

1998 INFORMATION FOR CONTRIBUTORS

Science is a weekly, international, peer-reviewed journal for the best research in every field of science. Manuscripts should be intelligible to a general audience and must be brief and clearly written. Competition for space in *Science* is keen, and most papers are returned without in-depth review. Priority is given to papers that reveal novel concepts of interdisciplinary interest. Manuscripts are evaluated and, if accepted, published as promptly as possible.

CATEGORIES OF SIGNED PAPERS

Reports (three journal pages) present important new research results. Reports should include an abstract and an introductory paragraph. A maximum of 30 references is suggested.

Research Articles (five journal pages, on average) are expected to present a major breakthrough. Research articles include an abstract, an introduction, and sections with brief subheadings. A maximum of 40 references is suggested.

Letters (300 words) discuss material published in *Science* or problems of general interest. All communications to *Science* should include the corresponding author's postal and e-mail addresses and telephone and fax numbers. Letters are not routinely acknowledged and may be edited for reasons of clarity or space. Letter writers are generally not consulted before publication.

Technical Comments (up to 500 words) discuss papers published in *Science* within the previous 6 months. The authors of an original paper are given an opportunity to reply. Comments and replies are reviewed and edited as needed. Summaries of the discussions appear in print; full text appears online.

Science's Compass provides broadly accessible commentaries by scientists on current scientific issues (see editorial, this issue). Most items in *Science's Compass* are commissioned by the editors, but unsolicited contributions will be consid-

ered on occasion. **Policy** commentaries (up to two printed pages) present discussions of science policy topics. **Books and New Media** (up to 1500 words) review current books, software, and CD-ROMs of interest to *Science* readers. **Research** commentaries (previously called Perspectives and up to 1000 words) analyze recent research and the impact of new developments on future investigations and should not primarily discuss the author's own work. **Reviews** (four journal pages, on average) review new developments of interdisciplinary significance and highlight unresolved questions and future directions. Most articles are solicited and all undergo review. They include an abstract, an introduction that outlines the main point, and brief subheadings to indicate the main ideas. A maximum of 50 references is suggested.

MANUSCRIPT PREPARATION

One page in the journal contains approximately 1000 words and one small figure. Use double-spacing throughout the text, tables, figure legends, and references and notes, and leave margins of at least 2.5 centimeters. Put your name on each page and number the pages, starting with the title page.

Titles and subheadings should be descriptive clauses, not full sentences. The maximum length is 90 characters and spaces for reviews and research articles, and no more than 100 characters and spaces for reports.

Abstracts explain to the general reader why the research was done and why the results should be viewed as important. The abstract should be 50 to 100 words, convey the paper's main point, and outline the results or conclusions.

Text. A brief introduction describing the paper's significance should be intelligible to readers in various disciplines. Technical terms should be defined. All tables and figures should be cited in numerical order.

Figures and tables should be submitted on separate pages from the text. For each figure, submit five high-quality prints, laser prints, or original drawings no larger than 22 by 28 centimeters. On the back of every figure, write the first author's name and the figure number and indicate the correct orientation. Authors are charged \$650 for the first color figure and \$450 for each additional figure. There is an additional charge for color figures in the reprints. Cover illustration suggestions may be included with the manuscript.

Informed consent. Investigations on humans must include a statement indicating that informed consent was obtained after the nature and possible consequences of the studies were explained.

Animal welfare. Authors using experimental animals must include a statement that animal care was in accordance with institutional guidelines.

Reproducibility. Evidence that the results are reproducible and the conditions under which this reproducibility was obtained should be stated.

Permission to reprint illustrations or tables from other publications must be obtained in writing by the author and must include complete citation from the copyright owner.

Copyright transfer is required from authors of each paper published in *Science*. U.S. government employees sign the section of the form stating exemption from copyright laws.

MANUSCRIPT SELECTION

Papers are assigned by subject to an editor in our offices in Washington, DC, or Cambridge, UK. Most papers are evaluated for their interest and overall suitability by members of the Board of Reviewing Editors (see Information Resources for listing). The editors at *Science* use this advice in selecting papers for in-depth review. Authors of papers that are not highly rated are notified promptly; in most cases, we will return only two copies of the figures and no manuscript copies.

Papers are reviewed in-depth by two or more outside referees. It is the policy of *Science* that reviewers are kept anonymous. Manuscripts are evaluated for their technical merit as well as their merit in relation to other papers that are or have been considered. In selecting papers for publication, the editors give preference to those with novel findings of general significance. Selected papers are edited to improve accuracy and clarity and to shorten, if necessary.

Papers cannot be resubmitted over a disagreement on interest or relative merit. If a paper was rejected on the basis of serious reviewer error, resubmission will be considered.

CONDITIONS OF ACCEPTANCE

When a paper is accepted for publication in *Science*, it is understood that

- Any materials and methods necessary to verify the conclusions of the experiments reported must be made available to other investigators under appropriate conditions.
- Archival data sets (such as sequence and structural data) should be deposited with the appropriate data bank and the identifier code should be sent to *Science* for inclusion in the published manuscript (coordinates should be released no later than 1 year after publication).
- Authors agree to transfer copyright of the paper (including electronic rights) to *Science*.
- The paper will remain a privileged document and will not be released to the press or the public before publication. If there is a need in exceptional cases to publicize data in advance of publication, the AAAS Office of Communications (202-326-6440) must be consulted.

PRINTING AND PUBLICATION

Proofs and reprints. Proofs and an order form for reprints are sent to the authors. All corrections should be marked on the proof.

Scheduling. Papers are scheduled for publication after acceptance. Papers with problems in layout or with cover pictures, or that are too long, may be subject to delay or further editing.

Contact Information for Washington, DC, and Cambridge, UK, offices

PHONE: (1)-202-326-6501 (USA); (44)-1223-302067 (UK)

FAXES: (1)-202-289-7562 (USA); (44)-1223-302068 (UK)

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science_editors@aaas.org for general editorial queries

science_letters@aaas.org for letters to the editor

science_reviews@aaas.org to return manuscript reviews

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Science Online can be found at www.sciencemag.org on the World Wide Web, where a summary of this information is available in different languages.

SCIENCE STYLE SHEET

Acknowledgments, including funding information, should be gathered into a brief statement at the end of the references and notes and will be edited to conform to *Science* style.

Equations and formulas should be typed with quadruple spacing if they are to be set off from the text. Define all symbols and number all equations.

Figures. All figures should be supplied as hard copy. Authors who prefer to submit their figures electronically may supply images in the following formats: TIFF, GIF, PICT, or PICT2. (After acceptance of a paper, the author will receive more specific information about electronic artwork.)

Figures will not be relabeled by *Science*. Most figures will be printed at a width of 5.9 cm (2.3 inches or 1 column) or 12.2 cm (4.8 inches or 2 columns). Some illustrations (for example, bar graphs, simple line graphs, and gels) may be reduced to a smaller width. Symbols and lettering should be large enough to be legible after reduction. Recommended symbols and their sizes after reduction:

● ○ □ ▲ △

Composite figures should be labeled **A, B, C, ...**. If mounting is necessary, use cardboard.

Legends should be double-spaced in numerical order on a separate page. No single legend should be longer than one page. Nomenclature, abbreviations, symbols, and units used in a figure should match those used in the text. The figure title should be given as the first line of the legend.

Line drawings should be labeled on the ordinate and abscissa with the parameter or variable being measured, the units of measure, and the scale. Scales with large or small numbers should be presented as powers of 10. Definitions of symbols should usually appear in the figure legend and not in the figure. Simple symbols (circles, squares, triangles, and diamonds, solid or open) reduce well.

Avoid the use of light lines and screen shading. Instead, use black-and-white, hatched and cross-hatched designs for emphasis. Use heavy lines or boxes for emphasizing or marking off areas of the figure.

Halftones, such as electron micrographs, should be submitted as high-quality prints or

originals (do not send irreplaceable artwork). If possible, use scale bars in place of, or in addition to, magnifications. In gels, the lanes should be numbered and identified by number in the figure legend.

For **color art**, please provide a positive slide, if possible, and a print or laser proof. Indicate positioning, lettering, and cropping limits on the print. For composite figures, send the original composite board rather than a print if the quality of the original is much better than that of the print. Do not send irreplaceable artwork.

Lettering must be in Helvetica font. Use boldface type for axis labels and for the labels **A, B, C, ...** in composite figures; use italic type only as it would be used in the text (for example, for variables and genes). Only the first letter of each entry should be uppercase; otherwise, use uppercase letters as they would be used in the text (for example, for acronyms). In the printed version of the figure, letters should be about 7 points (2 mm) high.

Sequences may be reduced considerably, so the typeface in the original should be clear. There should be about 130 characters and spaces per line for a sequence occupying the full width of the printed page and about 84 characters and spaces per line for a sequence occupying two columns.

References and notes are numbered in the order in which they are cited, first through the text and then through the table and figure legends. List a reference only one time. References that are always cited together may be grouped under a single number. Any references to unpublished data should be given a number in the text and placed, in correct sequence, in the references and notes. Use conventional abbreviations for well-known journals; provide complete titles for other journals. Do not use *op. cit.* See our Web site for examples of reference style.

Symbols, abbreviations, and acronyms should be defined the first time they are used.

Tables should supplement, not duplicate, the text. They should be numbered in the order of their citation in the text. Each table should be generated on a separate page with its legend double-spaced above the table. The first sentence of the legend should be a brief descriptive title. Three horizontal lines are used in tables: at the top and bottom of the table and between the column headings and the table body. Vertical lines are not used between the columns.

Every vertical column should have a heading consisting of a title with the unit of measure in parentheses. Units should not change within a column. Centered headings of the body of the table can be used to break the entries into groups. (See the section on lettering for use of italic type and uppercase letters.)

Footnotes should contain information relevant to specific entries or parts of the table. The sequence of symbols for footnotes is

^{*}, [†], [‡], §, ||, ¶, #, **, ††, ‡‡, ...

Units of measure are given in metric. If measurements were made in English units, give metric equivalents.

Important Submission Information

Manuscripts should be addressed to the Editor-in-Chief, *Science*, 1200 New York Ave., NW, Washington, DC 20005, USA, or to the Senior Editor, Europe Office, at Thomas House, 14 George IV St., Cambridge CB2 1HH, UK.

Submit five copies and a letter giving:

- names, telephone and fax numbers, postal and e-mail addresses of all authors, title of the paper, and a statement of its main point.
- a statement that none of the material has been published or is under consideration for publication elsewhere. Any paper or component of a paper that has been publicly distributed on the Internet may be considered previously published material. We reserve the right to determine if such an Internet posting compromises the originality of the paper as a submission to *Science*.
- names, postal and e-mail addresses, telephone and fax numbers, and fields of interest of four to six persons outside your institution who are qualified to referee the paper.
- any information needed to ensure a fair review process and to avoid potential conflicts of interest.
- names of colleagues who have reviewed the paper.
- number of words (including text, references, figure and table legends) in the manuscript.

Also include with your manuscript:

- five copies of any paper of yours that is in press or under consideration elsewhere and includes information that would be helpful in evaluating the work submitted to *Science*.
- written permission from any author whose work is cited as a personal communication, unpublished work, or work in press but is not an author of your manuscript.
- for manuscripts based on crystallographic data, two disk copies of the coordinates.
- a copy of the text on 3.5" diskette with files in Microsoft Word, WordPerfect, DCA_RFT, LaTeX, or RTF format. For more information see: www.sciencemag.org/misc/con-info.shtml#submit
- information about the authors' professional and financial affiliations that may be perceived to have biased the presentation.

By submitting a manuscript, the corresponding author accepts the responsibility that all authors have agreed to be so listed and have seen and approved the manuscript, its content, and its submission to *Science*. Any changes in author names or in their order of listing that arise during the revision of a manuscript must also be approved in writing by all the original authors.

In most cases, *Science* will consider a manuscript for publication only if its main findings have not been reported elsewhere, including in the mass media. Authors are permitted to present their data at open meetings but are asked to refrain from overtly seeking media attention. Specifically, authors are asked to decline participation in news briefings or coverage in press releases and to refrain from giving interviews or copies of their data or paper to reporters unless the reporters agree to abide by our press embargo. If a reporter attends the author's session at a meeting and writes a story based on the presentation, such coverage will not affect *Science's* consideration of the author's paper.



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TC Chelating Cellthru BigBead is a resin that makes use of a novel immobilized metal affinity ligand to bind immunoglobulin G (IgG) antibodies directly from cell culture harvest. Used in standard, low-pressure, packed-bed chromatography columns, the resin increases product recovery as well as overall process economy by combining clarification, product capture, and concentration into a single operation. The IgG binding capacity is comparable to that of immobilized protein A. **Sterogene.** For information call 800-535-0735 or circle 141 on the Reader Service Card.

PRODUCTS

Plasmid DNA Purification

The S.N.A.P. MidiPrep Kit is designed for fast purification of high-quality plasmid DNA from 10-ml to 100-ml overnight culture. The spin column-based procedure takes just 40 min and yields up to 200 µg of plasmid DNA. No organic reagents or ethanol precipitations are needed. High-quality plasmid DNA is eluted from the column ready to use at a convenient concentration for subsequent applications, including mammalian cell transfection. **Invitrogen.** For information call 800-955-6288 or circle 142 on the Reader Service Card.

Chemistry Software

ChemWindow Suite 5.1 is a chemistry software package with tools for publishing in seven different data and graphic types. The new version offers publication-quality structures, molecular models, animations, spectra, chromatograms, laboratory glassware diagrams, and process flow diagrams. Graphics and data can be created and edited inside object linking and embedding applications, such as Microsoft Office. The software also comes with a programmed database file in Microsoft Access. **Bio-Rad.** For information call 215-382-7800 or circle 143 on the Reader Service Card.

Apoptosis Detection Kits

The ApopNexin Apoptosis Detection Kit is designed to detect the translocation of phosphatidylserine (PS) to the outer cell membrane, which is considered a signature event of early stage apoptosis. The kit contains annexin V, conjugated with either fluorescein isothiocyanate or biotin, which binds specifically and rapidly to PS, allowing for convenient quantitative assays. The counterstain included, propidium iodide,

can be used to distinguish positive apoptotic cells with intact membranes from lysed, necrotic cells. ApopNexin can also be used to correlate apoptosis to cell cycle position using the tricolor analysis protocol provided. Because the biochemical format and endpoint of this assay are very different from those of DNA fragmentation assays, researchers can confirm their results by comparing data from both assays. **Oncor.** For information call 301-963-3500 or circle 144 on the Reader Service Card.

Data Acquisition System

The LogBook/300 stand-alone data acquisition system operates without an attached personal computer (PC). It contains an embedded 486 processor and is capable of executing programs and storing acquired data using off-the-shelf, low-cost, removable



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Electrophoresis Buffer Software

PHoEBus is a Windows-based application that determines the chemical, electrical, and electrophoretic characteristics of buffer solutions used in capillary electrophoresis. The program allows for the calculation of the properties of buffers when either direct or indirect ultraviolet detection is used. A database includes information about the buffers commonly used in capillary electrophoresis and can be updated to include specific components. The program can determine the ionic composition of a buffer, the buffer capacity, and the ionic strength if the operator provides the concentration of various acids, bases, and salts

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Semi-Dry Electroblotter

This durable, economical electroblotter has a ruthenium oxide-coated titanium anode plate and a stainless steel cathode plate. It is fully immersible in water and has a 20 cm by 20 cm gel transferring area. **Alltech Associates.** For information call 847-948-8600 or circle 148 on the Reader Service Card.

Literature

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POSITIONS OPEN

BIOENGINEERING FACULTY POSITION. Tenure-track. L.C. Smith College of Engineering and Computer Science at Syracuse University (SU). The Department of Bioengineering and Neuroscience (BEN-NEU) has received a Whitaker Foundation Special Opportunity Award to facilitate the initiation of an M.S. Program in Bioengineering. We currently offer the B.S. in bioengineering and the M.S. and Ph.D. in neuroscience. BEN-NEU has a long history of interdisciplinary research and teaching. We now seek to broaden our research agenda and increase our research and teaching interactions with the State University of New York Health Science Center (HSC), immediately adjacent to the SU campus. Our immediate goal is to create a research strength in biomechanics through close relationships with the Orthopedic Research Laboratory (ORL) at HSC.

We are seeking to recruit an individual who will establish internationally recognized research program in the area of biomechanics, broadly defined; excel as a teacher and research mentor; and have interests and skills that complement those of existing faculty in BEN-NEU, ORL, and/or those of faculty in other Departments of the College or at HSC involved in the bioengineering program. The level of appointment (ASSISTANT/ASSOCIATE PROFESSOR) will depend on experience and qualifications.

Information on the Department, Programs, Faculty, the College, and ORL can be accessed through our website: <http://www.ben-neu.syr.edu/>. A cover letter, curriculum vitae, statement of research interests and anticipated research trajectory, with the names of three potential references should be sent to: **Dr. Karen Hiimae, Secretary, Search Committee, Institute for Sensory Research, Syracuse University, Merrill Lane, Syracuse, NY 13244-5290.** Review of candidates will begin on February 6, 1998, and continue until the position is filled.

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TWO FACULTY POSITIONS DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY University of Medicine and Dentistry of New Jersey New Jersey Medical School

The department is continuing its expansion and is looking for outstanding, highly motivated, and accomplished **MOLECULAR BIOLOGISTS/BIOCHEMISTS.** Applications are invited for two tenure-track positions at the level of **ASSISTANT PROFESSOR.** Applications from established investigators at a more senior level will also be considered. Successful candidates will be expected to pursue an active program of biomedical research, preferably within the area of eukaryotic gene expression, and to participate in graduate and medical teaching.

Located in the University Heights section of Newark, a few minutes from New York City and pleasant New Jersey suburbs, UMDNJ-New Jersey Medical School provides a stimulating and collegial environment with substantial resources.

Send a complete curriculum vitae, brief outline of your research plans, and the names of three references to: **Dr. Michael B. Mathews, Chairman, Department of Biochemistry and Molecular Biology (S), UMDNJ-New Jersey Medical School, 185 South Orange Avenue, University Heights, Newark, NJ 07103-2714.**

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FACULTY/CURATOR POSITION IN ICHTHYOLOGY

The Scripps Institution of Oceanography, University of California, San Diego, invites applications for an **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** (tenure-track or tenured) in ichthyology. The successful candidate should have an established record or demonstrated potential in original research, preferably in the areas of systematics and evolutionary biology of marine fishes. In addition, he/she would teach a graduate-level course in biology of fishes, assume curatorship of the Scripps fish collection, and direct and support graduate students. Rank and salary will be commensurate with qualification and experience based on the University of California pay scale. A Ph.D. or equivalent degree is required. Send letter of application (including research interests, publications list, and résumé of curatorial and teaching experience) and the names and addresses of five potential referees to: **Chair, Ichthyology Search, Scripps Institution of Oceanography Graduate Department, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0208.** Closing date for applications is March 1, 1998. *University of California, San Diego is an Equal Opportunity/Affirmative Action Employer.*

POSITIONS OPEN

The Department of Molecular Pharmacology at Stanford University School of Medicine invites applications for a tenure-track position at the **ASSISTANT PROFESSOR** level. The Department of Molecular Pharmacology has been designated to play a nodal role in a new Sir Norman Foster-designed research building scheduled for occupancy in 1999. Under the department's direction, a program in gene therapy technology will be developed that will interface closely with immunology, oncology programs, and the Howard Hughes Medical Institute. The appointee will interact with other faculty members who have research interests in signal transduction, regulation of gene expression, functional genomics, and combinatorial biochemistry. The appointee will be expected to develop a creative independent research program that utilizes molecular and cell biology approaches to study model systems of genetic or acquired diseases and/or innovative therapeutic strategies.

Candidates should have a Ph.D. and/or M.D. degree and postdoctoral research experience. Candidates should send curriculum vitae, a description of future research plans, and the names and addresses of three references to: **Helen M. Blau, Chair, Department of Molecular Pharmacology and Director of Gene Therapy Technology Development, Stanford University School of Medicine, Stanford, CA 94305-5332.** *Stanford University is committed to increasing representation of women and members of minority groups on its faculty and particularly encourages applications from such candidates.*

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.*

TWO FACULTY POSITIONS ASTRONOMY AND CHEMISTRY

Bellevue Community College (BCC), a two-year college in the Puget Sound region of Washington state, invites applications for two tenure-track teaching positions to begin fall quarter 1998. Both positions require a Master's degree. The college is the largest community college in the state. BCC is diverse, innovative, and renowned for quality instruction. For an application packet, call our Jobline at **Telephone: 425-643-2082** or visit website: www.bcc.ctc.edu/joblist. Application deadline February 6, 1998, or until filled. *BCC is an Equal Opportunity Employer and operates under an Affirmative Action Plan.*

POSTDOCTORAL POSITION available to study the molecular properties of proteins involved in Ca^{2+} -release from skeletal muscle sarcoplasmic reticulum. Emphasis is on identification of ryanodine receptor mutation(s) and their effects on Ca^{2+} homeostasis in a subpopulation of turkeys with undesirable muscle food quality characteristics. Preferred candidates will have experience applying molecular biology techniques to the study of protein structure and function. Send curriculum vitae and names of three references to: **Dr. Gale Strasburg, Department of Food Science and Human Nutrition, Michigan State University, 337 G.M. Trout Building, East Lansing, MI 48824.** E-mail: stragale@pilot.msu.edu. *Michigan State University is an Equal Opportunity Employer.*

The University of Virginia seeks a **RESEARCH ASSOCIATE** to study neurogenetics of drugs of abuse in *Drosophila melanogaster*. Candidates should have a strong background in molecular genetics or behavioral biology. For more details on the science see website: <http://minerva.ac.virginia.edu/~biology/Fac/Hirsh.html>. Send curriculum vitae and names of three references to: **Dr. Jay Hirsh, Department of Biology, University of Virginia, Gilmer Hall, Charlottesville, VA 22903.** *The University of Virginia is an Equal Opportunity Employer.*

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Senior Scientist – New Product Development

The qualified individual will have a Ph.D. in biology, molecular biology, or immunology with 2-3 years of postdoctoral experience. The ideal individual will have experience in vaccine development with experience in cloning and expressing recombinant proteins in bacterial systems. Excellent communication, organizational and interpersonal skills are needed to effectively work in a team environment with other development, manufacturing and QC personnel. Industrial experience and familiarity with FDA or Health Canada regulatory requirements would be advantageous.

Research Associate – Biochemistry

An individual with a BSc in chemistry or biochemistry with solid biochemical laboratory skills is needed. Strong computer skills with the ability to use specialized software and a variety of operating systems (Windows 3.1/95, Windows NT, and OS/2) are essential. A good understanding of chromatographic techniques and experience with HPLC analysis is an asset. The successful candidate will be required to prepare and analyze samples by HPLC, SDS PAGE, IEF, and Western blot as well as perform protein purification by standard chromatographic methods. Familiarity with GLP and GMP practices would be beneficial but not necessary.

Senior Regulatory Affairs Associate

The successful candidate will prepare, file and follow-up on all types of regulatory submissions to the HPB, FDA and EMEA for animal health care products and assist with human health care products. You will participate on drug development teams for BIOSTAR products by providing regulatory and scientific input and maintain an ongoing program to ensure compliance with GMP regulations. Ideally the successful candidate will possess a University degree in a Life Science such as pharmacology, immunology, molecular biology, genetics, human or veterinary medicine, etc. and a minimum of three years of applied experience in the field of pharmaceutical regulatory affairs.

BIOSTAR Inc. is located at Innovation Place Research Park in Saskatoon, Saskatchewan (visit our website at www.innovplace.saskatoon.sk.ca or www.biostar.ca). We offer competitive compensation and benefits package along with the opportunity to work in a highly dynamic leading edge research environment. Interested candidates are invited to send their résumés in confidence to: Dr. Carolyn Weeks-Levy, Vice President, Research & Development

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I N C.

RESEARCH NUTRITIONIST GS-0630-12

Shape the future! The U.S. Department of Agriculture, Agriculture Research Service, Grand Forks Human Nutrition Research Center located in Grand Forks, North Dakota invites applications from outstanding individuals with broad nutritional background and interests for a Research Nutritionist position, GS-12, (\$44,953 to \$58,442, salary commensurate with experience) to lead research on the relationships and mechanisms by which the dietary trace elements affect human health and the burden of chronic disease in the U.S. population. Team research involving human volunteers will be supported by experiments with animals and appropriate cellular or molecular models. Collaborative arrangements with scientists at the University of North Dakota or other institutions are possible. Candidates must have a Ph.D., M.D., or Ph.D./M.D. degree in a closely related discipline. Applicants should submit a curriculum vitae, a list of publications, and a succinct outline of research plans and goals. This is a competitive, permanent appointment and *U.S. citizenship is required. ARS is an Equal Opportunity Employer.* For additional information on job requirements and application procedures, please call Hayley Lauritsen at (701) 795-8370 between 8:00am and 3:00pm, Monday through Friday, or fax (701) 795-8395, or write to: USDA, ARS, HRD, WOB, 6303 Ivy Lane, Room 553, Greenbelt, MD 20770-1433. Please reference announcement number ARS-D8W-031. Applications must be postmarked by 02/03/98.

At Wyeth-Lederle Vaccines and Pediatrics, a member of the Wyeth-Ayerst family, we're pioneering the design, manufacture, and marketing of vaccines that are changing lives — right now!

Here, you'll help improve the quality of a lot of lives, including your own. Our research facility, located in a suburb of Rochester, NY is within easy reach of some of New York State's most attractive cultural, educational and recreational activities.

RESEARCH SCIENTIST IMMUNOLOGY GROUP

We are currently seeking a Research Scientist for our Immunology Group. Working in a multidisciplinary environment, you will interact with scientists from the Molecular Biology, Bacteriology, Protein and Carbohydrate Chemistry departments in the design and preclinical testing of prototype vaccine formulations.

To qualify, you should have a Ph.D., 2-3 years' related post-doctoral experience in humoral and cellular immunology, skill in state-of-the-art molecular biology techniques, and a knowledge of the mucosal immune system.

At Wyeth-Lederle you'll enjoy a professional atmosphere and the kind of salary and benefits package you would expect from an industry leader. Please send your resume to: **Human Resources Department, Wyeth-Lederle Vaccines and Pediatrics, 211 Bailey Road, West Henrietta, NY 14586-9728.** An Equal Opportunity Employer.



Wyeth-Lederle Vaccines and Pediatrics
Protecting Families Through Immunization®

Associate/ Staff Scientist

Join a dynamic and growing effort at the forefront of drug discovery at The DuPont-Merck Pharmaceutical Company. We are focused on meeting major unmet medical needs through the discovery of innovative medicines. We currently have a position available in our Wilmington, DE research labs for a candidate with a BS or MS degree in **Molecular Biology** or a related field and several years of work experience. Familiarity with a variety of RNA protocols (RNase protection assays, in situ hybridizations, etc.) and experience in tissue culture and receptor binding assays are required. Some background in Chemistry is desirable. The candidate should be highly motivated with a willingness and desire to learn and apply new techniques.

Interested candidates should submit their resumes and references to: The DuPont-Merck Pharmaceutical Company, P.O. Box 80400, E400/5219, Wilmington, DE 19880-0400. Attention: SPH. An equal opportunity employer.

DU PONT
M E R C K

The DuPont Merck Pharmaceutical Company
Merging Strengths...Emerging Opportunities

Genentech, Inc.

incredible people
extraordinary science

What does your work mean to you? At Genentech, our work represents a commitment to progress, a quest for discovery. What matters to us? Something incredibly simple – bettering human health. Whether experimenting with a next-generation medicine, or producing one of our five marketed products in manufacturing, you'll play a critical part in making our vision a reality. Each day, we make it more real. If you share that passion for life, imagine what we could do with your help. It's incredible, and extraordinary.

Our progressive benefits package includes full medical/dental/vision, 3 weeks vacation, a stock purchase plan and health club membership. Send your resume, indicating Job Code, to: Genentech, Inc., Human Resources, P. O. Box 1950, South San Francisco, CA 94083-1950. Please use plain typefaces, we cannot accept faxes. You may e-mail your resume indicating Job Code to jobs@gene.com (ASCII files only with a maximum line width of 76 characters). Genentech is an Equal Opportunity Employer. We value the contributions of our diverse workforce.

www.gene.com

Scientists-Pharmacokinetics/Metabolism

Working in the Pharmacokinetics and Metabolism Department, you will investigate the disposition of novel therapeutics in preclinical animal models and identify lead candidates for further development. Your primary role will be to support the development of recombinant protein and small molecule therapeutics by designing, analyzing and reporting preclinical and clinical pharmacokinetics/pharmacodynamic studies. In addition, you will participate on an interdisciplinary project team responsible for the preclinical/clinical development and regulatory filings necessary to bring new drugs to market. To qualify for this challenging position, we require a PhD in pharmacokinetics, biochemistry, pharmacology, pharmaceutical sciences or a related discipline. Postdoc training and/or 2+ years of industrial experience in clinical pharmacokinetics preferred. Candidates must be able to integrate PK/PD information into optimizing dosing strategies for the treatment of various disease states. Experience with regulatory submissions and a demonstrated ability in advanced clinical pharmacokinetic data analyses are important. Job Code SCI1106.0

Postdoctoral Opportunities

All candidates should have a Ph.D. and/or M.D. with a strong background in the appropriate field.

Cardiovascular

This position will focus on identification and characterization of endothelial cell gene expression under one or more characterized environments (matrix, physical forces and growth factors). Experience in molecular biology and/or cell biology and an interest in the mechanisms of angiogenesis and anti-angiogenesis are necessary. Manager: Dr. Mary Gerritsen. Job Code SCI1037.

Immunology

A position is available for research involving regulation of oxygen radical production by phagocytic cells. The candidate will join an active research group whose focus is the role of oxygen radicals in inflammation, tissue injury and host defense, as well as the development of therapeutic strategies to regulate these processes. See J. Biol. Chem. 271:25400 (1996); J. Biol. Chem. 270:8194 (1995). Manager: Dr. John Curnutte. Job Code SCI1007.

A position is available to work in the area of integrin mediated cell adhesion. Areas of interest include structural basis of beta-2 integrin-ligand interactions, roles of alpha V integrins in angiogenesis and characterization of disintegrin (ADAM) structure and function. Experience in molecular biology and mammalian cell biology techniques, as well as structure function studies preferred. See Mol. Biol. of the Cell 8:501-515 (1997); J. Exp. Med. 183:1247-1252 (1996); J. Biol. Chem. 271:9962-9968 (1996); J. Biol. Chem. 270:12635-12640 (1995). Manager: Dr. Sarah Bodary. Job Code SCI1008.

Molecular Biology

A position is available to probe the function of novel hormones in growth and development. This will include the use of transgenic mice or other model systems, as well as the identification of novel receptor-ligand interactions. See Nature Biotech. 15:768-771 (1997); Stem Cells 14 (suppl 1):116-123 (1996); Proc. Natl. Acad. Sci. (USA) 92:5292-5296 (1995); Science 265:1445-1447 (1994). Manager: Dr. Austin Gurney. Job Code SCI777.

Toxicology

A position is available to assess the safety and mechanism of toxicity of exogenously administered human growth factors on tumor initiation, promotion, growth and metastasis. Experience with or knowledge of tumor biology, laboratory techniques, animal handling and with in-vivo and in-vitro tumor models is required. See Cancer Res. 56:921-924 (1996); Ann Intern. Med. 122:54-59 (1995); Cancer Res. 55:249-252 (1995); J. Clin. Invest. 95:1789-1797 (1995); Am. J. Clin. Pathol. 92:415-423 (1989); J. Histochem. Cytochem. 36 (4):383-389 (1988). Manager: Dr. Jeanine Bussiere. Job Code SCI535.

Protein Engineering

This position involves quantitative studies of protein-protein and protein-ligand interactions. Biochemical and biophysical techniques, as well as mutagenesis and phage display technology will be used to elucidate structure-function relationships. See Biochemistry 36:5607-5611 (1997); Blood 89:3219-3227 (1997); Biochemistry 34:10383-10392 (1995). Manager: Dr. Robert Kelley. Job Code SCI1073.

Molecular Oncology

A position is available to focus on the identification of cell death pathway components responsible for apoptosis, a process of fundamental importance in development and one that is intimately involved in the pathogenesis of cancer and neurodegenerative disorders. See Science 278:1612-1615 (1997); Nature 388:728-729 (1997); Science 277:815-818 (1997); Science 276:111-113 (1997); Science 275:1122-1126 (1997); Nature 385:86-89 (1997); Science 274:990-992 (1996); Cell 85:817-828 (1996); Science 269:1424 (1995); Science 268:567-569 (1995); Cell 81:801 (1995); Cell 81:505-512 (1995). Manager: Dr. Vishva Dixit. Job Code SCI266.



VICE CHANCELLOR, Academic Affairs

Duke University Medical Center invites applications for the position of Vice Chancellor for Academic Affairs. This senior position reports directly to the Chancellor for Health Affairs; the individual will be a key member of the management team that helps formulate and direct academic policy and operations for the Medical Center.

The Vice Chancellor will be in charge of the Medical Center's faculty affairs, sponsored research programs, interdisciplinary research and graduate education. Specific responsibilities include coordination and advancement of the biomedical research effort, enhancement of funding opportunities, advancement of educational policies, participation in the review and development of all research programs (including budgetary and space allocations), and resource planning and management. The faculty affairs portfolio includes overseeing the review process for faculty recruitments and promotions. A commitment to women and minority faculty recruitment is also essential.

Applicants should have a doctorate degree in the sciences (M.D., Ph.D., M.D./Ph.D., or equivalent), a strong background in biomedical research and research administration, and a deep commitment to excellence in these areas.

Please send letter of interest and curriculum vitae to: **Office of the Chancellor, Box 3701, Duke University Medical Center, Durham, NC 27710.**

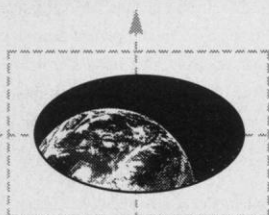
**Duke University
Medical Center**

Duke University is An Equal Opportunity/Affirmative Action Employer

**NYU
Medical
Center**

Bernard B. Levine Fellowship in Malaria Vaccinology

Postdoctoral position to investigate basic mechanisms in malaria vaccinology available for two years starting in the Fall of 1998. Studies will be conducted at New York University Medical Center, an institution well-known for its outstanding research environment in Parasitology. The award is open to individuals with either an M.D. or Ph.D. degree with a proven record of excellence and a strong background in basic immunology and molecular biology. Annual stipend is U.S. \$40,000. Interested candidates should send their curriculum vitae and three letters of reference to **Victor Nussenzweig, M.D., NYU Medical Center, Dept. of Pathology, MSB 131, 550 First Ave., New York, NY 10016. 212-263-5337, Fax 212-263-8179, e-mail: nussev01@mccr.med.nyu.edu.**



**We're redefining the way the world looks at life sciences.
We're the new life sciences company at Monsanto.**

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. The Agracetus Campus of Monsanto Company, is currently seeking candidates for the following positions:

Plant Transformation Post-Doc Rice Transformation Post-Doc

The selected candidates will develop plant transformation technology utilizing a variety of approaches including Agrobacterium and Gene Gun. As a member of these teams, you will improve and develop new rapid and efficient transformation protocol(s) for elite germplasm of crop plants with an emphasis on corn or rice.

We require a Ph.D. in one of the major plant biology disciplines, as well as experience and/or training in organelle biogenesis or reproductive biology and in plant growth, physiology, development and transformation. Candidates with experience in molecular tools such as promoter/gene isolation, cloning, analysis of gene function, vector construction with a strong desire to use their skills in plant transformation are highly encouraged to apply for these positions. Self-motivation, innovation, and communication in a team-based environment is essential.

Agracetus, located in Middleton, Wisconsin, has an expanded and modern research location with state-of-the-art plant transformation and greenhouse facilities. As part of a growing global company, we offer a competitive salary and benefits package. For consideration, please send your resume to: **Agracetus Campus, c/o Monsanto Company, Attn.: A. Kersten, 8520 University Green, Middleton, WI 53562. Fax: (608) 836-9710. E-mail: andrea.j.kersten@monsanto.com.** An application form will be required. EEO/AA Employer M/F/D/V.

Monsanto



New York University

CELLULAR NEUROPHYSIOLOGY

The Center for Neural Science of New York University invites applications for a tenure-track faculty position from candidates using cellular approaches to nervous system function. The appointment may be made at any level, pending final administrative and budgetary approval. Applicants with an active, independent research program in neuronal plasticity are encouraged to apply. Candidates should send a curriculum vitae, a statement of current research and teaching interests, copies of recent relevant publications, and the names and addresses of three or more individuals willing to provide letters of reference to: **Prof. J. Anthony Movshon, Center for Neural Science, New York University, 4 Washington Place, Room 809, New York, New York, 10003.**

NYU encourages applications from women and members of minority groups

**National Cancer Institute
Division of Clinical Sciences
Bethesda, Maryland**

Opening Date: January 2, 1998

Closing Date: March 31, 1998

Announcement Number: CA-97-0336

Deputy Director, Division of Clinical Sciences

The Division of Clinical Sciences (DCS) of the National Cancer Institute, National Institutes of Health, conducts research directed toward furthering our understanding of cancer and developing therapies leading to a reduction of the morbidity and mortality of cancer. The Director, DCS, is responsible for providing the scientific leadership and administrative support necessary to advance the clinical and translational research within the Division and Institute.

The Director, DCS, is seeking an outstanding Ph.D. or M.D. senior-level scientist to serve as Deputy Director of Scientific Affairs, DCS. The Deputy Director will be responsible for overseeing the implementation of new scientific programs and initiatives, such as the newly established Advanced Technology Center, and the management of existing programs, such as the DCS Sabbatical Program and Fellowship Programs. The Deputy Director will assist the Director in the development of new translational programs and in the recruitment of key research staff. The Deputy Director will coordinate interdivisional activities and serve as Division contact for intramural and extramural Working Groups. In addition, the Deputy Director will provide administrative oversight for the Division's personnel and space issues, and work with the Director to determine the optimum program support and/or resource allocation necessary to accomplish Division goals.

The Division is organized into 10 Laboratories/Branches staffed by approximately 1,000 individuals composed of personnel positions and fellowship positions, supported with an annual budget of approximately \$90 million.

Candidates should be recognized for their research accomplishments and should be experienced in the management of scientific programs. Candidates must possess a medical or other doctoral-level degree in a biomedical or related field. The total annual compensation will be commensurate with education and experience, based on the U.S. Government General Salary Schedule.

All applications should include the following: A letter expressing their interest in the position; a statement of their research interests, curriculum vitae and bibliography, and the names and addresses of five individuals who can be contacted as references. A list of the requirements or additional information about the position may be obtained by contacting Ms. Debbie Breedlove at the address listed below.

Applications should be sent to:

**Ms. Debbie Breedlove
Administrative Resource Center 31
National Cancer Institute
National Institutes of Health
Building 31, Room 3A20
31 Center Drive - MSC 2440
Bethesda, Maryland 20892-2440
Telephone: (301) 402-5736
FAX: (301) 480-0215**

Selection for this position will be based solely on merit with no discrimination for non-merit reasons such as race, color, gender, national origin, age, religion, sexual orientation, or physical or mental disability.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER

SCIOS is a biopharmaceutical company engaged in the discovery, development, and commercialization of novel human therapeutics, focused chiefly on cardiorenal disease and inflammation targets. We currently have the following exciting and challenging opportunities available to join our growing Cardiorenal Research team.

SCIENTIST/SENIOR SCIENTIST

We will rely on you to establish cellular and biochemical assays for kinase/phosphatase function. You will choose therapeutic targets from microarray differential display research efforts, evaluate lead therapeutic candidates, and develop assays suitable for secondary cell-based screening systems. Requires a PhD with documented research skills in biochemistry and cell biology with an emphasis on kinases or phosphatases. Experience in industry research preferred. Supervisory skills required. REF: 97-081.

SCIENTIST

Responsibilities include the purification of research quantities of novel proteins and their characterization as to purity and native structure. Requires a PhD with 2-3 years related postdoctoral experience. Preference will be given to candidates with industrial experience and/or experience utilizing advanced protein expression and purification techniques. Good communication skills a must. REF: 97-079.

SENIOR RESEARCH ASSOCIATE/ STAFF RESEARCH ASSOCIATE

You will be responsible for isolation, separation and tissue culture of primary cells from the heart and kidney. Additional duties include maintenance of transformed cell lines and tissue culture-based functional assays for screening and research. Requires a BS with 5+ years experience in tissue culture. Lab management experience in an industry setting and familiarity with *in vitro* cell function assays for screening are preferred. REF: 97-080.

Competitive salaries, a superior benefits package, and a very dynamic environment support the SCIOS team. Please respond to: SCIOS, Human Resources, Reference Code _____, 2450 Bayshore Parkway, Mountain View, CA 94043. Or FAX to 650/962-5966. EOE.

scios



UNIVERSITY OF CALIFORNIA SANTA BARBARA
**DONALD BREN SCHOOL
OF ENVIRONMENTAL
SCIENCE & MANAGEMENT**

Faculty Position in Earth System Science

The University of California, Santa Barbara (UCSB) School of Environmental Science and Management invites applications for a tenure-track position at the Assistant Professor level. We seek an interdisciplinary atmospheric scientist who conducts research on global or regional tropospheric processes and their interaction with the hydrologic cycle and biogeochemical cycles. Either a terrestrial or oceanic focus is appropriate. The person should also be able to teach a graduate-level course in local-to-regional-scale tropospheric processes.

The School's programs focus on scientific and social complexities, global interactions, and economic and political strategies. The curriculum includes the natural science, social science, and policy perspectives. The applicant should be a user and a teacher of numerical methods for deterministic simulation of environmental phenomena. He or she must have a strong interest in interdisciplinary collaborations with faculty and students. The candidate will be expected to develop and teach core courses for a professional Master's degree program in Environmental Science and Management as well as advanced topic courses. We offer the master's degree and, pending approval, the doctorate. Our first students enrolled in Fall 1996. Our School web page (<http://www.esm.ucsb.edu/>) contains more information.

For primary consideration apply by February 16, 1998. Thereafter positions are open until filled. Start date is July 1, 1998, but we can accommodate a later date at the candidate's preference. The Ph.D. is normally required at the time of appointment. Applicants should send a curriculum vitae, the names and addresses of four references, a statement of research and teaching interest, and reprints of no more than five publications to: Search Committee, School of Environmental Science and Management, University of California, Santa Barbara, CA 93106-5131; tel.: 805-893-7363; fax: 805-893-7612; E-mail: search@esm.ucsb.edu.

The University of California is an Equal Opportunity/Affirmative Action Employer. We encourage all qualified applicants to apply, including minorities, women, and persons with disabilities.

SYMPOSIUM

PENN STATE



Penn State's
17th Summer Symposium in Molecular Biology

"Immune-NeuroEndocrine Interactions: Cellular and Molecular Mechanisms"

July 29-31, 1998

Session I — "Neuroendocrine Modulators of the Immune System I"

Virginia Sanders (*Loyola University*)
Paul Kincade (*Oklahoma Medical Found.*)
Nancy Olsen (*Vanderbilt University*)
Jonathan Ashwell (*NIH*)

Session III — "Immune Modulators of the Neuroendocrine System"

Errol B. DeSousa (*Neurocrine Biosciences*)
Bryan L. Spangler (*University of Nevada*)
William A. Banks (*Tulane University*)
Allan M. Judd (*Brigham Young University*)

University Park Campus

Session II — "Neuroendocrine Modulators of the Immune System II"

Keith W. Kelley (*University of Illinois*)
Lina Matera (*University of Turin, Italy*)
John R. Klein (*University of Tulsa*)
Mireille Dardenne (*Hospital Neckar, France*)

Session IV — "Neuroendocrine and Immune System Interactions: The Disease State"

John Sheridan (*Ohio State University*)
Robert Bonneau (*Penn State, Hershey*)
Jean Merrill (*Berlex BioSci*)
Ronald Wilder (*NIH*)

Keynote Address: David Felten (*University of Rochester*)

Plenary Lecture: Esther Sternberg
(*National Institutes of Health*)

The Symposium will feature poster sessions and large industry exhibits along with afternoon workshops for selected oral presentations. This year's program is organized by Drs. Andrea M. Mastro, Douglas Granger, and Kamal Rashid of The Pennsylvania State University and Robert Bonneau of The Hershey Medical Center.

Registration: Regular \$150, Postdocs: \$85, Graduate Students: \$45.

For more information contact Ms. Carey Shuey, Program Assistant, 108 Althouse Lab, University Park, PA 16802, phone: 814-863-1918, Fax: 814-863-7024 or e-mail: cls20@psu.edu. Visit our website: http://www.bmb.psu.edu/deptpage/Summer_symposium.htm.

Abstracts for posters and oral presentations are due June 15, 1998.



MAYO CLINIC Postdoctoral Immunologist

The Department of Immunology, Mayo Clinic, is seeking applications for a Postdoctoral Immunologist with ample experience in cellular immunology, specifically in the area of T-lymphocytes and basic molecular biology techniques, to lead a research project for the development of novel immunotherapies for cancer.

The laboratory is headed by Dr. Esteban Celis in the Department of Immunology who is devoted to the identification of tumor-associated antigens, T-cell epitopes (cytotoxic and helper), and to the development of immunization strategies that overcome immune tolerance in the cancer setting. We are also developing adoptive cellular therapies for common types of cancer (breast, colon, and prostate) based on dendritic cell vaccination and T-cell therapy.

Applicants please forward curriculum vitae and direct inquiries to:

Esteban Celis, M.D., Ph.D.
Mayo Clinic

Department of Immunology
200 First Street SW
Rochester, MN 55905

Mayo Foundation is an Affirmative Action and Equal Opportunity Educator and Employer.

BUSINESS DEVELOPMENT MANAGER - PRECLINICAL USA

QUINTILES is the first full service contract pharmaceutical organization with over 8,500 professionals and offices in 23 countries. Our company has a firm commitment to develop specialist therapeutic area business capabilities in support of our customers' R&D requirements. To complement this strategy, we are now looking to recruit a preclinical Business Development Manager for North America.

The successful candidate will have at least 8 years pharmaceutical industry experience, primarily in discovery biology, but with a demonstrable understanding of drug development requirements, toxicology, drug metabolism and regulatory affairs. Candidates should have experience in at least one of the following therapeutic areas: oncology, inflammation/respiratory disease, CNS disorders or cardiovascular disease, and have been involved in successful drug discovery or development programs. A background in pharmacology research in cancer or respiratory disease would be an advantage and excellent communication skills are fundamental.

The remit will be to develop new business opportunities for Quintiles preclinical services by working closely with drug discovery and development groups within pharmaceutical and biotechnology research in North America. Based in one of our Quintiles North American offices, with a preference to an east coast location, you will be required to operate with a great deal of autonomy, but have the ability to matrix with both preclinical operations and other clinical business groups on an international basis. You will directly report to the Business Development Director in Edinburgh, Scotland.

This highly challenging position will command a competitive remuneration package. Please send CV in confidence to: **QUINTILES, Human Resources - RC, P.O. Box 13979, Research Triangle Park, NC 27709-3979, Fax (919) 941-6388.** (No Calls, Please) An Equal Opportunity Employer M/F/D/V. Find out more about our company and other opportunities by visiting our web site at: [HTTP://WWW.QUINTILES.COM](http://www.quintiles.com)
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DISCOVER THE ABBOTT DIFFERENCE.

PULMONARY IMMUNOPHARMACOLOGIST/ PHYSIOLOGIST

We are seeking a uniquely qualified Senior Research Pharmacologist to assist our discovery and exploratory efforts. The selected candidate will design, oversee and participate in the evaluation of novel compounds and mechanisms in models of pulmonary diseases. This position requires a Ph.D. with at least 1-3 years experience. Expertise in mucociliary transport and chronic bronchitis are major assets. We seek an aggressive, independent and creative thinker with the skills and drive to champion novel projects. Experience in molecular, cellular, and *in vivo* assays, as well as a strong record of innovative research, as evidenced by publications in leading journals, is essential. (JOB CODE: 97-LAM-4108)

RESEARCH BEHAVIORAL PHARMACOLOGIST

We are seeking an individual to design and conduct behavioral, pharmacological and related experiments in neuroscience drug discovery. In addition, the individual we seek will interpret and communicate findings through written and oral reports, maintain detailed records of research, prepare papers for publication and supervise associates. To qualify, you should possess a Ph.D. and 2-4 years postdoctoral experience in Neuroscience or related field. Research experience in behavioral neuroscience coupled with abilities in neurochemical, neuropharmacological and/or neuroanatomical techniques a must. A publication record and the ability to work in a team-oriented environment are essential. (JOB CODE: 97-LAM-4466)

We are located just 40 miles north of Chicago, in North Chicago, Illinois. In return for your expertise, we offer a competitive compensation package, including full benefits. For confidential consideration, please send your resume, indicating position of interest, with salary history to: **Job Code _____, Dept. 0583, Bldg. AP9A, Abbott Laboratories, 100 Abbott Park Rd., Abbott Park, IL 60064.** An EOE, we are as committed to employee diversity as we are to our broad range of products and services.



*At Abbott
Laboratories,
we've introduced
some of the most
impressive
innovations in
health care, and
will continue to
provide quality
health care
products far into
the future. With
54,000 employees
worldwide and
more than \$11
billion in annual
sales, our
achievements are
known globally
and are the result
of our talented
professionals.
Currently we are
seeking the
following
individuals to join
our team:*

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Faculty Position
Department of Pathology
Program in Developmental Biology
Baylor College of Medicine

The Department of Pathology and the Program in Developmental Biology invites applications for a tenure-track faculty position at the **Assistant or Associate Professor** level. The candidate is expected to maintain an independent, nationally funded research program in developmental biology that complements the broad scientific interests within the Department of Pathology. Current areas of investigation within the Department include cardiovascular development, *Drosophila* and mouse development, human genetic disease, protein trafficking, and developmental regulation of RNA splicing. Candidates should hold a Ph.D., M.D., or both and have postdoctoral experience. Generous start-up funds are available to the successful applicant. Additional information may be found at the web-sites for the Department of Pathology (www.bcm.tmc.edu/pathology/db/) and the Program in Developmental Biology (www.bcm.tmc.edu/db/).

A letter of application with curriculum vitae, statement of research objectives, reprints of two or three publications, and contact information for three referees should be sent to:

Chairman of Faculty Search Committee

Department of Pathology
Baylor College of Medicine
Houston, TX 77030

*Baylor College of Medicine is an Equal Opportunity/
 Affirmative Action/Equal Access Employer.*



Faculty Position in Physical Oceanography
Scripps Institution of Oceanography
University of California, San Diego

Scripps Institution of Oceanography invites applications for a faculty position in areas of large-scale physical oceanography. The position may be filled at the level of Assistant, Associate, or Full Professor (tenure-track or tenured) depending on experience, but preference will be given to applicants at the Assistant or Associate level. Successful candidates will be expected to contribute to the graduate teaching program of the Physical Oceanography Curricular Group and to develop a strong extramurally funded research program that will complement existing efforts in large-scale observations, theory, and climate dynamics. Preference will be given to candidates with strong credentials in reconciling models and observations, data assimilating modeling, ocean climate prediction, and general circulation modeling.

Rank and salary will be commensurate with qualifications and experience based on the UC pay scale. Candidates must have a Ph.D. or equivalent degree. The position will involve teaching and the supervision and support of graduate students, and the development of research programs supported by extramural funds. Associate and Full Professorial candidates must show evidence of a strong research record; Assistant-level candidates will be expected to show evidence of their potential through a publication record appropriate to their experience. Closing date for applications: March 1, 1998. Send letter of application including description of research interests, list of publications, résumé of teaching experience, and names/addresses of five referees to: **Chair, Physical Oceanography Search Committee, SIO Graduate Department, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0208.**

UCSD is an Equal Opportunity/Affirmative Action Employer.

Schering

Managers, Drug Discovery

At Schering-Plough Animal Health, we're turning a healthy interest in animal's well-being into the most remarkable innovations veterinary care has experienced in decades. We can offer you an exciting opportunity to advance your career at our **Union, NJ** facility.

In these positions, you will provide a direct interface between Schering-Plough Animal Health and the Schering-Plough Research Institute drug discovery effort. You will monitor Schering-Plough Research Institute discovery efforts both in-house and via third parties in order to alert Schering-Plough Animal Health to promising leads for animal health. These positions will coordinate specific projects directed toward the discovery of new therapeutically relevant drugs.

These two positions currently available require a Ph.D. in chemistry, microbiology, biochemistry, immunology or molecular biology and 3-6 years relevant experience. A D.V.M. degree in addition to the Ph.D. is desired.

To learn more about these challenging positions with a worldclass corporation offering a competitive salary/benefits, send your resume, to: **Pamela Wahlberg, Schering-Plough Animal Health, Code: MDD, 1095 Morris Avenue, Mail Stop 4000, Union, NJ 07083.** Please note that only those people selected for an interview will be contacted. Equal Opportunity Employer.



Schering-Plough
Animal Health

**Molecular
 Biologist**

Merck Research Laboratories, a division of Merck & Co., Inc., is a world leader in pharmaceutical research and is committed to developing breakthrough drugs and therapies in the shortest possible time frame; with the ultimate goal of improving world health. We are also committed to developing the careers of talented individuals throughout our organization.

The Department of Vaccine Genetic and Cellular Toxicology has an immediate opportunity for a Molecular Biologist with a BS or MS degree in a related field, and at least three years of laboratory experience. The successful candidate will carry out GLP studies of the tissue distribution and potential integration of DNA vaccines and gene therapy constructs. A strong academic background and demonstrated excellence in laboratory technique are essential.

Merck offers an excellent salary and benefits package with ample opportunities for personal and professional growth. For consideration, please send the following along with your resume: cover letter detailing your interest, proof of academic excellence, and the names of three references, to: **Ad # D-135, MRL Human Resources, WP42-2, Merck Research Laboratories, P. O. Box 4, West Point, PA 19486.** Only candidates considered for interviews will receive responses. EOE, M/F/D/V.

<http://www.merck.com>



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Pathways to Cancer

March 11 - 14, 1998

In celebration of James D. Watson's
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Organized by:

Ed Harlow,
Massachusetts General Hospital
Bruce Stillman,
Cold Spring Harbor Laboratory
Jan Witkowski,
Cold Spring Harbor Laboratory

Keynote Address
Harold Varmus, NIH

Topics

- mechanistic changes
that lead to cancer - mutations,
cell cycle, tumor development
- reviews of examples of specific
pathways involved in cancer -
ras-raf, wnt, and p16-Rb/E2f
- pathways to specific cancers and
how that molecular knowledge is
being or might be used clinically -
breast, colon, prostate, melanoma

Invited Speakers (*to be confirmed):

Thierry Boon*	Stanley Korsmeyer
Melanie Cobb	Arnold Levine
Philip Cohen	Joseph Nevins
Sara Courtneidge	Roel Nusse
Judah Folkman	Tony Pawson
Errol Friedberg	Mark Peifer
David Housman*	Bruce Ponder
Peter Howley	Gerald Rubin*
Michael Ittmann	Erkki Ruoslahti
Rakesh Jain	Charles Sherr
Scott Kern	Robert Weinberg
Marc Kirschner	Michael Wigler

Abstract Deadline: January 15

Registration Deadline: February 18

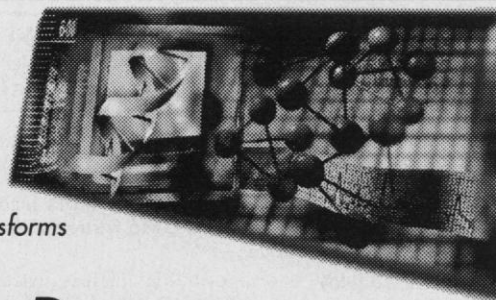
We encourage early submission of abstracts for
consideration as poster presentations.
A maximum of 60 posters will be selected based
on scientific merit and fair lab representation.



**Cold Spring
Harbor Laboratory**

Meetings & Courses Office
1 Bungtown Rd.
Cold Spring Harbor, NY 11724
Email: meetings@cshl.org
Fax: 516 367 8845 Tel: 516 367 8346

Online registration:
<http://www.cshl.org/meetings/>



The transition from theory
to practical application transforms
molecules to medicines.

PHARMACEUTICAL DEVELOPMENT AT SCHERING-PLOUGH

At Schering-Plough's Pharmaceutical Development Facilities in Kenilworth, NJ, scientists skillfully develop innovative formulations and drug delivery systems to bring quality pharmaceutical products to market. In this technologically advanced environment, you will provide the vital link between research and manufacturing.

SOLIDS FORMULATION RESEARCH & DEVELOPMENT

Our Pharmaceutical Development Group seeks talented Scientists who want
an opportunity to be a part of an exciting, multidisciplinary research effort.

SENIOR PRINCIPAL SCIENTIST/SECTION LEADER

As a senior member of our Solids Formulation Research group, you will manage the activities of 2-4 scientists involved in solid dosage form research and development. You will also plan and lead formulation studies to develop solid dosage forms for new chemical entities (NCEs) in support of Phase I/II clinical studies. To qualify, you will need a PhD in Pharmaceutics, Chemistry, Chemical Engineering or a related discipline and a minimum of 5 years of industrial experience in preformulation and formulation. Demonstrated scientific and technical accomplishments in the form of publications or patents is highly desirable. Previous supervisory experience along with excellent communication and interpersonal skills are essential. To be considered for this position, please reference Dept. PL01-KB.

ASSOCIATE PRINCIPAL SCIENTIST

As a member of our Solids Formulation Research group, you will be a part of a professional team developing solid dosage forms for human use. Responsibilities will include planning and carrying out experiments to develop solid dosage forms for new chemical entities (NCEs) in support of Phase I/II clinical studies. To qualify, you will need to be an independent self-starter with a PhD in Pharmaceutics, Chemistry, Chemical Engineering or a related discipline and 3 or more years of industrial or postdoctoral experience. Background that includes experience with preformulation/formulation and familiarity with GLP/GMP is highly desirable. Strong verbal and written communication skills are a must. To be considered for this position, please reference Dept. PL02-KB.

ASSISTANT/ASSOCIATE SCIENTISTS

Our Pharmaceutical Research and Development group has several opportunities for talented individuals. As a member of a team of professional scientists, you will develop solid dosage forms for new chemical entities (NCEs) and/or provide support in the characterization and screening of Discovery compounds. To qualify, you will need a BS degree in Chemistry, Chemical Engineering, Pharmacy or a related discipline and 2-5 years of experience or an MS degree and up to 2 years of experience. For solid dosage form positions, hands-on experience with formulations and familiarity with GLP/GMP is highly desirable. For discovery support positions, hands-on experience with preformulation work as well as familiarity with physical and chemical characterization of NCEs are required. Excellent organization, communication and interpersonal skills are essential. To be considered for these positions, please reference Dept. PL03-KB.

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.



**Schering-Plough
Research Institute**

Using Science for Human Advantage

**SAINT JOHN'S UNIVERSITY/COLLEGE OF SAINT BENEDICT
DEPARTMENT OF BIOLOGY
ASSISTANT PROFESSOR VACANCIES — FALL, 1998**

The Department of Biology invites applications for three full-time, tenure-track positions in Biology to begin Fall, 1998, as follows:

Aquatic Ecology and Botany — responsibilities include teaching aquatic ecology and plant diversity, and participating in our environmental studies program.

Molecular Biology — responsibilities include teaching molecular biology and courses in genetics and/or biochemistry.

Vertebrate Biology — responsibilities include teaching comparative vertebrate anatomy and vertebrate natural history, serving as curator of the vertebrate collections in our museum and participating in advising pre-med students.

Qualifications: The successful candidates will (1) have a Ph.D. in an appropriate field; (2) show a demonstrated interest and ability in teaching undergraduates in a liberal arts setting; (3) be willing to teach introductory biology; and (4) develop a research program appropriate for undergraduate student involvement.

Additional information posted on our website <http://www.csbsju.edu>.

Please submit a cover letter including a statement of teaching philosophy and appropriate research interests, curriculum vitae, transcripts, and three recent letters of recommendation by January 31, 1997, to:

**Director of Human Resources
St. John's University
Collegeville, MN 56321-5000**

Please refer to the position to which you are applying on all materials submitted.

Women and people of diverse racial, ethnic, and cultural backgrounds are encouraged to apply. EEO/AA Employers.

DIRECTOR

**Great Lakes WATER Institute
University of Wisconsin-Milwaukee
Graduate School**

The University of Wisconsin-Milwaukee (UWM) Graduate School seeks a Director to lead the newly reorganized UWM Great Lakes WATER Institute. The WATER Institute supports aquatic and environmental research, education, and outreach programs globally, with an emphasis on the Great Lakes region. The Institute serves as the home of the UWM Center for Great Lakes Studies (a UW-System/UWM Center of Excellence), the NIEHS Marine and Freshwater Biomedical Sciences Center, the UWM Aquaculture Institute, the Lake Michigan Fisheries Management and Law Enforcement units of the Wisconsin Department of Natural Resources, and the Wisconsin Sea Grant Regional Advisory Services. The Institute owns and operates the 22m RV *Neeskay*.

As chief administrator of the WATER Institute, the Director is expected to have the skill, imagination, and enthusiasm to foster the growth and productivity of ongoing programs, and to provide creative leadership for new initiatives and partnerships. Candidates should have prior experience administering an environmental research organization; a record of productive interaction in support of research with funding agencies, foundations, and private sector and community organizations; a doctoral degree in a related discipline; and a desire to lead an active, multi-disciplinary program into the 21st century.

This is a full-time, annual basis appointment with excellent fringe benefits. If appropriate, appointment in a UWM academic department will be considered based upon the qualifications of the successful candidate. Salary commensurate with qualifications and experience.

Interested individuals should submit a letter of application, résumé or vitae, and the names, addresses, and phone numbers of three references, postmarked by February 1, 1998, to: **Chair, Screening Committee for Great Lakes WATER Institute Director, University of Wisconsin-Milwaukee, Graduate School, P.O. Box 340, Milwaukee, WI 53201.**

Names of applicants who have not requested that their identities be withheld and names of all finalists will be released upon request.

EEO/AA/M/F/H/V

Acusphere Inc. is a rapidly growing and well funded biotechnology company engaged in the research, development and commercialization of encapsulated therapeutics and diagnostics.

FORMULATION SCIENTIST

We are seeking an individual to join our Formulations group in the development of delivery systems for therapeutic and diagnostic agents. The successful candidate will be involved with the formulation and encapsulation of compounds using several different delivery technologies. A Ph.D. in physical chemistry, chemical engineering, material science or pharmaceuticals and 0-3 years' Postdoctoral experience is required. A background in the use of polymers for drug delivery and experience in polymer characterization methods is preferred.

Acusphere Inc. offers a stimulating work environment as well as a competitive salary and an excellent benefits package including equity participation. Please send your resume to: **Acusphere Inc., Attn: HR, 38 Sidney Street, Cambridge, MA 02139.** An Equal Opportunity Employer M/F/D/V.

ACUSPHERE inc.

Senior Research Scientist, Molecular Biology

Pierce Chemical Company, a world-leading manufacturer of life science reagents, seeks a key scientist to work on development of molecular biology kits and reagents.

Qualified candidates will have a minimum of 3 years industrial Biotech R&D experience coupled with a Ph.D. in Molecular Biology and familiarity with a variety of lab techniques including:

- DNA/RNA synthesis and labeling with reporter groups
- Southern and Northern blotting via radioactive and nonradioactive methods
- Construction of cDNA libraries
- Subtractive hybridization
- Differential display
- Development and manipulation of plasmid constructs
- Protein expression/purification techniques
- Nucleic acid amplification techniques
- DNA sequencing

Other desired skills/qualities include a strong background in subtractive cloning and differential display, a track record of product development for commercial endeavors, an extensive knowledge of product offerings from life science kit and reagent companies, and extensive academic contacts.

Pierce Associates enjoy a competitive, industry-based compensation and benefit package that offers company-paid health, life and disability insurance; a company-sponsored 401(k) and profit sharing plan; educational assistance; wellness benefits; business casual dress; flexible work scheduling; and relocation assistance. Located in Rockford, Ill., we're proud of the very affordable cost of living and high quality of life that exists in our community just a short drive from Chicago and Milwaukee.

If interested, please contact in confidence:

Joe LaPointe, Recruitment and Compensation Manager
Pierce Chemical Company, 3747 N. Meridian Rd., Rockford, IL 61101-9316
Tel: 815-987-4638 • Fax: 815-968-3556
e-mail: joseph.e.lapointe@perstorp.com • Internet: <http://www.piercenet.com>
EOE/Non Smoking Environment

 **PIERCE**

Mitotix is a biotechnology company developing cell-cycle based biotherapeutics for cancer, cardiovascular and infectious diseases.

ASSAY DEVELOPMENT SCIENTIST

We are seeking an individual to design, develop and implement assays for the high-throughput screening of compound libraries and for follow-up studies of inhibitor "hits". The position will entail responsibility for troubleshooting or modifying existing assays and characterizing assay reagents.

A Ph.D. degree in biochemistry with postdoctoral experience would be ideal. Candidates with an MS degree and extensive work experience will also be considered. The candidate must have a track record of developing assays.

Mitotix offers competitive salaries, benefits and a chance to work in an exciting scientific environment. Please send resume to:
Human Resources, Mitotix, Inc.,
Job Code: ADS98, One Kendall Sq.,
Bldg. 600, Cambridge, MA 02139;
www.mitotix.com EOE.



New Tenure-Track Positions: Marine Chemist, Marine Geologist, and Physicist/Physical Oceanographer

Coastal Carolina University has extended the application deadline for three (3) new tenure-track positions beginning Fall 1998.

Marine Chemist: A Ph.D. degree is required and teaching experience is desired. This position will have teaching responsibilities for undergraduate courses in the Department of Marine Science. The successful candidate will have demonstrated the ability to conduct sponsored research and will be expected to develop an active research program as well as provide undergraduates with research opportunities.

Marine Geologist: This position will have responsibilities for developing and teaching undergraduate courses in marine geology for the Marine Science Department. The successful candidate is expected to maintain an active funded research program within the Center for Marine and Wetland Studies and oversee undergraduate student research. A Ph.D. in Geology, Geological Oceanography, or related fields is required. A strong background in coastal geomorphology, coastal processes, framework studies, applied marine geophysics, and hydrology is preferred.

Physicist/Physical Oceanographer: This position will have teaching responsibilities for undergraduate courses in the Departments of Chemistry/Physics and Marine Science. The successful candidate will have a demonstrated interest in and commitment to innovative methods of physics teaching. Preference will be given to candidates with an advanced degree in an area of experimental physics and a background in physical oceanography, hydrodynamics, climate modeling, or some related discipline. There will be ample opportunity for scholarly collaboration with the Department of Marine Science and for use of a modern GIS and multimedia computer lab built around a DEC workstation networked to a combination of X terminals and Power Macs.

Coastal Carolina University is a growing, state-supported, liberal arts institution that emphasizes undergraduate education. It is located in coastal South Carolina 10 mi. west of Myrtle Beach. For more information about the School of Natural and Applied Sciences, visit our web page at <http://www.coastal.edu/academics/science/schoolit.htm>. Interested candidates should submit a letter of application, resume, as well as names and telephone numbers of three references to: **Dr. S. Libes, Department of Marine Science, Coastal Carolina University, P.O. Box 261954, Conway, SC 29528-6054, USA.** Review of applications will begin immediately and continue until the positions are filled.

Coastal Carolina University is an EOE/AA Employer.

The Corinne Boyer Chair in Ovarian Cancer Research at the University of Ottawa



The Corinne Boyer Fund and the University of Ottawa announce the establishment of the **Corinne Boyer Chair in Ovarian Cancer Research** in the Faculty of Medicine and seeks nominations of, and applications from, scientists with a distinguished track record of achievement in the fields of genetics, developmental biology, or molecular medicine related to the understanding of the pathogenesis, diagnosis, or therapy of ovarian cancer. The successful candidate will join a dynamic multidisciplinary group of investigators in the Department of Cellular & Molecular Medicine and will lead the development of an integrated basic science approach for the study of ovarian cancer. A cross appointment in the Department of Obstetrics & Gynecology also will be provided. Academic rank for this tenure-track position will be at the Associate or Full Professor level.

In establishing and building this new ovarian cancer research initiative, it is also expected that the successful candidate will give public leadership on issues related to ovarian cancer, will attract other researchers and additional funding to the program, and will assist in public and professional education regarding the prevention, diagnosis, and treatment of cancer of the ovary.

The recruitment effort is directed at M.D.s and/or Ph.D.s with special emphasis on individuals who have the demonstrated ability for collaborative research. *In accordance with Canadian immigration requirements, this advertisement is directed primarily, but not solely, to Canadian citizens and permanent residents.* Bilingualism (English and French) is a definite asset. Nominations and applications, including a CV and a statement of research goals/interests, and the names of three references should be sent to **Dr. P. Walker, Dean, Faculty of Medicine, University of Ottawa, 451 Smyth Road, Ottawa, Ontario, CANADA K1H 8M5** by February 15, 1998.

NSCORT radiation health LBNL/CSU

Postdoctoral and graduate (Ph.D.) opportunities are offered in molecular, cellular and tissue radiation biology and radiological physics by the NASA Sponsored Center for Research and Training (NSCORT) in Radiological Health Sciences. This program consists of a consortium of investigators at Lawrence Berkeley National Laboratory (<http://henbane.lbl.gov/~nscort/>) and Colorado State University (<http://www.ColoState.EDU/Depts/RHS/>). Research opportunities exist in the following areas, with mentors at both Lawrence Berkeley National Laboratory and at Colorado State University:

- DNA Repair and Early Development of Chromosome Aberrations (Dr. Priscilla Cooper and Dr. Joel Bedford)
- Mechanisms and Modulation of Mutagenesis (Dr. Amy Kronenberg and Dr. Charles Waldren)
- Role of the Microenvironment in the Radiation Responses of Epithelial Cells (Dr. Mary Helen Barcellos-Hoff, Dr. Eleanor Blakely and Dr. Edward Gillette)
- Theoretical Modeling of DNA Damage and Cellular Responses (Dr. Alok Chatterjee)
- Microdosimetric Studies of Heavy Ion Interactions (Dr. Thomas Borak)

For further information, contact **Dr. Alok Chatterjee, Director of the NSCORT in Radiological Health, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 29-100, Berkeley, CA 94720**, or a_chatterjee@lbl.gov. See this position description and qualification requirements on our LBNL Web Site. The URL address is: <http://www.lbl.gov/CJO>. Affirmative Action Employer.



**U.S. Department of Agriculture (USDA)
Agricultural Research Service (ARS)
LABORATORY DIRECTOR
GS-14/15**

The USDA, Agricultural Research Service (ARS), is seeking a highly motivated and articulate research scientist to serve as Laboratory Director, and provide vision and leadership, to the ARS Appalachian Fruit Research Station, Kearneysville, WV. The mission of the Station is to identify and solve critical problems of temperate fruit production, protection, harvesting, and sorting needed to maximize productivity, cost efficiency, and fruit quality, while minimizing adverse environmental effects. This position will require the experience and willingness to interact closely with other scientists, and a demonstrated ability to conduct research. The successful candidate must have demonstrated supervisory skills, and the ability to work in a collaborative environment. Strong interpersonal and communication skills are a must. The incumbent will have the responsibility to shape, manage, and participate in research programs involving 17 senior scientists, a modern, well-equipped research laboratory and greenhouse facility, and a 550-acre research orchard. Professional experience is required in Horticulture, Entomology, Plant Physiology, Plant Pathology, and/or Agricultural Engineering. Competitive salary and benefits package. Ph.D. is desirable. *Candidate must be a U.S. citizen.* For further information on research programs contact **Wilda H. Martinez** at 215-233-6593. For application information and forms contact **Janie E. Carr** at 301-344-4569. Applications must be postmarked by January 30, 1998. *USDA/ARS is an Equal Opportunity Employer. Women and minorities are encouraged to apply.*



**THE COOPERATIVE INSTITUTE
FOR COASTAL AND ESTUARINE
ENVIRONMENTAL TECHNOLOGIES (CICEET)
REQUEST FOR PRELIMINARY PROPOSALS**

The Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), located at the University of New Hampshire, was established in 1997. The Institute's mission is to develop and foster the use of innovative environmental technologies and management approaches for the long-term conservation of the nation's coastal and estuarine ecosystems. Particular emphasis is placed on identifying, assessing, monitoring, reducing, and reversing the impacts of contamination of coastal waters. This request seeks preliminary proposals for projects of up to \$100,000 per year for 1-3 years that address the CICEET mission and use the National Estuarine Research Reserve System as laboratory areas for applied research and pilot projects. A total of \$2 million dollars is available under this RFP. The submission deadline is January 30, 1998. Proposal guidelines and supporting documents can be accessed at the following website: http://ekman.sr.unh.edu/idems/CICEET_RFP/ciceet_rfp.html

For more information contact:
Richard Langan, Ph.D.
UNH CICEET Acting Co-Director
Jackson Estuarine Laboratory
85 Adams Point Road
Durham, NH 03924
(603) 862-2175
rlangan@christa.unh.edu

CAREERS IN RESEARCH & DEVELOPMENT

Invitrogen is a growing company delivering the most innovative products for gene cloning and expression. We are looking for motivated individuals to work as part of our team. Invitrogen has an aggressive compensation package and a rewarding professional environment.

There are several Senior/Staff and Postdoctoral positions available in our research and development department. Invitrogen is a privately held, rapidly growing, molecular research technology company with an active R&D/postdoctoral program. We are looking for enthusiastic researchers with good oral and written communication skills and the desire to be involved in the development of cutting edge molecular biological research tools.

**SENIOR SCIENTIST/STAFF SCIENTIST
Bacterial/Molecular Geneticist**

We are seeking an innovative bacterial geneticist to assist ongoing efforts to simplify and optimize bacterial display and recombinant protein expression systems. Our research is also focused on developing assays for investigating molecular interactions in bacteria and bacteriophages. This Ph.D.-level position requires extensive experience with strain development and manipulation as well as in-depth knowledge of microbial biological systems.

SCIENTISTS/POSTDOCTORAL SCIENTISTS (7 positions open)

The successful candidates will be expected to demonstrate innovation in the investigation of novel technologies and product ideas. A Ph.D. in biochemistry, molecular biology or related field and 0 to 4 years of postdoctoral experience is required.

Molecular Crosslinking

This position will concentrate on the development of a novel proprietary cross-linking chemistry (Molecular Velcro™) that allows binding of proteins or DNA to other molecules as well as to solid phase. The successful candidate will have expertise in molecular biology and protein chemistry. A strong background in organic chemistry is a plus.

Protein-Protein Interactions

This position will explore and develop systems designed to study protein-protein interactions including the display of peptides and proteins on filamentous phage. The successful candidate will have experience with protein-protein interaction assays. Familiarity with phage display systems is preferred. A proven expertise in a wide variety of molecular biology techniques is a plus.

Eukaryotic Expression

This position will develop novel technologies to introduce nucleic acids and proteins into eukaryotic cells with a focus on gene expression. The successful candidate will have expertise in a variety of molecular biology techniques including mammalian tissue culture.

**cDNA Libraries &
High Throughput Cloning
(4 positions open)**

These positions will explore novel approaches for cDNA library construction as well as high throughput DNA cloning technologies. The successful candidates will have extensive experience in molecular biology techniques including cDNA library construction and cloning.

Please submit your resume via our web site, fax or mail. EOE. No phone calls, please.



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Fax: (760) 603-7207 • Website: www.invitrogen.com

Medical College of Ohio



**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>

MCO has a strong commitment to the principle of diversity and, in that spirit, seeks a broad spectrum of candidates including women, minorities and people with disabilities.

**DIRECTOR, OFFICE OF RECOMBINANT
DNA ACTIVITIES**
National Institutes of Health, Bethesda, Maryland
Supervisory Health Scientist Administrator, GS-601-15
Medical Officer, GS-602-15

The Office of Science Policy in the Office of the Director, National Institutes of Health located in Bethesda, Maryland is seeking applications for the position of Director, Office of Recombinant DNA Activities. The incumbent will serve as the senior NIH official responsible for overseeing the activities of the Recombinant DNA Advisory Committee (RAC) and ensuring compliance with the *NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines)*. In keeping with the NIH's mission to enhance public awareness of gene transfer research, the incumbent's duties include coordination of Gene Therapy Policy Conferences (GTPC's) and oversight of the NIH database of human gene transfer clinical trials, including adverse event reporting. GTPC's are intended to offer the unique advantage of assembling numerous participants who possess significant scientific, ethical, and legal expertise and/or interest that is directly applicable to human gene transfer research. Additional duties include developing policies and procedures to ensure that NIH supported projects will be conducted in compliance with the *NIH Guidelines*, and coordinating with other Federal agencies in the development of policies and procedures relevant to recombinant DNA research.

Candidates must possess, an advanced degree in an appropriate field of microbiology, biochemistry, molecular biology or other appropriate area of health science, a working knowledge of Federal regulations and guidelines associated with recombinant DNA research including, Food and Drug Administration (FDA) Investigational New Drug regulations (21CFR312), Protection of Human Subjects regulations (45CFR46), regulations involving environmental release of recombinant organisms, and other regulations related to biotechnology organisms. Applications from women and minorities are strongly encouraged. Please call the number listed below to obtain required job elements.

This is a civil service position with salary commensurate with experience. Please send a resume or an Optional Application for Federal Employment, OF-612, to the NATIONAL INSTITUTES OF HEALTH, Business Management Services Office-A, 1 Center Drive MSC 0182, Building 1, Room 332, Bethesda, Maryland 20892-0182, Attn: Mr. Nelson Rodriguez, #OD-97-2007

For additional information, please call Mr. Rodriguez on (301) 496-2511. Applications must be postmarked by January 26, 1998. U.S. citizenship required

Post Doctoral Scientist

- Signal Transduction -

Headquartered in the San Francisco Bay Area, **Onyx Pharmaceuticals** is a dynamic young company dedicated to the development of novel therapeutics for cancer and other diseases associated with abnormal cell growth. We currently have a great opportunity for an experienced research professional to join our growing multi-disciplinary team.

You will study the role of the GTPase Rac & CDC42Hs in phagocyte activation. Candidates must possess a strong background in molecular & cell biology with an emphasis in signal transduction. Experience in phospholipid biochemistry & neutrophil biology would be an asset.

Applications including a full CV and the names of three references should be sent to: **ONYX Pharmaceuticals, Attn: Arie Abo, (Job# 97-30-AA), 3031 Research Drive, Richmond, CA 94806-5206; fax: (510) 222-9758, or e-mail: denise@onyx-pharm.com. Equal Opportunity Employer**

ONYX
P H A R M A C E U T I C A L S

SCIENTIST POSITIONS

San Francisco Bay Area

Headquartered in a 66,000 square foot, state-of-the-art research facility, **Tularik Inc.** is a rapidly growing, privately-held biopharmaceutical company dedicated to the discovery and development of novel therapeutic agents that regulate gene expression. We have ongoing projects in the following areas: immune disorders, inflammation, obesity, hypercholesterolemia, viral diseases, bacterial diseases, and cancer.

Our continued growth has created exciting career opportunities for qualified professionals who possess a Ph.D. and at least 2 years of postdoctoral experience in molecular biology and biochemistry.

Bacterial Genetics

The successful candidate will engage in research to support our drug discovery efforts and will be expected to contribute to the design and implementation of novel high throughput screens for improved antibacterial agents. Candidates with a strong background in bacterial molecular genetics are encouraged to apply. (Position Code SC1)

Hypercholesterolemia

The successful candidate will engage in research aimed at the discovery of novel drug targets for the treatment of hypercholesterolemia. This individual will have a strong desire to identify the next generation of lipid lowering therapeutics. (Position Code SC2)

Molecular Virology

As a member of the viral diseases project team, the successful candidate will engage in research to support our ongoing drug discovery efforts and will have a strong desire to discover superior drugs to treat Hepatitis C Virus disease. (Position Code SC3)

Nuclear Receptors

The successful candidate will engage in research aimed at the identification and characterization of novel nuclear receptors that are candidates for therapeutic modulation. This individual will have a strong desire to exploit the opportunities offered by nuclear receptors for the discovery of new classes of drugs. (Position Code SC4)

In addition to an attractive total compensation package, including competitive salary, comprehensive benefits and equity participation, Tularik offers a stimulating research environment and experienced leadership that recognizes achievement. To apply, please send, fax or e-mail your resume to:

Tularik Inc.
Human Resources
Attn Position Code: _____
Two Corporate Drive
So. San Francisco CA 94080
Fax: (650) 829-4303
email: resume@
tularik.com

equal opportunity
employer

www.tularik.com



Tularik

Creating Drugs That Regulate Genes

POSITIONS OPEN

ASSISTANT PROFESSOR OF HEALTH DECISION SCIENCE DEPARTMENT OF HEALTH POLICY AND MANAGEMENT Harvard School of Public Health

This position entails research and teaching in the methods and clinical applications of decision analysis. A part-time clinical affiliation with a Harvard-affiliated medical teaching institution can be arranged. Applicants should have an M.D. and at least Master's-level preparation in decision science. Research experience and a record of scientific presentations and/or publications in decision modeling of clinical problems is required.

Please send curriculum vitae and names of three references to:

**Dr. John D. Graham, Chair
Search Committee for an
Assistant Professor of Health Decision Science
Center for Risk Analysis
Harvard School of Public Health
718 Huntington Avenue
Boston, MA 02115**

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

TENURE-TRACK FACULTY POSITION AT CARB BIOINFORMATICS/COMPUTATIONAL BIOLOGY

Applications are invited for a tenure-track faculty position at the Center for Advanced Research in Biotechnology (CARB). We are particularly interested in applicants who use computational methods to derive new information from existing sequence and structure data, and in applicants developing computer models of cellular and subcellular processes. The successful candidate will be expected to establish a strong, independent, externally funded research program. CARB is a research center of the National Institute of Standards and Technology (NIST) and the University of Maryland Biotechnology Institute (UMBI). CARB is devoted to fundamental studies of macromolecular structure, function, and engineering, and offers opportunities for collaboration with scientists involved in high-field NMR spectroscopy; physical biochemistry; structural immunology; protein folding, stability, modeling, and engineering; macromolecular crystallography; and computational chemistry.

Interested candidates should send a curriculum vitae, a summary of research interests and plans, and arrange for at least three letters of reference to be sent to:

**Bioinformatics Search Committee
Center for Advanced Research in Biotechnology
University of Maryland Shady Grove Campus
9600 Gudelsky Drive
Rockville, MD 20850**

Review of applications will begin on February 1, 1998. CARB is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply. This is a NIST-funded position. Preference will be given to U.S. citizens.

ENVIRONMENTAL BIOLOGIST

Applications are invited for a tenure-track position as an **ASSISTANT PROFESSOR** in the Department of Biology. Preference will be given to individuals with prior experience or a strong interest in research on large-river ecosystems. The successful applicant will be expected to teach effectively, establish an extramurally supported research program, and supervise M.S. and Ph.D. students in environmental biology. Responsibilities will include teaching in the undergraduate biology core and graduate courses in area of specialty. Ph.D. and postdoctoral experience are required. Departmental information can be found at [website: http://www.louisville.edu/a-s/biology](http://www.louisville.edu/a-s/biology). Please submit curriculum vitae, statements of research and teaching interests, recent reprints, and the names and e-mail addresses of three references to: **Dr. Paul Bukaveckas, Department of Biology, University of Louisville, Louisville, KY 40208**. Screening of completed applications will begin February 1, 1998, and will continue until the position is filled. *The University of Louisville is an Equal Opportunity/Affirmative Action Employer. Women, African-Americans, and other underrepresented groups are encouraged to apply.*

POSITIONS OPEN

FRAMINGHAM STATE COLLEGE BIOLOGY DEPARTMENT ASSISTANT PROFESSOR

The Biology Department at Framingham State College seeks applicants for a tenure-track position as Assistant Professor for fall 1998. The successful applicant will be a broadly trained Biologist with expertise in neurology. Responsibilities will include teaching general biology courses for majors and non-majors, an introductory human biology course, advanced course in the candidate's specialty, and supervision of undergraduate research. Minimum qualifications include a Ph.D. in biology and teaching experience. Ability to supervise student teachers (middle and high school) preferred.

Please send curriculum vitae, statement of research and teaching interests, and the names of three references by February 13, 1998, to: **Dr. Richard Beckwith, Chair, Biology Department, Framingham State College, P.O. Box 9101, Framingham, MA 01701-9101.**

FRAMINGHAM STATE COLLEGE
Framingham State College is an Affirmative Action/Equal Opportunity Employer. Applications are especially invited and encouraged from women, people of color, and persons with disability.

TENURE-TRACK POSITION IN COMPUTATIONAL SCIENCE CORNELL UNIVERSITY Department of Computer Science

We are seeking applicants at all ranks for a tenure-track position in computational science. The applicant should have a very strong background in computer science, and should also have a strong background and research interest in computational aspects of some field of natural science such as biology, chemistry, physics, or materials science.

Research may include such topics as simulation (both mathematical and systems aspects), problem solving environments, domain-specific algorithms, bioinformatics, and high-performance computing to support computational science. We are looking for candidates with demonstrated research accomplishments and who are committed to excellence in teaching computer science. REF: CS#2

Further information about the department is available on the World Wide Web at [website: http://www.cs.cornell.edu/](http://www.cs.cornell.edu/).

Applicants should submit a curriculum vitae and the names of at least three references to: **Chair, Faculty Recruiting Committee, Department of Computer Science, 4130 Upson Hall, Cornell University, Ithaca, NY 14853-7501**. Please include reference number with application.

Cornell University is an Equal Opportunity Employer and welcomes applications from women and ethnic minorities.

ASSISTANT PROFESSOR OF PLANT MOLECULAR BIOLOGY AND BIOTECHNOLOGY

The Division of Biology of Kansas State University (KSU) invites applications for a tenure-track position beginning the 1998-99 academic year. We seek an individual who will establish a strong, extramurally funded research program in plant molecular biology and biotechnology, as well as participate in undergraduate and graduate teaching in molecular biology courses. A Ph.D. or equivalent and postdoctoral training are required. The position will include a competitive salary and start-up package, and the individual will have an affiliation with the Kansas Agricultural Experiment Station and with its KSU Plant Biotechnology Center. The Division of Biology is a large, diverse unit, with a strong record of research productivity and funding. For information about the Division, go to [website: http://www.ksu.edu/biology](http://www.ksu.edu/biology). Applicants should submit a curriculum vitae, selected reprints, a summary of research interests, and a summary of instructional interests, and should have three letters of reference sent to: **James A. Guikema, Chair, Plant Science Search Committee, Division of Biology, Kansas State University, 232 Ackert Hall, Manhattan, KS 66506-4901**. Review of applications will begin on February 16, 1998, and will continue until a successful applicant is identified. *KSU is an Equal Opportunity Employer, and actively seeks diversity among its employees.*

POSITIONS OPEN



IMMUNOLOGIST

A position of **ASSISTANT PROFESSOR** on the tenure-track is available for a person to work in a multidisciplinary program of vaccine development and protein engineering at The Ohio State University. Applicants should hold a Ph.D. degree in the field of immunology with experience and/or postdoctoral training in vaccine development. Duties will primarily include research with some teaching required in microbiology and immunology. The successful candidate will be expected to obtain independent extramural support for research activities as well as to collaborate with other scientists in an established program of the development of cancer vaccines and vaccines against infectious diseases. A competitive salary, based on individual qualifications, will be negotiated with short-list candidates. Letters of application together with a complete curriculum vitae should be sent to: **Dr. Vernon Stevens, The Ohio State University, 1654 Upham Drive, Columbus, OH 43210-1228**. *The Ohio State University is an Equal Opportunity Employer.*

ASSISTANT PROFESSOR BIOCHEMISTRY AND MICROBIOLOGY UNIVERSITY OF VICTORIA British Columbia, Canada

The Department of Biochemistry and Microbiology invites applications for a full-time, tenure-track appointment at the Assistant Professor level. Preference will be given to candidates with expertise in prokaryotic or eukaryotic signal transduction. Candidates should have completed a minimum of two years of relevant postdoctoral research. The successful candidate will be expected to teach in graduate and undergraduate programs and to establish a vigorous independent research program.

Our Department, which is located in a modern well-equipped building, consists of ten full-time faculty members supported by extensive peer-reviewed funding.

Applicants should send, by March 31, 1998, a curriculum vitae, together with copies of two recent publications, a short description of future research interests, and the names and addresses of three referees to:

**Dr. Edward E. Ishiguro
Faculty Search Committee
Department of Biochemistry and Microbiology
University of Victoria
P.O. Box 3055, Petch Building
Victoria, British Columbia V8W 3P6 Canada
FAX: 1-250-721-8855
E-mail: eishuv@uvvm.uvic.ca**

Applicants should ask their referees to send confidential reports to **Dr. Ishiguro** without waiting to be contacted.

The University of Victoria is an Employment Equity Employer and encourages applications from women, persons with disability, visible minorities, and aboriginal peoples. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

NUTRITIONAL BIOCHEMISTRY

The Department of Nutrition of Case Western Reserve University School of Medicine ([website: http://www.cwru.edu/med/nutrition/home.html](http://www.cwru.edu/med/nutrition/home.html)) has an opening for an **ASSISTANT or ASSOCIATE PROFESSOR** in nutritional biochemistry and metabolism. This faculty member will (i) develop an independent, NIH-supported research program on the metabolism of macromolecules in animals and/or humans, preferably using stable isotope technology, (ii) train graduate students and postdoctorates, and (iii) teach at the graduate level. Research space, including a gas chromatography-mass spectrometry unit, is located at the Cleveland Mt. Sinai Medical Center on University Circle. Please send curriculum vitae, detailed outline of research program, and names of three references to: **Dr. Henri Brunengraber, Chair, Department of Nutrition, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4906**. *Case Western Reserve University is an Equal Opportunity Employer and encourages applications from minorities and women.*



Gene Regulation - The Future In Drug Discovery

Signal Pharmaceuticals, Inc. is at the forefront of scientific advances in intracellular signaling and gene regulation.

The Department of Inflammation & Immunology identifies novel molecular targets and evaluates drug candidates for the development of gene-regulating therapeutics. Biochemical, molecular biologic and genetic approaches are applied to identify and validate important regulatory pathways and proteins responsible for the expression of genes associated with inflammatory and immune disease. In vitro and in vivo models of inflammation biology are developed for target identification, validation and profiling of drug candidates. Current focus includes components of the NF- κ B pathway and MAP kinase enzymes.

RESEARCH SCIENTIST

You will have demonstrated skills using cell and molecular biologic techniques to identify and evaluate novel signal transduction enzymes regulating gene expression. Demonstrated expert knowledge in the field of signal transduction and gene expression is essential. You will hold a PhD in molecular biology, immunology or a related field, and will have a minimum of 3 years industrial/academic experience. You will display the ability to develop hypotheses, design experimental approaches and work independently, whilst participating as an integral member of a dynamic research team. (Code: SRI)

ANIMAL PHARMACOLOGIST

A position exists to play a leading role in the formation of the Animal Pharmacology Group. You will be a talented PhD with broad-based experience in physiology, immunology, cell biology and biochemistry with a proven track-record in the characterization of new therapeutics. Your 0-2 years of post-doctoral experience in Immunology, Pharmacology, Physiology or Biochemistry should be supported by 3-5 years of industrial/academic experience and specific skills working within in vivo animal models, immunology and FACS. Animal handling techniques and surgical skills are a must. Prior experience evaluating PK/ADME characteristics of compounds is preferred. The demonstrated ability to supervise others and develop a broad-based in vivo pharmacology effort is essential. (Code: SAP)

Signal offers a competitive compensation package that includes equity participation. Please send resume, indicating code to: Signal Pharmaceuticals, Attn: L. Cain, with code indicated, 5555 Oberlin Dr., San Diego, CA 92121 or e-mail at lcain@signalpharm.com See our website at www.signalpharm.com/signal EOE

SIGNAL
PHARMACEUTICALS, INC.



INTELLECTUAL PROPERTY PROTECTION

DEKALB Genetics Corporation, the fastest growing agricultural seed company in the U.S., has a career opportunity in the area of intellectual property protection for an individual with a background in agricultural biotechnology. Position will work with scientists and attorneys in areas relating to patent prosecution, litigation, and interferences. The successful candidate will have an M.S. degree in a field related to agricultural biotechnology and 2 years research experience.

This position is located at DEKALB's biotechnology research facility in Mystic, CT, a scenic shoreline community located on Long Island Sound, halfway between Boston and New York. For more information on **DEKALB**, visit our web site at <http://www.dekalb.com>. Please mail your resume and 3 professional references to:

DEKALB Genetics Corporation
Human Resources
62 Maritime Drive
Mystic, CT 06355-1958

EOE

EXTRAORDINARY PEOPLE. EXTRAORDINARY SCIENCE.



The Whitehead Institute/MIT Center for Genome Research has become a world leader in functional genomics, genome mapping, sequencing, and informatics. The Center attracts the brightest scientists to develop and utilize state-of-the-art automated systems for data production and analysis in an exciting and challenging atmosphere.

RESEARCH SCIENTIST

•To work on a multi-disciplinary team of biologists, engineers, and computer scientists for the Sequencing Project. Will assist in developing automated systems for high-throughput Genome Sequencing. Research will be directed at improving speed, quality, and efficiency of DNA sequencing and data processing in a production environment. Requires a M.D. or Ph.D. and demonstrated management and supervisory skills. 2 years' experience in molecular biology, genetics, or computational biology and informatics preferred.

DATABASE ADMINISTRATOR/ ARCHITECT

•To provide database expertise for entire Genome Center. Responsible for administering Sybase, including configuration of DBMS server and client software, designing and implementing access policies and backup and restore procedures, troubleshooting, schema design, helping application developers and users formulate queries, and providing expertise on DBMS-centered client access and development tools. Requires a BA/BS in Computer Science or related field, 3 years' professional software development experience including at least 1 year of experience with a commercial relational DBMS (Sybase, Oracle, Informix, DB/2). An interest in biology, experience with Perl and schema design, knowledge of object-oriented databases, and experience with developing graphical user interfaces and Web-based interfaces preferred. Excellent written and verbal communication skills desired, including the ability to listen and adjust to team requirements.

SOFTWARE ENGINEER

•To design, implement, and maintain tools and software systems in Perl, C, C++, Java, and other languages, in a UNIX and Web-based environment. Programs will be designed in consultation with biologists and computer scientists, and will be implemented in projects for which you will have the primary responsibility. Must be technically flexible and comfortable with rapid prototyping and frequent user interaction in small research teams. Must have coding and system building skills experience in UNIX or Windows NT writing software in Perl, C, C++, Java or other languages in addition to excellent written and verbal communication skills, initiative, and problem-solving abilities. Must have a Bachelor's degree in computer science (or another field if accompanied by significant programming experience).

We have many other Research and Bioinformatics opportunities available.

We offer excellent salaries, generous benefits (including tuition reimbursement), interaction with the MIT community, opportunity to attend scientific lectures, and a convenient location.

Please send resumes to: Whitehead Institute for Biomedical Research, Human Resources Dept. Ref. SGEM:102, Nine Cambridge Center, Cambridge, MA 02142.

Visit our web site at: <http://www.wi.mit.edu>.

Equal Opportunity Employer.



WHITEHEAD INSTITUTE

POSITIONS OPEN

COASTAL OR ESTUARINE PHYSICAL OCEANOGRAPHER

The Romberg Tiburon Center for Environmental Studies (RTC), a field campus of San Francisco State University (SFSU) located on the San Francisco Bay, in association with the Geosciences Department on the main campus, seeks candidates for a tenure-track position as an **ASSISTANT PROFESSOR**, available August 1998. A Ph.D. is required and postdoctoral experience is preferred. We seek a scientist who uses modern data acquisition and analysis (including modeling) techniques for both laboratory and field studies to focus on transport processes, e.g., particle/organism transport including sediment interactions. Preference is for scientists with a strong field component to their research, with experience working in coastal waters and interests or experience in estuarine processes. The candidate would be expected to develop a research program focused in part on San Francisco Bay and to collaborate with current researchers, including biologists. Applicants should have the ability or potential to maintain an independent, externally funded research program involving undergraduate and graduate students. The successful candidate must have a commitment to excellence in teaching, with teaching interests or experience in the areas of general or physical oceanography, and estuarine processes, and will be expected to teach at the undergraduate and graduate levels. RTC/SFSU offers laboratory space, competitive start-up funds, and an environment of successful extramural research funding ([website: http://thecity.sfsu.edu/~rtces](http://thecity.sfsu.edu/~rtces)). Send a curriculum vitae, a statement of teaching and research interests, and three letters of reference to: **Dr. Richard Dugdale, Chair, Search Committee, Romberg Tiburon Centers, P.O. Box 855, Tiburon, CA 94920. Telephone: 415-338-6063. Review of applications will begin February 15, 1998. Telephone: 415-338-6063; FAX: 415-435-7120. RTC/SFSU is an Equal Opportunity/Affirmative Action Employer.**

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 responsibilities include: intermediate-level undergraduate course in immunology (with lab) and microbiology (with lab); graduate/advanced undergraduate course(s) in candidate's area of expertise; 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; review will begin February 1, 1998. 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 FLORIDA

Seeks **ASSOCIATE PROFESSOR** and **CHIEF/PROFESSOR** and **CHIEF** for the Department of Medicine, Division of Gastroenterology, Hepatology, and Nutrition. M.D. degree, B.C. in internal medicine and gastroenterology, research experience. A Physician Investigator who has a well-established research program and who can direct the existing research training grant in gastroenterology is being sought. Existing program is well balanced in respect to providing excellent clinical care and performing both basic and clinical research. Qualified candidates should possess the abilities to lead and develop programs in research, education, and health care delivery. This is a tenure-track position. Salary and benefits commensurate with experience. Recruiting deadline: February 28, 1998. Anticipated starting date: July 1, 1998. Please submit curriculum vitae and other information to: **Dr. Frederick Southwick, Professor and Chief, Box 100277 JHMH, Gainesville, FL 32610. An Affirmative Action/Equal Opportunity Employer.**

POSITIONS OPEN



Princeton University

The Department of Geosciences is seeking applicants for a **MOLECULAR BIOLOGIST POSTDOCTORAL POSITION** beginning immediately to study the requirement for uptake and role of trace metals in marine prokaryotes. The initial appointment will be for one year, with the possibility of renewal.

Individuals must be of a background in molecular biology and experience in protein purification, who are interested in applying their training to problems in environmental sciences, are invited to send their curriculum vitae and three letters of reference to: **Professor François Morel, Department of Geosciences, Guyot Hall, Princeton University, Princeton, NJ 08544.**

Princeton University is an Equal Opportunity/Affirmative Action Employer.

TEACHING POSITIONS CELL BIOLOGY AND PARASITOLOGY WESTERN MARYLAND COLLEGE

Western Maryland College seeks applications for two (2) tenure-track **ASSISTANT PROFESSOR** positions in biology, to begin August, 1998. Ph.D. expected.

(1) Successful applicant will teach undergraduate classes in cell biology, (with lab), freshman course for majors, and upper-division courses in an area of specialization; also advise students and mentor student research. Prefer candidates whose research and interests are biologically based.

(2) Successful applicant will teach undergraduate classes in biology; freshman-level courses for majors and non-majors, in the environmental field and incorporating computer technology; upper-division courses in the area of specialization, preferably parasitology or parasite ecology; also advise students and mentor student research. Preference given to candidates whose research and interests involve and complement the needs of majors. Candidates interested in either position should send letter of application, curriculum vitae, statement of teaching philosophy, transcripts, research interests, and three letters of reference to: **Dr. Louise A. Paquin, Department of Biology, Western Maryland College, Westminster, MD 21157 by February 20, 1998. Western Maryland College is a selective, private liberal arts institution located in central Maryland, close to Baltimore and Washington, D.C. Western Maryland College is an Affirmative Action/Equal Employment Opportunity and ADA Employer and specifically invites and encourages applications from women and minorities. Americans with disability only may Telephone: 410-857-2504.**

The Atmospheric Sciences Center located in Reno, Nevada, one of five centers within the Desert Research Institute, a division of the University and Community College System of Nevada, is currently accepting application packets for the following positions:

ASSISTANT/ASSOCIATE RESEARCH PROFESSOR (TWO POSITIONS)

(1) Develop, pursue, and obtain funding for original research in the atmospheric sciences. The successful candidate should have demonstrated skills in working with high resolution numerical models, which parameterize cloud processes on different spatial scales. (2) Develop, pursue, and obtain funding for original research in the atmospheric sciences. The successful candidate should have demonstrated skills in aerosol and cloud physics. Education/experience: Both positions require a Ph.D. in atmospheric sciences or a related discipline and: (1) at least one year of experience with high resolution numerical models or (2) working knowledge of modeling precipitation processes.

For complete job description please visit our [website: www.dri.edu](http://www.dri.edu).

Salary and benefits: Salary for both positions is very competitive and commensurate with qualifications. The Desert Research Institute offers an excellent benefits package.

The Desert Research Institute is an Affirmative Action/Equal Opportunity Employer. We hire only U.S. citizens and those authorized to work in the United States.

POSITIONS OPEN

THE UNIVERSITY OF CHICAGO

The University of Chicago Department of Radiation and Cellular Oncology has full-time faculty positions available for Board-certified or Board-eligible **RADIATION ONCOLOGISTS** with basic and clinical research interest(s). Areas of clinical investigation include: concomitant radiochemotherapy, monoclonal antibody therapy, biological response modifiers, neutron radiotherapy, decision-analysis in oncology, as well as investigation of organ-specific disease sites. Research laboratory interests include molecular aspects of radioresistance, cell cycle regulation, signal transduction, and correlation of basic laboratory parameters with clinical outcome. New investigation on gene therapy will be initiated. The Department offers excellent start-up funds and continuing support as well as protected research time for qualified candidates. Academic appointments are at the **INSTRUCTOR, ASSISTANT PROFESSOR, or PROFESSIONAL** rank and are based on individual qualifications and experience.

The University offers a highly competitive compensation and fringe benefit package to qualified candidates. For more information, please contact:

Ralph R. Weichselbaum, M.D.
Professor and Chairman

The University of Chicago
Department of Radiation and Cellular Oncology
5841 South Maryland Avenue, MC0085
Chicago, IL 60637
FAX: 773-834-7233

The University of Chicago is an Equal Opportunity Employer. Women and minorities are encouraged to apply.

EVOLUTIONARY PLANT BIOLOGIST

Denison University invites applications for a tenure-track Plant Biologist position at the **ASSISTANT PROFESSOR** level. Teaching responsibilities include introductory-level plant biology and general zoology, and advanced courses in evolutionary biology and area of botanical expertise (one introductory and one advanced course per semester, with labs). Ability to teach genetics is a plus. A strong interest in and potential excellence for undergraduate teaching are essential. An active research program, supervision of undergraduate research, participation in the full range of faculty responsibilities (including academic advising and committee service) and commitment to both scholarly research and undergraduate liberal arts education are expected. Denison offers competitive start-up funds, summer support for student-faculty research, departmental greenhouse, herbarium, 350-acre Biological Reserve and field station adjacent to campus, and other teaching and research facilities. Ph.D. required; postdoctoral experience and demonstrated teaching ability preferred. Please send current curriculum vitae, statements of teaching philosophy and research interests, and transcripts (graduate and undergraduate) by January 22, and have three letters of recommendation forwarded by February 13 to: **Chair, Plant Biologist Search Committee, Biology Department, Denison University, Granville, OH 43023. Denison University is an Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.**

PHYSIOLOGIST. Idaho State University, Department of Biological Sciences, announces a tenure-track position for a Physiologist, at the level of **ASSISTANT PROFESSOR**, commencing August 1998. The successful candidate must hold a doctorate (postdoctoral experience preferred), will train students from undergraduate to doctoral levels, and will be expected to develop a research program with emphasis in an area of physiology that complements existing faculty research strengths. Teaching responsibilities may include participation in introductory courses, and specifically will include an upper-division/graduate-level systemic physiology course for health professions programs, including Occupational Therapy and Physical Therapy students. Participation in systemic pathophysiology and neuroscience courses is also anticipated. The position will remain open until filled. Please send a letter of application, curriculum vitae, and a statement of teaching experience, teaching philosophy, and research goals. Also have three letters of recommendation sent by December 30, 1997, to: **Physiologist Search Committee Chair, Department of Biological Sciences, Box 8007, Idaho State University, Pocatello, ID 83209-8007.** For information about the department see [website: http://www.isu.edu/departments/bios](http://www.isu.edu/departments/bios). *Idaho State University is an Equal Opportunity/Affirmative Action Employer.*

Biosource Genomics

Plant Functional Genomics

Biosource Genomics is a new plant biotechnology company applying revolutionary reverse genetic methodologies to the discovery of novel gene-based products for agricultural and pharmaceutical markets. Biosource Genomics, a subsidiary company of Biosource Technologies, Inc. (BTI), the world leader in virus-based gene expression systems for plants, uses BTI's proprietary GENEWARE® system for rapid expression, systemic knockout, and high-throughput screening of genetic sequences via RNA viral replicons in higher plants. Biosource Genomics and its life science corporate partners will have exclusive access to the patented GENEWARE® viral vector technology for applications in functional plant genomics. We are looking for exceptionally motivated, creative, and visionary individuals to join our state-of-the-art Northern California facility located 30 minutes from the world famous Napa Valley.

We seek candidates at the Ph.D./M.S./B.S. level with expertise in normalized cDNA library construction, high-throughput robotic screening, automated DNA sequencing, bioinformatics, molecular virology, and plant molecular genetics. Candidates having several years of experience at major university or corporate genomic centers are especially desired.

Qualified candidates should submit a detailed CV and the names of three references to: **Biosource Technologies, Inc. (Dept. BGS), 3333 Vaca Valley Parkway, Vacaville, CA 95688.** Interested candidates who plan to attend The Plant & Animal Genome VI Meeting (San Diego, CA, January 18-22) may contact Dr. Guy della-Cioppa by e-mail (guydell@worldnet.att.net) to arrange for an introductory discussion while in San Diego about career opportunities with Biosource Genomics.



NATIONAL INSTITUTES OF HEALTH NATIONAL INSTITUTE OF MENTAL HEALTH Chief, Genetics Research Branch

The National Institutes of Health, National Institute of Mental Health, invites applications for the position of Chief, Genetics Research Branch within the Division of Basic and Clinical Neuroscience Research. The branch plans, supports, and conducts programs of research and resource development in basic and clinical research, focusing on the genetic basis of neural functioning, quantitative behavioral traits, and complex mental disorders such as schizophrenia, mood and other brain disorders.

Qualifications include an M.D. with a subspecialty in medical genetics, with appropriate postgraduate training in behavioral research; an M.D. with a subspecialty in psychiatry, with appropriate postgraduate training in genetic epidemiology or molecular or quantitative genetic research; or a Ph.D. in psychology, genetics, or another relevant field, with appropriate postgraduate training in genetic epidemiology or molecular or quantitative genetic research or equivalent training and experience. Candidates will be evaluated based on (1) professional knowledge of the principles, theories and practices applicable to the scientific fields of behavioral research, genetic epidemiology, molecular genetics, and quantitative genetics as applied to the study of neural function related to brain disease or behavior relevant to mental health and illness (selective factor); (2) professional knowledge of basic and applied research approaches and techniques in the genetic analysis of brain disorders or behavior relevant to mental health; (3) ability to manage major research programs; (4) oral communication skills; (5) written communication skills; and (6) supervisory skills.

This is a GS-15 Civil Service position with a salary range from \$77,000 to \$100,000 per annum. In addition, a recruitment bonus may be paid and relocation expenses may be paid. Physicians may be eligible for a Physician's Comparability Allowance (PCA) of up to \$20,000 a year. Benefits include a retirement plan, health and life insurance, Thrift Saving Plan, and sick and annual leave. The position may also be filled through the Commissioned Corps of the Public Health Service. U.S. citizenship is required. Minorities and women are encouraged to apply.

If interested, please submit an Optional Application for Federal Employment (OF-612) or a resume or C.V. plus bibliography to Ms. Margot Darby, NIMH, Personnel Management Branch, 5600 Fishers Lane, Room 7C-15, Rockville, MD 20857. Candidates are encouraged to address the evaluation criteria noted above in a supplemental statement. Applications will be accepted if postmarked by January 30, 1998 and received within 5 working days. For further information call Ms. Darby at (301)443-9094. A copy of the full text vacancy announcement is also available via the World Wide Web: <http://www.nimh.nih.gov/ocm/pmb/nimhjobs.htm>.

NIH IS AN EQUAL OPPORTUNITY EMPLOYER



UNIVERSITY OF MISSOURI-COLUMBIA IMMUNOLOGISTS

The Department of Molecular Microbiology & Immunology seeks to fill **two** full-time tenure-track faculty positions in Immunology. Candidates will be expected to develop a vigorous, externally funded research program, direct Ph.D. students and participate in teaching graduate and/or medical students.

1) **Assistant Professor:** Candidates should have a Ph.D. or equivalent degree with a minimum 3 years of relevant postdoctoral experience, significant publications and evidence of potential for a sustained commitment to high-quality research.

2) **Assistant or Associate Professor:** Candidates should have demonstrated potential for maintaining an active, independent research program in Immunology as evidenced by quality publications and external funding. This individual will also serve as director of the Cell and Immunobiology Core Facility, part of the University of Missouri Molecular Biology Program, which provides tissue culture reagents, hybridoma production and flow cytometry to investigators.

Salary for these positions is competitive and commensurate with experience. Interested candidates should submit a curriculum vitae, statement of research interests and goals and the names, addresses and telephone numbers of at least three references to:

Dr. Helen B. Mullen, Immunology Search Committee, Dept. of Molecular Microbiology and Immunology, DC044.00, University of Missouri-Columbia, Columbia, MO 65212. Noncitizens please include visa status. Screening of applications will start 15 February 1998, and will continue until the positions are filled. The University of Missouri is an affirmative action-equal opportunity employer and encourages applications from females and minorities.



Tenure-Track Faculty Position in Biochemistry and Molecular Biology Department of Biochemistry McMaster University

The Department of Biochemistry, McMaster University invites applications for a tenure-track faculty position at the level of Assistant Professor. We encourage applications from individuals with strong training in biochemistry and molecular biology, and are especially interested in those whose research interests relate to investigating molecular mechanisms in the general area of gene expression, regulation, and/or function in eukaryotic systems.

Applications must have a Ph.D. in Biochemistry or a closely related field, at least two years of postdoctoral experience, and a strong record of research accomplishment. Successful applicants are expected to establish and maintain a vigorous, externally funded research program, and to participate in undergraduate and graduate education.

McMaster University offers excellent facilities for biochemistry, molecular biology, structural biology, and cell biology, and a stimulating research environment that encourages cooperative, multidisciplinary interactions.

Applicants should submit a curriculum vitae, a summary of past and current research, a statement of future research plans, and arrange for three letters of reference to be sent to: **Dr. John P. Capone, Professor and Chair, Department of Biochemistry, McMaster University, 1200 Main Street West, Hamilton, Ontario L8N 3Z5. FAX: 905-522-9033. Closing date of applications is March 31, 1998.** In accordance with Canadian immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. McMaster University has an employment equity programme, and encourages applications from all qualified candidates, including women, aboriginal people, people with disability, and visible minorities.

POSITIONS OPEN

UNIVERSITY OF CALIFORNIA AT BERKELEY COLLEGE OF NATURAL RESOURCES AND AGRICULTURAL EXPERIMENT STATION Department of Environmental Science, Policy, and Management

The Division of Resource Institutions, Policy, and Management invites applications for a nine-month tenure-track appointment in environmental policy at the **ASSISTANT PROFESSORIAL** level, beginning July 1, 1998. The incumbent will teach and do research on the formation, behavior, and performance of policies and institutions that affect environmental relations and their social consequences. S/he will work within a faculty and graduate students engaged in institutional analysis and reform associated with, for example, state-federal relations in resource and environmental management; racial, class, and gender boundaries in environmental systems; property and jurisdiction in ecosystem management; transnational and interstate river basin arrangements; international trade and organization; and global and regional environmental regimes. S/he is expected to bring theoretical and methodological strength in analysis of environmental policy formation and performance, desire to work with others across academic boundaries, and willingness to serve public needs for academic engagement. A Ph.D. in political science, policy analysis, political economy, geography, or related field, or a J.D., is required. Experience in forming and executing environmental arrangements is desired.

Please send a letter stating interest and qualifications for the position, curriculum vitae, all academic transcripts, and names of four references before March 1, 1998, to: **Chair, Environmental Policy Search Committee, Division of Resource Institutions, Policy, and Management, 217 Giannini Hall, University of California, Berkeley, CA 94720.** The University of California at Berkeley is an Equal Opportunity/Affirmative Action Employer.

PHYSICAL SCIENCE/SCIENCE EDUCATION ASSISTANT PROFESSOR TENURE-TRACK POSITION Begin Fall 1998

Keene State College, part of the University System of New Hampshire, is a public undergraduate liberal arts college of 5,000 students. Keene, a pleasant city of 22,000 with many cultural and recreational opportunities, is located in scenic Monadnock Region of southwest New Hampshire, two hours from Boston and the seacoast.

We are seeking a Physical Science/Science Education, Assistant Professor with the following responsibilities: teach secondary science methods (physical and life sciences), supervise student teachers, and, in general, assume responsibility for the secondary science education program at Keene State College. In addition, a half-time teaching load in two or more of the physical sciences is expected. Qualifications: Doctorate in one of the physical sciences plus a Master's in science education, or a doctorate in science education plus a Master's in one of the physical sciences required. Classroom teaching at the U.S. secondary level also required. Life science and/or interdisciplinary science experience desirable. Doctorate must be completed by September 1998. Minimum salary for Assistant Professor is \$36,500.

Send letter of application, curriculum vitae, description of teaching experience, statement of teaching philosophy/methods, and three letters of reference (with evaluation of candidate's teaching experience) by January 15, 1998, to: **Kim Harkness, Office of Human Resource Management, Keene State College, 229 Main Street, Keene, NH 03435-1604.** Affirmative Action/Equal Opportunity Employer.

TENURE-TRACK FACULTY POSITIONS VISION RESEARCH

Current openings at the **ASSISTANT, ASSOCIATE, or FULL PROFESSOR** levels. Preference will be given to candidates with current federal grant support, strong vision science research/publication record, and academic experience. Expertise in molecular biology/genetics, cell biology, or cellular physiology desirable. Send curriculum vitae, brief statement of research interests, and names and addresses of three references by February 15 to: **Dr. Steven J. Fliester, Faculty Search Committee Head, Saint Louis University Eye Institute, 1755 South Grand Boulevard, St. Louis, MO 63104-1540. E-mail: fliester@slu.edu.** Saint Louis University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

Population biology/herpetology. The Department of Zoology at Southern Illinois University, Carbondale, invites applications for a tenure-track **ASSISTANT PROFESSOR** position. Applicants should have a research emphasis on ecological, evolutionary, and/or genetic problems related to amphibians and/or reptiles, and an interest in biotic surveys. Preference will be given to individuals with postdoctoral experience using molecular and/or biometric approaches in their research. The successful candidate will be expected to enhance departmental research and graduate program capabilities by developing an externally funded program and through collaboration with faculty and staff. Responsibilities will include work with our collections manager in the curation of a herpetological collection. Teaching duties will be in the areas of vertebrate biology, herpetology, intermediate biometry, with opportunity to develop an upper-level specialty course. Minimum qualifications: Ph.D. in zoology/biology with demonstrated research experience and graduate training in area of specialization; demonstrated grant success or evidence of strong potential to obtain external funding; a publication record and scholarly activities commensurate with experience. To apply, send a cover letter highlighting qualifications for the position described, a detailed statement of research interests and plans, and a statement of teaching interests and capabilities; a curriculum vitae; names, addresses, and telephone numbers of three persons qualified to discuss your qualifications for this position. Closing date for applications is 15 February 1998 or until filled. Starting date 16 August 1998. Mail applications to: **Dr. William Muhlach, Chair, Department of Zoology, Southern Illinois University, Carbondale, IL 62901.** We especially encourage women and minority candidates to apply. Southern Illinois University, Carbondale is an Equal Opportunity/Affirmative Action Employer.

BIOCHEMISTRY. The Department of Chemistry and Biochemistry at Denison University invites applications for a tenure-track faculty position in biochemistry at the **ASSISTANT PROFESSOR** level to begin in August 1998. Applications are sought from individuals with a strong commitment to teaching at the undergraduate level, a superior background in biochemistry, and the capacity to develop an active research program which involves undergraduates. Teaching responsibilities will include biochemistry, general chemistry, and other courses for the major or non-major consistent with the candidate's interest and background. Ability to participate in the organic chemistry sequence would strengthen the application. The department has excellent facilities, computer resources, and instrumentation for teaching and research in biochemistry and all areas of chemistry. Instrumentation is available for separations (GC/MS and other GC methods, HPLC, electrophoresis), spectroscopy (FT-NMR, FT-IR, UV-vis, fluorescence), and molecular modeling (SGI workstations), as well as surface microscopy, powder X-ray, and AA. Generous start-up funds and a junior faculty research leave program are in place. Applicants should have earned a Ph.D. Postdoctoral experience is desirable. Send a curriculum vitae, transcripts, a statement of teaching philosophy and research plans, and three letters of recommendation to: **Dr. Michael M. Fuson, Department of Chemistry and Biochemistry, Ebaugh Laboratories, Denison University, Granville, OH 43023.** Inquiries may be sent by e-mail: fuson@denison.edu. Information about the university and department is available at the university's website: <http://www.denison.edu>. Our review of completed applications will begin February 2, 1998. Denison University is an Affirmative Action/Equal Opportunity Employer. Women and people of color are especially encouraged to apply.

WILDLIFE BIOLOGIST. Tenure-track, **ASSISTANT PROFESSOR** in the Department of Biology, Eastern New Mexico University. Teaching duties include general zoology, introduction to wildlife and fisheries sciences, mammalogy, ornithology, conservation biology, wildlife management, and biogeography. The candidate is also expected to develop a research program in wildlife management which includes undergraduate and graduate students. Qualifications: Ph.D., college-level teaching experience, and publication in refereed journals.

Application Procedure: Position starts August 17, 1998. Send résumé, transcripts, statements of research and teaching interest, and three current letters of recommendation to: **Wildlife Biologist Search Committee, Personnel Department-Station #21, Eastern New Mexico University, Portales, NM 88130.** For information, Telephone: 505-562-2478.

Application Deadline: Application accepted until position is filled. Screening begins January 30, 1998. Affirmative Action/Equal Opportunity/Title IX Employer.

POSITIONS OPEN

ASSISTANT PROFESSOR OF BIOLOGY KALAMAZOO COLLEGE

Applications are invited for a two-year position (with possibility of extension) anticipated to begin September 1998. Ph.D. required. Salary competitive and consistent with level of experience. This position is designed for an applicant who intends to pursue a teaching/research career in a liberal arts college. Teaching responsibilities will include cell biology and advanced courses in area of expertise. Candidates are expected to have high aptitude for and interest in undergraduate teaching, a commitment to the liberal arts, and a desire to involve undergraduates in scholarship both in and out of the classroom. Kalamazoo College is a highly selective nationally known liberal arts college that takes pride in its tradition of outstanding undergraduate science education. Completed applications received by February 15, 1998, will receive full consideration, with later applications reviewed as needed until the position is filled. Send letter of application, curriculum vitae (including a description of scholarly interests), undergraduate and graduate transcripts (unofficial acceptable), statement of teaching philosophy and research interests, and three letters of recommendation to: **Dr. David A. Evans, Chair, Department of Biology, Kalamazoo College, 1200 Academy Street, Kalamazoo, MI 49006-3295.** For more information about the College, see our website: www.kzoo.edu. Kalamazoo College encourages candidates who will contribute to the cultural diversity of the College to apply and to identify themselves if they wish. Equal Opportunity Employer.

MICROBIOLOGIST

Applications are invited for a tenure-track position as an **ASSISTANT PROFESSOR** in the Department of Biology. Responsibilities will include teaching in the undergraduate microbiology and biology core courses and specialty courses within the graduate program in environmental biology. Applicants must have a Ph.D., postdoctoral experience is preferred. The successful applicant will be expected to maintain a strong extramurally supported research program and supervise the research of M.S. and Ph.D. students. Preference will be given to individuals whose research employs molecular biological approaches to microbial studies.

Departmental information can be found at website: <http://www.louisville.edu/a-s/biology>. Send statement of research interests, teaching experience and philosophy, curriculum vitae, three representative reprints, transcripts, and the names, telephone numbers, and e-mail addresses of three references to: **Dr. Mike Perlin, Department of Biology, University of Louisville, Louisville, KY 40208.** Screening of completed applications will begin February 1, 1998, and will continue until the position is filled. The University of Louisville is an Equal Opportunity/Affirmative Action Employer. Women, African-Americans, and other underrepresented groups are encouraged to apply.

The University of Colorado-Boulder, is seeking to fill a tenure-track **ASSISTANT PROFESSOR** position in biogeochemistry jointly between the Department of Geological Sciences and the Environmental Studies Program. More information is available at website: <http://www.colorado.edu/GeolSci/>. Applicants should send a letter of interest outlining research and teaching plans, a complete curriculum vitae, and the names, addresses, telephone numbers, and e-mails of at least three professional references to: **Chair, Biogeochemist Search Committee, Geological Sciences Department, University of Colorado at Boulder, Boulder, CO 80309-0399.** Screening of applications will begin January 1, 1998, and continue until the position is filled. The University of Colorado at Boulder is committed to diversity and equality in education and employment.

SEARCH EXTENDED

Tenure-track, **ASSISTANT PROFESSOR** position in biochemistry to begin fall 1998.

For details see original advertisement in *Science* 278: 1176 Nov. 7, 1997.

Applicants should send a curriculum vitae, detailed description of research plans, and three letters of recommendation by February 2, 1998, to: **Biochemistry Search Committee, Department of Chemistry and Biochemistry, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132.** Applications may also be submitted by e-mail: neu@sfsu.edu (all documents must be formatted in MS-Word).

**Wildlife Ecologist
Assistant/Associate Professor
School of Forestry and Wood Products
Michigan Technological University**

Appointment Terms:

This is a nine-month, tenure-track position. Rank and salary will be commensurate with qualifications and experience.

Responsibilities:

Major responsibilities are teaching (60%) and research (40%) emphasizing ecosystem-based natural resource management. Interest/expertise in any of the following areas will best complement current faculty: wildlife ecology, wildlife/habitat relationships, conservation biology, landscape ecology, avian ecology. Teaching is expected to contribute to a new B.S. in Applied Ecology and Environmental Sciences degree program, including a course in conservation biology and other courses in areas of expertise. Development of an externally funded research program involving M.S. and Ph.D. students is also expected. Potential exists for cooperation with a new interdisciplinary Remote Sensing Institute.

Qualifications:

Ph.D. required; management emphasis is highly desirable.

Application Procedure:

Send curriculum vitae, names of three (3) references (with addresses and telephone numbers), one-page statements of research interests and teaching philosophy, and selected reprints to:

**Wildlife Ecologist Search Committee
School of Forestry and Wood Products
Michigan Technological University
1400 Townsend Drive
Houghton, Michigan 49931-1295**

Review of applications will begin early 1998 and will continue until an appropriate candidate is found.

*Michigan Technological University is an Equal Opportunity
Educational Institution/Equal Opportunity Employer.*



Faculty position in computational geophysics at the Cecil and Ida Green Institute of Geophysics and Planetary Physics, Scripps Institution of Oceanography.

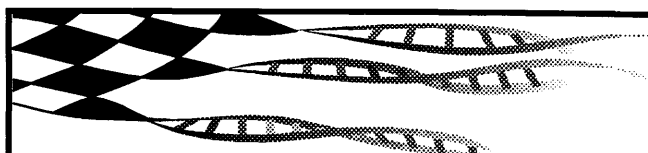
The Scripps Institution of Oceanography and the Cecil and Ida Green Institute of Geophysics and Planetary Physics invites applications for an Assistant, Associate, or Full Professor (tenure-track or tenured) in the field of computational geophysics with emphasis on problems amenable to attack through large-scale computing. Strong preference will be given to an appointment at the Assistant/Associate level. Examples of suitable research areas include inversions for Earth structure, mantle convection, exploration geophysics, and the geodynamo. A qualified candidate should possess expertise in some of the following: multidimensional numerical modeling of continua, seismic waveform modeling, cellular automata, and parallel processing.

Facilities include one or two new NSF Supercomputer Centers (NPACI) at UCSD, a large digital mass store (>10 TB), and modern computing and network infrastructure at IGPP.

The successful candidate will be expected to teach graduate-level courses at Scripps and IGPP and will be encouraged to participate in undergraduate teaching in geophysics through the Earth Sciences degree program. Salary will be commensurate with experience and qualifications and based on the UC pay scale. The position requires a Ph.D. degree and a competitive record of publications, as well as evidence of the ability to conduct and fund an active research program.

Application and inquiries should be addressed to the **Chair, Geophysics Search, Department of the Scripps Institution of Oceanography, University of California, San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0208**. For more information about current research at IGPP, consult our web page at <http://igpp.ucsd.edu>. The closing date for applications is February 28, 1998.

*The University of California
Is an Equal Opportunity/Affirmative Action Employer.*



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Chair Department of Biochemistry, Microbiology & Immunology



The Faculty of Medicine at the University of Ottawa seeks a dynamic academic leader as Chair of the new Department of Biochemistry, Microbiology & Immunology. The Department, the result of a merger of the Departments of Biochemistry and Microbiology & Immunology, comprises 90 full-time and cross-appointed scientists and has the largest graduate studies enrollment in the Faculty. The Department also is jointly responsible for the undergraduate program in Biochemistry in the Faculty of Science.

Applicants should have an outstanding record of achievement and innovation in research and education consistent with three areas of research focus within the new Department: receptor biology, microbial and host resistance and structural biology. Proficiency in both official languages (English and French) is desired.

Appointment to the Faculty of Medicine will be made at the appropriate academic rank (Associate or Full Professor). Interested applicants are requested to submit a curriculum vitae and the names of three references to **Dr. Peter Walker, Dean, Faculty of Medicine, 451 Smyth, Ottawa (Ontario) K1H 8M5 CANADA** by March 15, 1998.

In accordance with Canadian immigration requirements, this advertisement is directed primarily, but not solely, to Canadian citizens and permanent residents. Women, aboriginal peoples, members of visible minorities, and persons with disability are encouraged to apply. More information can be obtained at www.uottawa.ca/academic/med.

POSITIONS OPEN

PLANT SYSTEMATIC BIOLOGY

The Department of Biology invites applications for a tenure-track faculty position at the **ASSISTANT PROFESSOR** level for fall 1998. Preference will be given to candidates using molecular techniques to address systematic problems at population or higher taxonomic levels in plants. Familiarity with wetland habitats (or tropical floras), though not required, will be an added advantage. The candidate is expected to teach an undergraduate course in systematics, botany, evolution, or population biology, a graduate course in the area of specialization, and to participate in the General Education curriculum. The University has a strong faculty and very active research programs in environmental areas, and doctoral programs in environmental biology and environmental sciences. The candidate is expected to contribute to the development and the strengthening of the doctoral program and to have an active research laboratory supported by extramural grants. Applications should have a Ph.D. and postdoctoral (or equivalent professional) experience. Please submit a curriculum vitae, statement of teaching and research goals, and three letters of reference to: **Dr. Kamaljit Bawa, Chair of Search Committee, Department of Biology, University of Massachusetts-Boston, 100 Morrissey Boulevard, Boston, MA 02125.** Deadline for receipt of applications is February 8, 1998. **FAX: 617-287-6650; e-mail: heatley@umb.edu.** Please see our web page for more information on our department, **website: www.bio.umb.edu.** *University of Massachusetts-Boston is an Affirmative Action/Equal Opportunity/Title IX Employer. Women and minorities are encouraged to apply.*

PARASITOLOGY

Tenure-track **ASSISTANT PROFESSOR** in biology with specialty in parasitology beginning 1 September 1998. Ph.D. required; postdoctoral and teaching experience desirable. Responsibilities: share in teaching and ongoing revision of an introductory biology course emphasizing molecular, cellular, and genetic principles; develop a research and teaching program in parasitology; pursue extramural funding; supervise M.S. theses. Send letter of application, brief statements of teaching philosophy and research interests, curriculum vitae, three letters of recommendation, and transcripts to: **Chair, Department of Biology and Microbiology, University of Wisconsin-Oshkosh, Oshkosh, WI 54901-8640.** Telephone: 920-424-1102; **FAX: 920-424-1101; e-mail: zilinsky@uwosh.edu** by 16 February 1998. **Website: http://www.uwosh.edu/departments/biology/.** *The University of Wisconsin-Oshkosh is an Affirmative Action/Equal Opportunity Employer.*

The Department of Biology of Georgia Southwestern State University invites applications for a tenure-track faculty position at the rank of **ASSISTANT PROFESSOR** beginning August 1998. Applicants must have a Ph.D. in the biological sciences with an emphasis in invertebrate and aquatic biology. Teaching responsibilities will include entomology, aquatic biology, genetics, ecology, and general biology. Evidence of successful teaching and continued scholarship are required. Research interests involving largely undergraduate students are encouraged. Review of applications will begin on January 15, 1998, and continue until the position is filled. Applications should include a cover letter, résumé, unofficial transcripts, and the names, addresses, telephone numbers, and e-mail addresses (if possible) of at least three professional references. Send applications to: **Dr. Bob Herrington, Department of Biology, Georgia Southwestern State University, 800 Wheatley Street, Americus, GA 31709.** *Georgia Southwestern State University is an Affirmative Action/Equal Employment Opportunity Employer.*

FACULTY POSITION BIOLOGY

Tenure-track **ASSISTANT PROFESSOR** in biology. Ph.D. required. Teaching comparative morphology, animal physiology, cell biology, immunology, and supervising undergraduate research. Start date is August 15, 1998. A maturing and enthusiastic Christian faith and commitment to the mission of a residential, evangelical Christian university is essential. Send letter and curriculum vitae to: **Dr. Glenn Sumrall, Provost, LeTourneau University, Box 7001, Longview, TX 75607-7001.** *Applicants agreeing with the mission of LeTourneau University are considered without regard to race, age, sex, disability, or national origin.*

POSITIONS OPEN

HEALTH SCIENTIST ADMINISTRATOR

The National Institutes of Health, National Center for Research Resources (NCRR), is seeking applicants for the position of Health Scientist Administrator, GS-601-13/14, for the Office of Review (OR). This position is located in Bethesda, Maryland, and is a permanent, full-time position with a salary range of \$54,629 to \$83,922 per annum, commensurate with qualifications. A recruitment bonus of up to 25 percent of base pay may be available to a non-federal selectee for this position. A relocation bonus of up to 25 percent of base pay (subject to approval) may be available to a permanent federal employee who must relocate to accept this position.

The Health Scientist Administrator is responsible for conducting the review of grant applications submitted to the National Center for Research Resources, Office of Review. Specifically, the incumbent is responsible for the administration of the scientific and technical merit review of applications on biomedical technology, biomedical engineering, and innovative technologies for the study of structure and function at all levels of living systems. In this process, the incumbent is responsible for the initial administrative review of applications; assumes overall responsibility for administering assigned reviews; and collects and provides information and guidance to the committee which he/she considers essential for the review. The incumbent also manages committee meetings and project site visits where he/she orients reviewers and ensures continuity in the special review committee's approach toward evaluating proposals.

Applicants for this position must have a doctoral degree with expertise in biomedical or biophysical research and must be a United States citizen. Send applications to: **Mr. Sean Stroud, National Institutes of Health, National Center for Research Resources (NCRR), 31 Center Drive, Building 31, Room 3B43, Bethesda, MD 20892-2131.** For application forms and a copy of the announcement, contact: **Mr. Stroud, Telephone: 301-496-1524.** Applications must be postmarked by January 20, 1998.

Public Health Service Commissioned Officers interested in performing the duties of the position within the Commissioned Corps may submit a résumé to the above address.

NIH is an Equal Opportunity Employer.

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

The University of Texas M. D. Anderson Cancer Center, one of the world's leading cancer research centers, has an outstanding opportunity at our research facility located in Smithville, Texas for:

DIRECTOR, MOLECULAR BIOLOGY RESOURCE

The Resource Center provides a variety of molecular services for 22 faculty members at Science Park, as well as affiliated researchers located at the M. D. Anderson main campus in Houston, and at the University of Texas at Austin. The Molecular Biology Resource Director will be responsible for all aspects of the operation of the Resource Center, including the supervision of two research assistants. A Ph.D. in biology, molecular biology, or biochemistry is required. The successful candidate will bring experience not only in molecular biology, but also in computer technology and state-of-the-art biomedical instrumentation. The candidate should have extensive experience at the graduate or postdoctoral level in several of the following areas: manual and automated DNA sequence analysis, mutation detection, PCR-based genotyping, image analysis, SSCP analysis, informatics. Qualified applicants should send a curriculum vitae and list of references to: **Dr. M. C. MacLeod, Department of Carcinogenesis, University of Texas M. D. Anderson Cancer Center, Box 389, Smithville, TX 78957.**

We are an Equal Opportunity/Affirmative Action Employer.

MOLECULAR CYTOGENETICIST

Position available immediately for projects concerning CHG analysis of human tumor specimens and FISH mapping of viral integration sites in chromosomes from rat lymphomas. Experience in cytogenetics required; prior training in FISH or CGH preferred. Submit curriculum vitae and names of three references to: **Joseph R. Testa, Ph.D., c/o Human Resources, Fox Chase Cancer Center, 7701 Burholme Avenue, Philadelphia, PA 19111.** *Equal Opportunity Employer.*

POSITIONS OPEN

PLANT PATHOLOGIST/MICROBIOLOGIST

The New England Plant, Soil, and Water Laboratory, USDA-ARS, Orono, Maine, has an opening for a Plant Pathologist/Microbiologist to conduct research aimed at developing low-input, sustainable crop production systems. Research projects will address the ecology of soil-borne pathogens/organisms and their effects on potato plant health and tuber quality. Research will also deal with the interactions of plant pathogens and microbial populations as they relate to pathogen survival and pathogenicity in sustainable cropping systems. The Laboratory is located on the University of Maine campus; thus the researcher will have access to resources and facilities afforded by the University. *Candidates must be U.S. citizens and have knowledge of plant pathology, microbiology, ecology, and skills in horticultural aspects of potato production, tissue culture, and molecular biological techniques.* Salary is \$38,593 to \$46,254. For application procedures, call **Susan Bartley, Telephone: 207-581-3266.** Applications must be marked ARS-X8N-8045 and postmarked by January 5, 1998.

BIOLOGIST UNIVERSITY OF WISCONSIN-GREEN BAY

The Human Biology Department invites applications for a tenure-track position as **ASSISTANT PROFESSOR**. Candidates must have a Ph.D. in biology or a related area with molecular biology training. Primary responsibility is teaching Principles of Biology I, an introductory course for majors. Postdoctoral experience is desirable. Normal teaching load is 21 credits per year. Review of applications will begin on February 20, 1998, and position will remain open until filled. Send letter of application describing teaching and research interests, curriculum vitae, transcripts, recent reprints, and the names, addresses, and telephone numbers of three current references to: **Biologist Search Committee, ES 301, University of Wisconsin-Green Bay, 2420 Nicolet Drive, Green Bay, WI 54311-7001.** Telephone: 920-465-2681; **FAX: 920-465-2769.** *UWGB is an Affirmative Action/Equal Opportunity Employer. Unless confidentiality is requested in writing, information regarding the applicants must be released upon request. Finalists cannot be guaranteed confidentiality.*

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**

DIRECTOR OF UNIVERSITY ANIMAL RESOURCES. North Carolina State University seeks a Director of University Animal Resources. Qualified applicants will be ACLAM Diplomates. Senior professorial rank and salary will be commensurate with training and experience. Starting date is July 1, 1998. Applicants should send letter of application, curriculum vitae, and names of three references to: **Dr. Lance Perryman, College of Veterinary Medicine, North Carolina State University, 4700 Hillsborough Street, Raleigh, NC 27606.** Telephone: 919-829-4250; **e-mail: lance_perryman@ncsu.edu.** Application closing date is February 16, 1998, or until a suitable candidate is chosen.

North Carolina State University is an Equal Opportunity/Affirmative Action Employer.

HARVARD MEDICAL SCHOOL

RESEARCH ASSOCIATE position available immediately to study intracellular signal transduction, focus on insulin action and neoplasia. Background in biochemistry, molecular biology, or cell biology. *U.S. citizen or permanent resident* with Ph.D. within last three years. Send curriculum vitae and three references to: **Dr. David B. Sacks, Brigham and Women's Hospital/Harvard Medical School, Thorn 530, 75 Francis Street, Boston, MA 02115.** **FAX: 617-278-6921; e-mail: dsacks@bics.bwh.harvard.edu.**



The USDA, Agricultural Research Service, Beltsville Agricultural Research Center, Plant Sciences Institute, Horticultural Crops Quality Laboratory, in Beltsville, Maryland is seeking a Microbiologist/Research Food Technologist, GS-403/1382-12/13. Salary is commensurate with experience (GS-12: \$45,939-\$59,725 per year, GS-13: \$54,629-\$71,017 per year). *Candidates must be U.S. citizens.* The position conducts high priority basic and applied food technology and postharvest biology research on food safety and quality of fresh and fresh-cut fruits and vegetables. In addition to the basic education requirements, applicants must demonstrate: 1) knowledge of the principles, techniques, and procedures of microbiology, food technology, and plant physiology, 2) ability to design, plan, conduct multidisciplinary research, and analyze and publish results, 3) knowledge of plant postharvest biology and technology, and 4) skill in the application of techniques and procedures used in the study of human pathogenic bacteria. For information on the research program, contact **Dr. Ken Gross** on (301) 504-6128. This position has specific education and experience requirements, and factors that must be addressed. In order to ensure submission of a complete application, applicants must request a copy of the vacancy announcement by calling (301) 344-4638 or by printing it from the Internet at <http://www.ars.usda.gov>. The vacancy announcement number for this position is ARS-D8B-058/B-8-02. The vacancy announcement closes 2/2/98. *USDA/ARS is an Equal Opportunity Employer.*

DEAN, FACULTY OF SCIENCE

The University of British Columbia

The University of British Columbia invites applications and nominations for the position of Dean of the Faculty of Science. The preferred starting date is July 1, 1998.

UBC is a publicly supported university comprising twelve faculties, nine schools and numerous centres and institutes. The University ranks among the leading universities in North America and is strongly committed to internationalisation with a stated mission to be a world-renowned institution of higher education and research.

The Faculty of Science at UBC is among the very best in Canada. It has nine departments covering a broad range of disciplines grouped into the general areas of earth and ocean sciences, life sciences, physical sciences and mathematics and informational science. The breadth of activities makes it one of the most comprehensive Faculties in Canada. The undergraduate and graduate enrolments are approximately 5,000 and 1,000, respectively. The full-time professorial staff of the Faculty is about 300; its annual operating budget is \$37 million; and external research support averages \$32 million per year. The Faculty sets its highest priorities on the continued development of outstanding research and innovative, high quality educational programs.

As the senior executive officer of the Faculty, the Dean is expected to provide dynamic leadership within the Faculty and the University, and to maintain strong, productive relationships with government, industry and public constituencies related to the Faculty's programs. The successful candidate will be an internationally recognised scholar dedicated to research and teaching and with proven administrative ability. Candidates must have the academic credentials, and record of scholarly achievement consistent with an appointment to the academic rank of Professor. The appointment is for a term of six years and is renewable.

In accordance with Canadian immigration requirements priority will be given to Canadian citizens and permanent residents of Canada. UBC hires on the basis of merit and is committed to employment equity. We encourage all qualified persons to apply. **Applications and nominations will be received until February 28, 1998 or until the position is filled,** and should be forwarded to:



**Chair of the Search Committee
Vice President Academic and Provost
University of British Columbia
6328 Memorial Road
Vancouver, BC V6T 1Z2**

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U.S.: Bren Peters
Phone: 202-326-6541
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E-mail: science_displayads@aaas.org

Europe: Debbie Cummings
Phone: 44 (0) 1223 302 067
Fax: 44 (0) 1223 576 208
E-mail: european_ads@science-int.co.uk

POSITIONS OPEN



U.S. DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

ARS is seeking a permanent full-time interdisciplinary **RESEARCH ENTOMOLOGIST/MOLECULAR BIOLOGIST**, GS-12/13 in the Systematic Entomology Laboratory, Plant Sciences Institute, Beltsville Agricultural Research Center. Salary is commensurate with experience: GS-12: \$45,939 to \$59,725 and GS-13, \$54,629 to \$71,017 per annum plus benefits. (Figures for January 1998 pay increases are not yet available.) The position involves planning and conducting independent and team research primarily on the molecular biology and molecular systematics of a wide array of insects of importance to U.S. agriculture. In addition to the basic educational requirements, applicants must demonstrate knowledge of the principles, methods, and procedures of molecular biology; knowledge of the biology of eukaryotic organisms; skill in the application of molecular methods and procedures of systematics; ability to collaborate or co-publish research with colleagues; and ability to interpret data, design, plan, and conduct research on molecular systematics of a group of organisms and publish results. *Must be a U.S. citizen.* For information on the research program and/or position, contact **Dr. Manya B. Stoetzel**, Telephone: 301-504-5183; FAX: 301-504-6482; e-mail: mstoetzel@sel.barc.usda.gov. To apply, applicants must Telephone: 301-344-4638 to request a copy of ARS-D8B-055 in order to properly file application. Applications must be postmarked by January 12, 1998.

USDA is an Equal Opportunity Employer.

National Institute for Occupational Safety and Health (NIOSH) has established a new, state-of-the-art research facility in Morgantown, West Virginia to conduct research on the molecular mechanisms underlying adverse health effects associated with workplace exposures. The Toxicology and Molecular Biology Branch is seeking an **INDEPENDENT INVESTIGATOR** to establish a laboratory-based research program that will apply cellular, molecular, and/or genetic approaches to problems in occupational safety and health. Suggested areas include, but are not limited to, medicinal chemistry, HLA associations with immunopathology, developmental toxicology, and model systems applicable to occupational health. The successful candidate will have opportunities to collaborate with other Branch Investigators conducting research programs in immunotoxicology, neurotoxicology, molecular toxicology, dermatotoxicology, and molecular carcinogenesis.

Applicants should send a curriculum vitae and a cover letter describing the candidate's area of research and how their expertise will be applied to occupational safety and health issues to:

Ms. Cheryl Fisher
Toxicology and Molecular Biology Branch
National Institute for Occupational Safety
and Health
m/s 3014
1095 Willowdale Road
Morgantown, WV 26505

CDC/NIOSH is an Equal Opportunity Employer and provides a smoke-free workplace.

The Metabolism Branch, Division of Clinical Sciences, National Cancer Institute, in Bethesda, Maryland, seeks an experienced **LABORATORY TECHNICIAN**. The ideal candidate will have knowledge of recombinant DNA technology including analysis of DNA and RNA, gene cloning, library construction and screening, production of recombinant proteins in prokaryotic and eukaryotic cells, screening of cDNA expression libraries, transient and stable transfection of eukaryotic cells and RT-PCR; radiolabeling of cellular proteins followed by immunoprecipitation and SDS-PAGE analysis, IP/immunology techniques. Additionally, the candidate will have good organization skills, effective verbal and written communication skills, and familiarity with computers. Starting salary will be approximately \$39,270 to \$61,190. If interested, send résumé with cover letter to: **Jean Decker**, Building 10, Room 4N115, 10 Center Drive, MSC 1374, Bethesda, MD 20892. *NIH is an Equal Opportunity Employer.*

POSITIONS OPEN



RESEARCH SPECIALIST TRANSGENICS, KNOCKOUTS

The Department of Cellular and Molecular Biology at Harvard University is seeking candidates for a Technical Research Specialist position.

The position is for highly motivated individual to organize and execute genetic backcross experiments and to generate transgenics and knockouts. Substantial experience in related areas is required.

Highly competitive salary and excellent benefit package are offered.

Please send résumé to:

Harvard University
Howard Hughes Medical Institute
Attn: Josephine Austrie
Biolabs, 16 Divinity Avenue
Cambridge, MA 02138
E-mail: jaustrie@fas.harvard.edu

No phone calls please.

TENURE-TRACK POSITION IN ASTRONOMY AND ASTROPHYSICS AMERICAN MUSEUM OF NATURAL HISTORY

The American Museum of Natural History in New York City, a leading scientific research institution, is re-establishing a Department in Astronomy and Astrophysics in tandem with its renowned and newly reconstructed Hayden Planetarium. Over the next two years, we expect to make two tenure-track research staff appointments at the **JUNIOR** and **SENIOR** level in any specialty. Applicants must have a Ph.D. in astronomy or a related field. This initial hiring is part of a larger goal of building and maintaining a significant research presence in astrophysics at the Museum with the expectation that the successful candidate will have a broad base of interests. Successful applicants are expected to have demonstrated exceptional accomplishments that include a strong publication record and the ability to compete for major grants and/or telescope time. Successful applicants will also be expected to participate in the innovative outreach efforts of the new Hayden Planetarium, which will include, but are not limited to, writing for the public, developing content for sky shows and exhibits, and working with scientific visualizers. The Museum's Department has an up-to-date research library and will soon acquire an SGI Onyx mini-supercomputer equipped with an Infinite Reality graphics engine for the scientific visualization of large databases.

Links to Columbia and Princeton Universities exist (through adjunct appointments, joint grants, and shared graduate students) and such links will be encouraged among the successful applicants. We request a curriculum vitae, written statements on research goals and on interest in educational outreach, and the names of three references. Compensation will be commensurate with rank and accomplishments of the candidate. Screening of applicants will begin January 20, and continue through March 1, 1998. Please submit all materials to: **Astronomy and Astrophysics Search Committee**, c/o Francine Oliver, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024. For further information contact: **Dr. Neil D. Tyson**, Telephone: 212-769-5912; e-mail: tyson@astro.amnh.org. *The American Museum of Natural History is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.*

An **ASSOCIATE RESEARCH SCIENTIST** position is available at the Department of Cell Biology, Columbia University, to study microtubules and signal transduction in motile cells. Candidates should have a doctoral degree in cell biology with postdoctoral experience in cell motility and the cytoskeleton. Knowledge of imaging and protein purification is essential. Submit a curriculum vitae and three references to: **Dr. G. Gunderson**, BB-1217, Columbia University, 630 West 168th Street, New York, NY 10032. *An Affirmative Action/Equal Opportunity Employer.*

POSITIONS OPEN



U.S. DEPARTMENT OF AGRICULTURE (USDA) AGRICULTURAL RESEARCH SERVICE (ARS)

ARS is seeking a permanent full-time **RESEARCH ENTOMOLOGIST**, GS-12/13, in the Systematic Entomology Laboratory, Plant Sciences Institute, National Museum of Natural History, Washington, D.C. Salary is commensurate with experience: GS-12: \$45,939 to \$59,725 and GS-13: \$54,629 to \$71,017 per annum, plus benefits. (Figures for pay increase for January 1998 are not yet available.) Incumbent plans and conducts independent and cooperative research primarily on the systematics of weevils (*Insecta: Coleoptera, Curculionidae*) and related beetle families of importance to U.S. agriculture. In addition to the basic educational requirements, applicants must demonstrate knowledge of general entomology, insect taxonomy, genetics, ecology, and molecular biology; ability to plan and conduct research projects; ability to analyze, interpret findings, and publish results; and knowledge of systematic zoology, evolutionary theory, rules of nomenclature, insect morphology, and physiology. Ph.D. in entomology or related field is desirable. *Must be U.S. citizen.* For information on the research program and/or position, contact: **Dr. Manya B. Stoetzel**, Telephone: 301-504-5183; FAX: 301-504-6482; e-mail: mstoetzel@sel.barc.usda.gov. To apply, applicants must Telephone: 301-344-4638 to request a copy of ARS-D8B-037 in order to properly file a complete application. Applications must be postmarked by February 2, 1998.

ARS is an Equal Opportunity Employer.

RESEARCH PLANT PATHOLOGIST

The New England Plant, Soil, and Water Laboratory, USDA-ARS, Orono, Maine, has an opening for a Plant Pathologist to conduct research aimed at developing low-input, sustainable crop production systems. Research projects will address factors affecting survival, parasitic fitness, and pathogenicity of fungal pathogens as they relate to the epidemiology and management of foliar diseases of potatoes with primary emphasis on potato late blight. Research can also deal with molecular studies of fungal biology leading to field-based research on improved management practices for potato late blight and/or other foliar diseases of potato. The Laboratory is located on the University of Maine campus; thus the researcher will have access to resources and facilities afforded by the University. *Candidates must be U.S. citizens and have knowledge of plant pathology, fungal and plant biology, and epidemiology as well as skills in horticultural aspects of potato culture, tissue culture, and molecular biological techniques.* Salary is \$38,593 to \$46,254. For application procedures, call **Susan Bartley**, Telephone: 207-581-3266. Applications must be marked ARS-X8N-8044 and postmarked by January 5, 1998.

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.

COLUMBIA UNIVERSITY

POSTDOCTORAL POSITIONS available to study integrin receptor signaling. Two projects are available: the role of integrins in T cell development and function; the role of integrin signaling in vascular smooth muscle proliferation and migration. Experience in molecular biology required, and immunology or cell biology background preferred. Send curriculum vitae and names of three references to: **Dr. Eugene Marcantonio**, Department of Pathology, Columbia University, 630 West 168th Street, New York, NY 10032. *Columbia University is an Equal Opportunity/Affirmative Action Employer.*

GLOBAL CAREER OPPORTUNITIES



The Victor Chang CARDIAC RESEARCH INSTITUTE SYDNEY, AUSTRALIA

Faculty Position

The Institute is seeking an outstanding researcher for a faculty position at the Associate- or Full-Member Level. Applicants will be expected to hold a PhD, MD, or both with relevant postdoctoral training, and to have developed a recognised, well-funded research program. The Institute will provide a strong package to allow a dynamic research program to be established rapidly. Candidates with a distinguished record of research in any area of cardiovascular science will be given serious consideration, although those with programs in *molecular genetics*, *gene therapy* or *transplantation biology* are particularly encouraged to apply.

In addition to continuing a high-quality individual and interactive research program, the appointee will have responsibility for further developing the programmatic research interests of the Institute in the molecular basis of cardiovascular biology and disease, and in training postgraduate students in molecular cardiology. This is an exceptional opportunity for a leadership position in a thriving and growing institute committed to excellence in cardiovascular research. The VCCRI is affiliated with the University of New South Wales, Australia.

Applicants should send a curriculum vitae, short description of research plans and the names of at least three referees to:

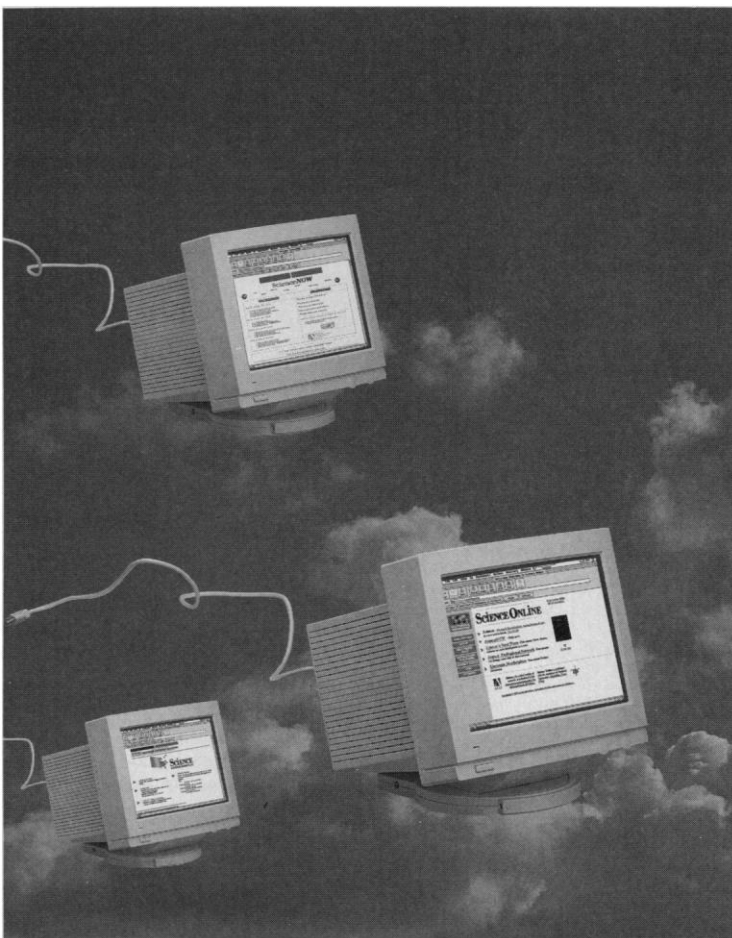
Professor Robert M Graham,
Victor Chang Cardiac Research Institute,
384 Victoria Street, Darlinghurst, Sydney, NSW 2010, Australia.
Tel: 61-2-9295 8500 Fax: 61-2-9295 8501
or e-mail: b.graham@victorchang.unsw.edu.au
Affirmative Action/Equal Opportunity Employer

POLICY Program Director

The American Association for the Advancement of Science (AAAS) seeks an experienced Program Director to oversee, develop, and manage projects to promote knowledge about science and scientific developments in the religious community, to promote dialogue between the scientific and religious communities, and to facilitate constructive cooperation between the two communities. Successful candidate will organize meetings, conferences, and symposia; write proposals for fundraising; represent the Program and AAAS at various public and professional functions; serve as the primary liaison with advisory committee for the Program and the AAAS Board of Directors; conduct research on a range of related issues; prepare, write, and edit related publications; help to formulate and manage a budget; make presentations at conferences and other events. This is a full-time regular position for an initial period of two years, reporting to the Director of Science and Policy Programs; continuation beyond the two-year grant period will be contingent on availability of funding. Deadline for submission of applications is 1 March 1998.

Qualifications: Master's degree (science discipline and a record of scientific achievement); Ph.D. degree preferred; seven to ten years of relevant work experience (experience in progressively responsible positions in program development and management); experience in the interface between science and religion through teaching and/or participation in projects and conferences a plus; excellent verbal, written, and interpersonal skills; proposal writing and budget management experience; good computer skills; proven organizational skills; supervisory experience. Travel required.

Interested applicants may send résumé and cover letter with salary requirements to AAAS, Human Resources Department, 1200 New York Avenue N.W., Suite #100, PD-017, Washington, DC 20005. EOE. Non-smoking work environment.



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POSITIONS OPEN

DEVELOPMENTAL BIOLOGY

The Department of Biological Sciences at Florida Tech invites applications for a faculty position in developmental biology starting August, 1998. Particular interest in individuals using molecular or cellular approaches; however, any contemporary area of developmental biology will be considered. Rank and terms of appointment depends on qualifications and experience. Two years of postdoctoral experience, and evidence of accomplishments in research and teaching required; transmission electron microscopy experience desired. Candidate must develop a research program with extramural funding, direct graduate research, and participate in undergraduate and graduate teaching in developmental biology, mammalian physiology, and anatomy. A new 38,600 square foot F. W. Olin Life Sciences Building is slated for occupancy fall, 1999. Submit curriculum vitae, three letters of recommendation, and statements of research and teaching interests by February 15, to: Gary Wells, Department of Biological Sciences, Florida Institute of Technology, 150 West University Boulevard, Melbourne, FL 32901. Florida Tech is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

POSTDOCTORAL FELLOWSHIP/ SENIOR RESEARCH ASSISTANTSHIP IN MOLECULAR/CELLULAR NEUROBIOLOGY. Division of Neuroscience Oregon Regional Primate Research Center

Full-time position available immediately. Candidate will investigate the genomic and transactivating factors involved in the nervous system-selective transcription of the $\beta 1$ -adrenergic receptor gene, and identify the molecular determinants of adrenergic receptor desensitization. Ph.D. in molecular biology, biochemistry, or neuroscience, or B.S./M.S. degree with advanced technical skills in recombinant DNA methods, *in situ* hybridization, and immunocytochemistry, are required. Skills in computer literacy and neuroanatomy would also be desirable. Salary commensurate with experience. Send curriculum vitae, publication list, and three references to: Dr. Curt Machida, Neuroscience, ORPRC, 505 N.W. 185th Avenue, Beaverton, OR 97006. FAX: 503-690-5384. Equal Opportunity/Affirmative Action Employer.

PHYSICAL CHEMISTRY, BIOPHYSICS, AND PHYSICS EXPERIMENTALISTS AND THEORISTS POSTDOCTORAL AND RESEARCH FACULTY

The Wilson group, at the University of California, San Diego, Department of Chemistry and Biochemistry, has positions available for exceptionally talented Scientists in the following areas: ultrafast X-ray diffraction and absorption applied to chemical and biochemical dynamics and function, dynamics of biomolecular and biological processes (including interneuronal communication and function) imaged using ultrafast microscopy, and theoretical studies related to these areas. For more information about these positions and the group, or to receive application process information, visit our website: <http://www-wilson.ucsd.edu> or e-mail: wjgjobops@ucsd.edu. Positions commensurate with experience and qualifications, with salaries based on University of California pay scales. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL/RESEARCH ASSOCIATE positions available in (1) murine genome program for screening of autoimmune responsible genes, (2) knock-out approaches, and (3) molecular and biochemical analysis of disk (spine) degeneration. Understanding and experience in the relevant area is absolute requirement. Applicants should send a curriculum vitae, a brief summary of research experience, and the names and addresses of the current preceptor and at least two additional referees to: Tibor T. Glant, M.D., Ph.D., Professor, Department of Orthopedic Surgery, Rush University at Rush-Presbyterian St. Luke's Medical Center, 1653 West Congress Parkway, Chicago, IL 60612.

IS THIS YOUR ONCE IN A LIFETIME OPPORTUNITY

Small, established Los Angeles biotech company seeks creative **RESEARCH DIRECTOR** with entrepreneurial flair. Substantial equity position available for individual with marketable ideas. Please FAX curriculum vitae in absolute confidence to: FAX: 310-657-4222, Attn: Mr. Cole. All applicants will receive a reply.

POSITIONS OPEN

POSTDOCTORAL POSITION available to utilize novel genetic approaches to develop vaccines against Lyme disease, ehrlichiosis, and babesiosis. Focus of project shall be to use genetic immunization as a means of identifying vaccine candidates capable of interrupting feeding by the tick vector *Ixodes scapularis*. Related studies will investigate gene expression during tick feeding by the tick-borne pathogen *Borrelia burgdorferi*. Experience with recombinant DNA techniques required. Background in medical entomology highly desirable. Position includes salary (negotiable), fringe benefits, and opportunity to work in a stimulating research environment. Send curriculum vitae and names, telephone numbers, and e-mail addresses of three references to: Dr. Justin Radolf, Division of Infectious Diseases, The University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Boulevard, Dallas, TX 75235-9113. FAX: 214-648-5476; e-mail: jradolf@mednet.swmed.edu.

University of Texas Southwestern Medical Center is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

University of Texas Medical Branch at Galveston

Three Postdoctoral positions are available immediately to study mechanisms of HIV pathogenesis and latency and HIV antibody responses. Applicants should have a strong background in either molecular biology or protein chemistry and serology. Send a curriculum vitae and the names of three references to: Dr. Miles W. Cloyd, Ph.D., Professor, Department of Microbiology and Immunology, University of Texas Medical Branch, 301 University Boulevard, Galveston, TX 77555-1019. University of Texas Medical Branch hires only persons authorized to work in the United States. UTMB is an Affirmative Action/Equal Opportunity Employer. Minorities/Females/Disabled/Veterans.

TULANE UNIVERSITY MEDICAL CENTER TULANE REGIONAL PRIMATE RESEARCH CENTER Department of Parasitology

Two **POSTDOCTORAL ASSOCIATES** are sought to join a multidisciplinary group working on the pathogenesis and immunoprophylaxis of Lyme disease. Background in molecular biology of prokaryotes or in cellular immunology would be advantageous. Please send curriculum vitae and names of three references by January 24, 1998, by mail to: Dr. Mario T. Philipp, Chairman, Department of Parasitology, Tulane Regional Primate Research Center, 18703 Three Rivers Road, Covington, LA 70433. Or by e-mail: philipp@tpc.tulane.edu.

Tulane University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE.

Candidates must have a Ph.D. in biochemistry/molecular biology. Preferred are a strong background in mitochondrial function, biosynthesis and molecular biology, in the interactions of mitochondrial and nuclear genomes, and in the study of the uptake of apocytochrome c by the organelle and its transformation to the holoprotein. Salary \$25,000. Apply by February 1, 1998, with curriculum vitae and names of three references to: Dr. Emanuel Margoliash, Biological Sciences (M/C 066) University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607.

POSTDOCTORAL POSITION is available to study RNA/protein interactions in light regulated translation in the green algae *Chlamydomonas reinhardtii*. Expertise in molecular biology and genetics is essential. A description of the project can be found at website: <http://hermes.scripps.edu/pub/mayfield>. Please send a curriculum vitae and the names of three references to: Stephen Mayfield, Department of Cell Biology, BCC283, The Scripps Research Institute, 10550 North Torrey Pines Road, La Jolla, CA 92037.

POSTDOCTORAL FELLOWSHIP available immediately to study influence of estrogen on cell cycle regulation, adhesion, and survival in vascular endothelial cells. Experience in molecular biology and biochemistry required, recent Ph.D. or M.D. Send curriculum vitae and names of three references to: Douglas W. Losordo, M.D., Department of Cardiology, St. Elizabeth's Medical Center, 736 Cambridge Street, Boston, MA 02135. FAX: 617-789-5029; e-mail: dlosordo@opal.tufts.edu.

POSITIONS OPEN

POSTDOCTORAL/RESEARCH ASSOCIATE

Postdoctoral position available for an NIH-funded program to study cytokines, chemokines, and cellular mechanisms in the ocular pathogenesis of *Pseudomonas aeruginosa* in mice. Requirements: background in molecular biology (nuclease protection, RT/PCR, *in situ* hybridization), cellular immunology, and/or biochemistry.

Send cover letter including research background and goals, and names of three references to: Dr. Linda D. Hazlett, Professor and Chair, Department of Anatomy and Cell Biology, Wayne State University School of Medicine, 540 East Canfield Avenue, Detroit, MI 48201. E-mail: lhazlett@med.wayne.edu.

Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free. Wayne State University—People working together to provide quality service.

POSTDOCTORAL POSITION

The Division of Critical Care of the Children's Hospital Medical Center is looking for a Postdoctoral Fellow to study the role of peroxynitrite and poly (ADP-ribose) synthetase in myocardial reperfusion injury. The successful applicant will have an M.D. and/or Ph.D. degree, background in cardiovascular pharmacology, and experience with myocardial reperfusion injury and free radicals. Prior experience with myocardial reperfusion injury in mice is preferred. Send curriculum vitae and names of references to: Dr. Csaba Szabo, Division of Critical Care, Children's Hospital Medical Center, 3333 Burnet Avenue, Cincinnati, OH 45229. FAX: 513-636-4892.

POSTDOCTORAL RESEARCH POSITIONS

are available to study transcriptional regulation and repair mechanisms during hypoxia, heat shock, and radiation. Ph.D. or M.D. training in transcription, DNA repair, signal transduction, strong background in molecular biology required. Please submit résumé, names of three referees to: Dr. S. K. Calderwood and Dr. C. N. Coleman, Joint Center for Radiation Therapy, Dana Farber Cancer Institute, Boston, MA 02115. E-mail: stuart_calderwood@dfci.harvard.edu; Telephone: 617-632-3885.

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POSTDOCTORAL POSITION available in geochemistry/biogeochemistry (especially "cold mineral" geochemistry) to join a research group studying acid mine drainage (especially dissolved Hg) from a Superfund site into Clear Lake, California and subsequent production of methyl Hg. Send résumé, transcripts, and names, addresses, and e-mails of three references to: University of California, Davis—Clear Lake Environmental Research Center, 200 Park Street, Lakeport, CA 95453. E-mail: ucdclerc@pacific.net; website: <http://ice.ucdavis.edu/ucdclerc>. Review of applications will begin January 9, 1998.

POSTDOCTORAL POSITIONS are available to pursue site-directed mutagenesis and kinetic studies of enzymes involved in blood coagulation and fibrinolysis (see website: <http://www.biochem.wustl.edu/~enrico>). Relevant experience in molecular biology and enzymology is required. Send curriculum vitae to: Dr. Enrico Di Cera, Department of Biochemistry and Molecular Biophysics, Washington University School of Medicine, Box 8231, St. Louis, MO 63110. E-mail: enrico@caesar.wustl.edu; FAX: 314-362-7183.

POSTDOCTORAL and GRADUATE STUDENT positions available in geochemistry of aquatic ecosystems. Experiment involves applying radioactive tracers to a small reservoir to study dynamic processes and refine computer models. Tracers include radioisotopes of Hg, Ca, Fe, Co, Mn, Cs, Sr, Sc, Na, and Cr. Interests are in water/sediment, water/season, and water/macrophyte kinetics; trophic chain transfers; and chemical speciation. Contact: Dr. Hinton, Savannah River Ecology Laboratory, Drawer E, Aiken, SC 29802. E-mail: hinton@serl.edu.

POSTDOCTORAL FELLOW needed to study signaling mechanism coupled to platelet adhesion receptors. This position requires a Ph.D. and/or M.D., and experience in molecular biology, protein biochemistry, and tissue culture. Please send a curriculum vitae and the names of three references to: Dr. Xiaoping Du, Department of Pharmacology, MC 868, University of Illinois at Chicago College of Medicine, 835 South Wolcott Avenue, Chicago, IL 60612. E-mail: xdu@uic.edu.

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Fax: (+61) 02 922-1100

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Professor - Cognitive Neuroscience

Applications are invited for a senior tenured faculty position in the Center for Neurobiology and Behavior at Columbia University College of Physicians and Surgeons. Applicants must have demonstrated a record of sustained research excellence. The successful candidate will be expected to maintain a vigorous, independent research program and to provide leadership in the development of cognitive neuroscience at Columbia. Resources will be provided for the future recruitment of additional junior faculty in this area. Submit curriculum vitae, names and addresses of three references, and summary of research objectives, to: **Search Committee, Center for Neurobiology and Behavior, Columbia University, New York State Psychiatric Institute, 722 W. 168 St., New York, NY 10032**

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Assistant Professor - Cognitive Neuroscience

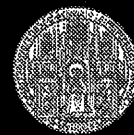
Columbia University invites applications for a tenure-track faculty position in the Center for Neurobiology and Behavior, at Columbia University College of Physicians and Surgeons. Applicants must possess a Ph.D. or M.D. degree and have at least two years of post-doctoral training. Successful candidates will be expected to develop a vigorous, independent research program in cognitive neuroscience, using approaches such as brain imaging, behavioral psychology, single unit recording, computational methods, or related techniques. Submit curriculum vitae, names and addresses of three references, and summary of research objectives, to: **Search Committee, Center for Neurobiology and Behavior, New York State Psychiatric Institute, 722 W. 168 St., New York, NY 10032**

Columbia University

takes affirmative action to ensure equal opportunity.

EUROPEAN CAREER OPPORTUNITIES

dkfz



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Stiftung des öffentlichen Rechts

Universität Heidelberg

Professorship (C4)

for

Medical Physics and Biophysics

The German Cancer Research Center (DKFZ) and the Faculty of Medicine at the University of Heidelberg will jointly appoint a scientist as head of the Division of Medical Physics and Biophysics within the Research Program "Radiological Diagnostics and Therapy."

Applicants should have outstanding scientific records in applied medical physics in cancer research and should focus on biophysical methods in oncological diagnostics. Profound experience in MRT, CT, ultrasound, or PET is anticipated. The successful applicant should contribute by innovative developments to the enlargement of the applicabilities and significance of biophysical methods in close collaboration with the other divisions of the Research Program. Sound technical equipment is offered for these tasks. "Habilitation" or equivalent scientific achievements are required; applications from female scientists are encouraged.

Please send your application with a curriculum vitae, a list of publications, and references by January 31, 1998, to:

**Deutsches Krebsforschungszentrum, Stiftungsvorstand,
Im Neuenheimer Feld 280, D-69120 Heidelberg, Germany**

ANNOUNCEMENT

INVITATION

The Limnological Institute of the University of Oriente is a Venezuelan institution that is dedicated to scientific research in the area of continental aquatic sciences.

The Institute has its seat in Caicara del Orinoco, a city in the northeastern part of the state of Bolivar. Geographically, it is located at the center of the Orinoco Basin, very close to the Orinoco river, and a few kilometers away from other important rivers such as the Apure, the Caura, and the Cuchivero.

The abundance of existing aquatic resources, together with the rich vegetal and animal biodiversity influenced by the proximity of the Venezuelan Amazon, turns this region into an ideal place for scientific research.

The Institute offers its installations to researchers from any country in the world, in order to develop research work in the following areas:

Limnology

- Hydrochemistry
- Sediments
- Bacteriology
- Primary productivity
- Secondary productivity
- Plankton

Crocodylia

- Taxonomy
- Reproductive ecology
- Habitat

Fish

- Taxonomy
- Food ecology
- Reproductive ecology
- Cytogenetics

Aquatic plants

- Taxonomy
- Ecology
- Handling

The Limnological Institute offers lodging at no cost, together with the use of scientific equipment and laboratories. However, it is recommended that the visiting researcher should use (and pay the cost of) the services of local personnel.

**Address: Instituto Limnológico,
Universidad de Oriente
Caicara del Orinoco
Estado Bolivar
Venezuela**

FAX: 58-35-67474

E-mail: cinvesti@re.udo.edu.ve

POSITIONS OPEN

POSTDOCTORAL FELLOWSHIPS IN DIABETES, OBESITY, METABOLISM, AND ENDOCRINOLOGY

Positions available beginning April 1, 1998, for postdoctoral training in diabetes, obesity, metabolism, and endocrinology (M.D., Ph.D., or M.D.-Ph.D.). Possible mentors are from the Departments of Medicine, Biochemistry, Physiology, and Biophysics and in the Section of Epidemiology of the School of Public Health include: N. Ruderman (Director), B. Corkey and P. Pilch (co-directors), S. Chipkin, R. Cohen, T. Colton, S. Farmer, J. Hamilton, M. Holick, N. Istfan, J. Kirkland, K. Kandrór, J. Murphy, J. Melby, B. Millen, M. Prout, K. Tornheim. Opportunities exist for M.D. fellows to obtain an M.P.H. or Ph.D. degree, to work on an NIH-funded General and Clinical Research Center (GCRC), and to obtain Board-eligibility in endocrinology.

Funding for these positions is through an NIH doctoral training grant and is open to American citizens and permanent residents only. Curricula vitae and letters of reference to individual faculty or to: N. Ruderman, M.D., D. Phil., Diabetes Research Unit, Boston Medical Center, 88 East Newton Street, Boston, MA 02118. For additional information or electronic submission, website: <http://med-biochem.bu.edu/postdoc.html>.

The National Eye Institute, National Institutes of Health, has a **POSTDOCTORAL POSITION** available in the Laboratory of Molecular and Developmental Biology. The purpose of this position is to study the phenotypes of alpha-crystallin/small heat shock protein gene knockout mice previously generated in this lab. A variety of biochemical, molecular biological, histological, and physiological approaches will be employed. Applicants must be U.S. citizens or permanent residents; have a Ph.D. in molecular biology, biochemistry, or a related field; and have fewer than five years of postdoctoral experience. Experience in eye research, protein biochemistry, transgenic animals is desirable. Starting salary ranges from \$25,000 to \$36,000 per year depending on experience. Please send a curriculum vitae, bibliography, and names of three references to: Dr. Eric Wawrousek, National Eye Institute, 6 Center Drive, MSC 2730, Bethesda, MD 20892-2730. FAX: 301-402-3603; e-mail: erick@helix.nih.gov.

NIH is an Equal Opportunity Employer.

POSTDOCTORAL POSITION available to study the role of irritant receptors and neuropeptide receptors in environmental pollution-induced activation of airway macrophages. The ideal candidate will have experience in various techniques to study gene expression, cytokine gene regulation, measures of oxidant stress, and apoptosis, as well as a good understanding of ion-fluxes in signaling events. The studies will be conducted in collaboration with Dr. Susanne Becker and Dr. Bellina Veronesi at EPA in Chapel Hill, North Carolina. Please send curriculum vitae and the names of three references to: Ms. Lealer Haith at the Center for Environmental Medicine and Lung Cell Biology, University of North Carolina, Campus Box #7310, Chapel Hill, NC 27599.

POSTDOCTORAL POSITION available immediately in NSF-funded project to study the regulation and biochemistry of restriction-modification systems. Studies focus on DNA sequence recognition by DNA methylases, and on the mechanism(s) of action of a new class of regulatory proteins. Candidates with research experience in the areas of gene regulation, DNA-protein interactions, or enzyme kinetics are urged to apply. Submit curriculum vitae and the names of three references to: Prof. Robert M. Blumenthal, Department of Microbiology and Immunology, Medical College of Ohio, 3055 Arlington Avenue, Toledo, OH 43614-5806. E-mail: blumenthal@opus.mco.edu; website: www.mco.edu:80/micro/faculty/blumenthal.html.

Affirmative Action/Equal Employment Opportunity.

ASSISTANT SCIENTIST OR POSTDOCTORAL FELLOW IMMUNOLOGY

Assistant Scientist or Postdoctoral position available to study T cell responses to *Haemophilus ducreyi* antigens in experimentally infected human subjects. A Ph.D. in basic immunology is required. Applicants should send their curriculum vitae and the names of three references to: Dr. Stanley M. Spinola, Department of Medicine, EH 435, 545 Barnhill Drive, Indianapolis, IN 46202-5124. E-mail: sspinola@mdep.iupui.edu. Indiana University is an Affirmative Action/Equal Opportunity Employer.

POSITIONS OPEN

POSTDOCTORAL POSITION

Postdoctoral positions are available at the University of Florida Gene Therapy Center for individuals with experience in nucleic acid enzymology, virology, vector development, animal models, neurobiology, gene expression, or gene therapy. The applicant will have the opportunity to work on one of several funded projects involving basic studies of Adeno-associated virus DNA replication, integration, or transcription, or the use of AAV as a vector for cancer or central nervous system gene therapy. The applicant will also have an opportunity to interact with other faculty in the Gene Therapy Center who are working on diverse gene therapy applications that include cystic fibrosis, AIDS, cancer, hypertension, spinal cord lesions, Alzheimer's, inflammatory diseases, retinal diseases, as well as the development of novel gene therapy vectors. The applicant should have an M.D. or Ph.D. degree. Please send résumé and the names of three references (preferably via FAX or e-mail) to:

Nicholas Muzyczka
Gene Therapy Center, University of Florida
Box 100266 JHMHSC
Gainesville, FL 32610
FAX: 352-392-5914

E-mail: muzyczka@medmicro.med.ufl.edu.

Application deadline is February 16, 1998, with a flexible start date.

POSTDOCTORAL POSITION INTESTINAL GENE EXPRESSION

Studies focus on mechanisms of transcriptional regulation in the intestine, analysis of transgenic animals, and gene-targeting. Immediate opportunity available in established laboratory in outstanding Research Foundation with 118 grant-funded investigators. The applicant should have a Ph.D. and relevant experience in molecular biology. Please send a curriculum vitae and brief summary of past and present research interests to: Dr. Mitchell Cohen, Children's Hospital Medical Center, Division of Pediatric Gastroenterology and Nutrition, 3333 Burnet Avenue, Cincinnati, OH 45229-3039. FAX: 513-636-7805; e-mail: mitchell.cohen@chmc.org. Children's Hospital Medical Center is an Affirmative Action/Equal Opportunity Institution. Applications from women and people from diverse racial, ethnic, and cultural backgrounds are encouraged.

POSTDOCTORAL POSITION

SYPHILIS IMMUNOLOGY. A Postdoctoral position is available to investigate the cellular immune response to syphilis and its relationship to HIV gene expression and HIV transmission. Preference will be given to candidates with a strong background in contemporary cellular immunology and/or experience with HIV gene regulation. Candidates should send curriculum vitae and the names and addresses of three references to: Dr. Michael V. Norgard, Acting Chairman, Department of Microbiology, University of Texas Southwestern Medical Center, 6000 Harry Hines Boulevard, Dallas, TX 75235-9048 USA. FAX: 214-648-5905. U.T. Southwestern Medical Center is an Equal Opportunity Employer.

NIH-supported **POSTDOCTORAL TRAINING GRANT POSITION** for scientists or clinicians (Ph.D. and/or M.D., D.D.S., D.V.M.) to conduct research on communication among the nervous, endocrine, and immune systems is currently available. Applicants must be U.S. citizens or permanent residents of the United States. Applicants should submit a letter stating research interests along with curriculum vitae and three references to: Dr. Ronald Glaser, Department of Medical Microbiology and Immunology, 2175 Graves Hall, 333 West 10th Avenue, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans, and individuals with disability are encouraged to apply.

POSTDOCTORAL POSITION available immediately to study coenzyme F₄₂₀ biosynthesis in *Mycobacterium* using molecular biological and biochemical approaches. Applicants should have significant experience with molecular biology techniques, and should have one or more publications in English in international journals. Send curriculum vitae and list of three references to: Dr. Lacy Daniels, Department of Microbiology, University of Iowa, Iowa City, IA 52242 USA. Telephone: 319-335-7780; FAX: 319-335-9006; e-mail: ldaniels@blue.weeg.uiowa.edu. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are strongly encouraged to apply.

POSITIONS OPEN

POSTDOCTORAL RESEARCH FELLOWSHIPS IN PSYCHONEUROIMMUNOLOGY

Sponsors: The Norman Cousins Program in Psychoneuroimmunology and the NIMH

Duration: One or two years upon completion of Ph.D., D.O., D.N.Sc., or M.D. and accredited residency program. Eligibility: Three positions available for U.S. citizens and permanent residents, three for non-U.S. citizens. Stipend: NIMH salary scale depending on experience. Fellows will work under preceptorship of a senior investigator on a topic of their choice. Practical research training, formal didactic, and elective seminars will be provided in neural and behavioral sciences, and immunology, etc. Both basic and clinical interdisciplinary research is emphasized. Deadlines: February 15, June 15, and October 15. Obtain application form from: The Norman Cousins Program in Psychoneuroimmunology, 300 UCLA Medical Plaza, Suite 2127, Los Angeles, CA 90095-7076. Telephone: 310-825-8281; FAX: 310-794-9247; e-mail: pni@mednet.ucla.edu.

POSTDOCTORAL POSITIONS IN CARDIOVASCULAR SCIENCES

This novel training opportunity supported by the NIH focuses on the integrative aspects of vascular biology, and encompasses cell and molecular biology, biochemistry, physiology, and clinical sciences. Specific research strengths are in the areas of hypertension, cerebral circulation, atherosclerosis, and epidemiology. Applicants must be U.S. citizens or permanent residents. Send curriculum vitae and names of three references to: Carlos M. Ferrario, M.D., Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27103-1032. E-mail: cferrari@bgsu.edu.

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POSTDOCTORAL FELLOWSHIP(S) in cytokine signaling Center for Gene Regulation, Program in Cell and Developmental Biology and Veterinary Science Department, Penn State. Position(s) available in active NIH, ACS, and corporate-sponsored program to study molecular effectors of receptor-mediated mitogenesis, differentiation, and apoptosis (including JAK and p38 kinases, stat targets, oncogene-induced apoptosis, and novel transgene models for Epo signaling). Forward curriculum vitae and references to: D. M. Wojchowski, 115 Hunning Building, The Pennsylvania State University, University Park, PA 16802. E-mail: dmw1@psu.edu; Telephone: 814-865-0657. Affirmative Action/Equal Opportunity Employer.

Great Lakes—**POSTDOCTORAL/GRADUATE STUDENTS** wanted to study the molecular biology of newly cloned adaptors Grb 10 and PSM in insulin, IGF-1, PDGF action (see *Nature* 324:68, 1986; *Science* 236:197, 1987; *EMBO J.* 8:2943, 1989; *J. Virol* 68:411, 1994; *JBC* 271:8882, 1996; *J. Biochem.* in press, 1997) by Heimo Riedel, Ph.D., Biological Sciences, Wayne State University, Detroit, MI 48202. Telephone: 313-577-7870; e-mail: hriedel@sun.science.wayne.edu. Wayne State University—People working together to provide quality service. Wayne State University is an Equal Opportunity/Affirmative Action Employer. All buildings, structures, and vehicles at WSU are smoke-free.

POSTDOCTORAL POSITION available now to study neuronal microtubules. Microtubule-associated protein 1 will be investigated using molecular methods. Send curriculum vitae and names of two references to: Dr. Jim Hammarback, Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157-1010. FAX: 910-716-4534; e-mail: jhammarb@bgsu.edu. Affirmative Action/Equal Opportunity Employer.

COURSES & TRAINING

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Applications of candidates are invited who have had several years of postdoctoral experience and a strong record of achievements. The independent group leader will be appointed at the Associate Professor level (C2/C3) for a period of five years.

Appropriate laboratory space, funds for laboratory set-up and operation, and additional salaries for one scientist, two technicians, and fellowships for graduate students will be provided.

Applicants should submit their CV and publication list, a draft of their future research objectives and the names of three references to:

Gunter Fischer

**Max Planck Research Unit Enzymology of Protein Folding
Kurt-Mothes-Str. 3, D-06120 Halle/Saale, Germany**

Closing date for applications is Monday, 2nd March 1998.

Universität Heidelberg

The Faculty of Clinical Medicine Mannheim of the University of Heidelberg invites application for the appointment of

Professor (C3)

of

PSYCHOPHARMACOLOGY

to become Head of the Department of Psychopharmacology at the Central Institute of Mental Health (CIMH). The successful applicant will have an outstanding scientific record in psychopharmacology, with specialization in molecular pharmacology. Excellence in teaching and administrative abilities are required which will qualify him/her for the rank of professor. The CIMH is responsible for the psychiatric education of medical students from the University of Heidelberg and the candidate should be interested in contributing to graduate studies in neurobiology and psychopharmacology.

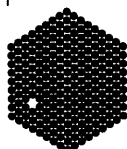
The position is an essential link between clinical research and basic studies. The candidate should have an interest in molecular psychopharmacology and clinical problems. He/she also should have significant research accomplishments and a commitment to education in a medical setting.

The CIMH is an interdisciplinary psychiatric research center with an increasing focus in biological psychiatry. Currently the CIMH has laboratories in molecular biology, cell biology, and psychopharmacology with a planned expansion in the area of behavioral biology. Excellent research cooperation exists between CIMH laboratories and the basic science departments at the University of Heidelberg and neighbouring institutions such as EMBL, the Max-Planck-Institute, and industrial research laboratories.

Candidates have eight weeks following the appearance of this announcement to apply. The appointment will be in accordance with the Foundation of the Central Institute of Mental Health, **Professor Dr. Dr. Fritz Henn, Director**.

Applicants should send a CV with letters of recommendation (List of Publications, References) to **Prof. K. van Ackern, Dean of the Faculty of Clinical Medicine Mannheim of the University of Heidelberg, Klinikum Mannheim, P.O. Box 10 00 23, D-68135 Mannheim**.

The University of Heidelberg is an Equal Opportunity Employer.



EMBL **Monterotondo
Research Programme**

The European Molecular Biology Laboratory (EMBL), an international research organisation with its Headquarters Laboratory in Heidelberg (Germany), Outstations situated in Grenoble (France), Hamburg (Germany) and Hinxton (UK), and a Research Programme at Monterotondo (Italy) has the following vacancies in **Monterotondo**:

**HEAD OF TRANSGENIC
FACILITY (ref. 97/100)**

An EMBL Research Programme in Mouse Genetics, headed by Prof. Klaus Rajewsky, was established recently in Monterotondo, near Rome, and will begin to operate in January 1998. One focus of the Programme is to generate conditional mouse mutants for studying questions in immunology and cell biology.

The Head of Transgenic Facility should be well trained in all techniques and procedures for generating chimaeric and transgenic mice (ES-cell injection, DNA-injection, embryo transfer, etc.). We are seeking a highly motivated person, capable of organising and running a service which should serve the EMBL research groups both in Monterotondo and in Heidelberg. Two technicians will provide support.

**ADMINISTRATIVE OFFICER
(ref. 97/93)**

This administrative officer will have managerial, organisational and secretarial responsibilities, including contact with local authorities.

We are seeking someone with administrative and secretarial training and experience. Experience in financial matters is also required. The person appointed should be fluent in Italian and have a good command of written and spoken English. He/she should have excellent word processing skills. Experience of working in Italy will be an advantage.

Closing date for applications: 15.02.1998;

Commencing date: As soon as possible

For further information contact

Dr. Walter Witke, Tel: +49 6221 387 332;

email: witke@embl-heidelberg.de

and visit these web sites:

<http://www.embl-heidelberg.de/ExternalInfo/>

PhDProgramme/PhD8Monterotondo.html

and

<http://emma.rm.cnr.it/>

EMBL is an inclusive, equal opportunity organisation.

To apply please send your CV or write briefly for a standard application form, quoting appropriate ref. no., to:

**The Head of Human Resources, EMBL, Postfach
10.2209, D-69012 Heidelberg, Germany.**

Fax: +49 6221 387555

email: jobs@EMBL-Heidelberg.de

POSITIONS OPEN

MULTIDISCIPLINARY POSTDOCTORAL FELLOWSHIPS NONLINEAR DYNAMICS IN BIOLOGY

NSF-funded Research Training Group in "Nonlinear Dynamics in Biology" at University of California, Davis seeks one Postdoctoral Fellow in cell or neurobiology and another in biofluidynamics, ecology, or population biology. Positions are open to U.S. citizens/permanent residents interested in multidisciplinary training and graduate student mentorship and are renewable for a second year. For application information see website: <http://www.itd.ucdavis.edu/rtg>. Deadline: February 15, 1998, or until filled.

MINORITY FELLOWSHIP/FACULTY

Minority candidates sought at postdoctoral or faculty level to work on the mechanism of androgen action on muscle. Ph.D. or equivalent, with molecular biology experience. Background in growth factors, signal transduction, a plus. Write to: **Shalender Bhasin, M.D., Division of Endocrinology, Charles R. Drew University, 1621 East 120th Street, Los Angeles, CA 90059.**

GRANTS

BRAIN TUMOR RESEARCH

The Brain Tumor Society announces the availability of grant funding for any project with the potential to advance basic scientific research focused on brain tumors. Funds may be used for start-up projects or supplementary funding.

Funding: Grants will be awarded annually for up to a two-year period, at a maximum of \$50,000 per year. Grants will be limited to research being conducted in the following states: Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Washington, D.C.

Application deadline: April 15, 1998.

Information and application forms:

The Brain Tumor Society
84 Seattle Street

Boston, MA 02134-1245

Telephone: 617-783-0340 or 800-770-8287

Website: www.tbts.org

E-mail: info@tbts.org

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RESEARCH GRANTS

As part of its continuing efforts to encourage the utilization of alternatives to traditional uses of laboratory animals in basic research, testing, and education, The Alternatives Research and Development Foundation (ARDF) is soliciting **RESEARCH PROPOSALS** to develop such methods. Funding of up to \$40,000 each is available to support individual projects at U.S. universities and research institutions. Deadline for applications is 30 April 1998, with recipients announced on 15 July 1998. For further information and application instructions, contact:

The Alternatives Research and Development Foundation

14280 Golf View Drive
Eden Prairie, MN 55346-3000
FAX: 612-949-2619

No telephone calls, please.

CONFERENCE

EUROPEAN CONFERENCE ON: COMPUTATIONAL CHEMISTRY AND THE LIVING WORLD: FROM SEQUENCE TO FUNCTION Chambéry (French Alps), 20-24 April 1998

Organized by: Division de Chimie Physique/SFC, Bunsen-Gesellschaft für Physikalische-Chemie, Divisione de Chimica Fisica/SCI, Faraday Division/RSC, Societe Francaise de Biophysique. Information from:

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Computational Chemistry and the Living World
Laboratoire de Chimie Physique 11

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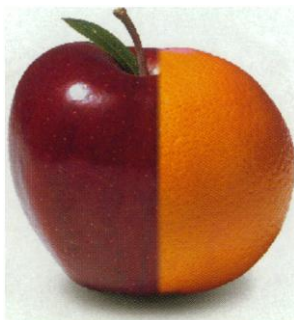
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