in the international pharmaceutical industry.

The Position: This position requires close liaison with other senior members of ADT's scientific and management team. Primary responsibilities include the hands-on development and validation of high-capacity cellular screens for drug discovery, scientific evaluation of data arising from established cellular screens, and high-level interaction with key scientific staff in collaborating companies. There are also requirements for the preparation of professional scientific reports and verbal presentations of research data.

The Candidate: You will be qualified with a Ph.D. in biological sciences and have significant postdoctoral experience in preeminent research environments. Direct experience of screening-based drug discovery using functional cell-based assays would be an advantage. You will have excellent written and verbal presentation skills and the ability to provide scientific leadership to several projects simultaneously. With a high standard of computer literacy you will be comfortable with the use of databases and data analysis software for the storage, retrieval, and analysis of large data sets.

An excellent salary package, commensurate with experience, will be negotiated with the successful applicant and, where appropriate, assistance with relocation will be offered. Further information can be obtained from Michele Neisemann (e-mail: mneisemann@ amrad.com.au or fax (61-3-9208-4030). Applications (quoting 3 referees, including phone/fax numbers) should be submitted to: Michele Neisemann, AMRAD Discovery Technologies Pty Ltd, Private Box 29, Richmond, VIC 3121 Australia. Applications Close: 27 February 1998.

AMRAD is an Equal Opportunity Company.



Lectureship in Environmental Science

School of Environmental & Marine Sciences

Vacancy 921SNC

We wish to appoint an environmental scientist who can demonstrate excellence in teaching and research related to environmental risk assessment, incorporating environmental toxicology.

Preference will be given to a person who also has experience in aspects of waste management science and technologies. The successful applicant will have a doctorate and an interdisciplinary background in science, strong links with relevant disciplines and an ability to work collaboratively with both interdisciplinary and discipline-based scientists. The capability to interact effectively with both the private sector and regulators is also a priority.

Applicants should be able to demonstrate the ability to undertake research-based teaching, at both undergraduate and graduate level. Priority will also be given to an applicant who also has the ability to complement the School's existing teaching and research endeavours related to terrestrial, marine and atmospheric environments.

Commencing salary will be established within the range NZ\$45,250 - NZ\$54,250 per annum.

Further information and Conditions of Appointment should be obtained from the Academic Appointments Office, phone 64-9-373 7599 ext 5097, fax 64-9-373 7023, email: appointments@auckland.ac.nz, or from our website:

www.auckland.ac.nz/appointments/

If mailing your application **three copies** must reach the Academic Appointments Section, The University of Auckland, Private Bag 92019, Auckland, New Zealand, **by 30 March 1998**.

Please quote Vacancy Number 921SNC in all correspondence.

ASSISTANT REGISTRAR, ACADEMIC APPOINTMENTS



New Zealand

The University has an equal opportunities policy and welcomes applications from all qualified persons

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POSTDOCTORAL POSITIONS IN MOLECULAR NEUROLOGY HARVARD MEDICAL SCHOOL

Two postdoctoral positions available in the Center for Neurologic Diseases (CND) to study the molecular ba-sis of Alzheimer's disease. One focuses on analyzing presculue-1 transgenic and knockout mice (*Cell* **89:629**– 639, 1997), and generating additional mutant mice using novel gene targeting methods. The other focuses on the cell biology of APP and the biochemistry of A β production and proteolysis. The CND offers an exciting interdisciplinary environment for basic research on neurologically relevant problems. Highly motivated individuals with a recent Ph.D. and/or M.D. and substan-tial experience in molecular or cell biology and/or pro-tein chemistry can apply. Send curriculum vitae, two recent reprints, and names of three references to: Dr. Jie Shen and Dr. Dennis Selkoe, Center for Neurologic Diseases, Harvard Institutes of Medicine, 7 nue Louis Pasteur, Boston, MA 02115. E-mail: jshen@cnd.bwh,harvard.edu.

POSTDOCTORAL POSITION IN IMMUNOLOG

A position is available in our laboratory at the Maxwell Finland Laboratory for Infectious Diseases at the Boston University School of Medicine studying the humoral and cellular immune responses towards Neisseria gouorrhoeae in patients with gonococcal infection to define correlates of protection from disease. Experience in immunologic techniques is essential, including murine and human lymphocyte isolation, culturing, proliferation assays, FACS analysis, ELISA, SDS-PAGE and Western blot analysis, etc. If interested please send your curriculum vitae including names, telephone numbers, and FAX numbers of at least three references to: Lee M. Wetzler, M.D., The Maxwell Finland Laboratory for Infectious Diseases, Boston Medical Center, Boston University School of Medicine, 774 Albany Street, Boston, MA 02118. FAX: 617-534-4391; e-mail: lwetzler@acs.bu.edu.

RESEARCH ASSOCIATE/POSTDOCTORAL position available immediately in the Molecular Immunology Department. Research emphasis is on determination of the mechanisms of congenital heart block. Qualifications include recent Ph.D. and/or completion of Postdoctoral Fellowship with experience in molecular bi-ology, protein biochemistry, cell biology, and immunol-Work will include human tissues and animal models. Four-year funding is available with the potential for a permanent position. Candidates should send curriculum itae and three letters of reference to: Dr. Jill Buyon, Department of Molecular Immunology, Hospital for Joint Diseases, 301 East 17th Street, New York, NY 10003

POSTDOCTORAL FELLOWSHIP at the University of Hawaii to study cellular mechanisms of stimulus-secretion coupling in peptidergic secretory cells (**website**: www.pbrc.hawaii.edu/ian/). Experience in at least one of the following: patch clamping with capacitance, fluo-rescence microspectroscopy (e.g., fura), amperometry. Monthly stipend, \$2,400 to \$2,800, from March 1, for two years. Send statement of career goals, résumé, names and e-mail or telephone contacts for three references to: Ian Cooke, Békésy Lab of Neurobiology, 1993 East-West Road, Honolulu, HI 96822. Closing date: February 15, 1998, or until position is filled. Equal Employment Opportunity/Affinative Action Institution.

The Center for the Neurobiology of Aging (CNA) at the University of Florida has several NIH-funded **POST**-DOCTORAL TRAINING GRANT positions available beginning this spring or summer. Areas of expertise in the CNA include gene therapy, drug discovery for Alzhei-mer's disease and stroke, neuroendocrinology, and mechanisms underlying cell survival. Please send your curriculum vitae and the names of three referees to: The Chair, Center for the Neurobiology of Aging Fellowship Committee, Box 100267, J. H. Miller Health Center, Gainesville, FL 32610.

POSTDOCTORAL POSITION available immediately to study transcriptional regulation of animal RNA viruses. Experience in molecular biology, biochemistry, or tissue culture desirable. Please contact: Dr. Raju Ramaswamy, Microbiology, Meharry Medical College, Nashville, TN 37208. Telephone: 615-327-6687; FAX: 615-327-6602; e-mail: ramasa25@ccvax.mmc. edu. Candidates may also send their résumé, and two letters of recommendation to the above address.

POSITIONS OPEN

CELL AND DEVELOPMENTAL BIOLOGY POSTDOCTORAL FELLOWS

Positions available to study biosynthesis and function of O-glycosylated proteins during development. Successful applicants will have dem-onstrated strength in either rDNA approaches or mouse embryology. Opportunity to develop independent line of inquiry. Appointment can be made at either a junior or senior level. To apply, please send your curriculum vitae, a statement of research interests, and the names of two references to: Dr. Lawrence A. Tabak, Director, Center for Oral Biology, University of Rochester Medical Center, Box 611, 601 Elm-wood Avenue, Rochester, NY 14642. E-mail: lawrence_tabak@urmc.rochester.edu.

The University of Rochester is an Equal Opportunity/ Affirmative Action Employer. Women and members of underrepresented groups are strongly encouraged to apply.

POSTDOCTORAL POSITIONS in drug delivery. We are studying novel methods for the in vivo delivery of oligonucleotides and genes. A Ph.D. with experience either in pharmaceutics/drug delivery or in nucleic acid bio-chemistry is essential. Send curriculum vitae and names of two references to: Professor R. L. Juliano, Department of Pharmacology, CB# 7365, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7365. An Equal Opportunity/Affirmative Action Employer

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At the Conservation and Research Center, Front Royal, Virginia, NOAHS is offering a two-week intensive course in methods, applications, and interpretation of molecular genetic analyses of endangered species. This course will be taught by scientists with expertise and a variety of personal experiences in this important new field. Learn how to develop and interpret a wide range of genetic data using real examples, laboratory demonstrations, and a variety of computer programs.

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Ms. Jan Martenson, Course Coordinator NCI-FCRDC P.O. Box B Frederick, MD 21702-1201 E-mail: noahscrc@mail.ncifcrf.gov FAX: 301-846-1686 Telephone: 301-846-1299 Application deadline: March 31, 1998. MOLECULAR TECHNIQUES WORKSHOP

UNIVERSITY OF WISCONSIN-MILWAUKEE June 22 to July 11, 1998

Designed for faculty, graduate students, postdoctor-ates, and other professionals interested in applying molecular biological approaches to their research. Techniques include cloning, sequencing, PCR, methods for gene ex-pression, and more. Tuition: \$1,650. Housing: \$255 per double, meals not included. Contact: **Barb Wimpee**, NIEHS Marine and Freshwater Biomedical Sciences Center. Telephone: 414-382-1746; FAX: 414-382-1705; e-mail: bwimpee@csd.uwm.edu.

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NEUROIMMUNOLOGY FELLOWSHIP

One-year, renewable position for a Ph.D., to study mechanisms of central nervous system inflammatory demyelination in multiple sclerosis or animal model. To include studies on T cell co-stimulation, antigen presenation, cytokines, growth factors, and/or identification of antigenic epitopes and T cell receptor usage. Techniques include cell culture (human and animal lymphocytes, astrocytes, oligodendroglia, macrophages), immunocyto-chemistry, autoradiography, RT-PCR, SSCP, and cloning. Multiple collaborations available. Interested persons should contact: Dr. John Trotter, The Barnes-Jewish MS Center and the Washington University Medical Center, Box 8111, 660 South Euclid Avenue, St. Louis, MO 63110. Telephone: 314-362-3293; FAX: 314-747-1345; e-mail: trotterj@neuro.wustl.edu.

> POSTDOCTORAL POSITION YEAST GENETICS

Position available to study a novel prolyl-isomerase required for G2/M in yeast and conserved in flies and humans (PNAS 93:447, 1996; Nature 380:544, 1996; *Gene* **203**:89, 1997). Background in molecular genetic. preferred. See website: www.wadsworth.org/BMS/. Scotland Avenue, Albany, NY 12208. Health Research, Inc., is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIP in immunology/genetics available now for work on marrow cells and cytokines in genetic studies of mice dealing with regula-tion of marrow-bone cell interactions. Ph.D. required. Involves interactions with large, multidisciplinary lab of Ph.D's and M.D's performing osteoporosis-related research. Salary, benefits competitive. Send cover letter and curriculum vitae to: Ms. C. Farrell, Mineral Metabolism Lab, P.O. Box 7210, Loma Linda, CA 92354

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