GUARANTEED OLIGOSTM
COM-E
YOURSELF TO OUR
DNA SYNTHESIZERS

SEND YOUR SEQUENCES
BY E-MAIL
FOR DIRECT EXECUTION

USA
Order At: oligos@gensetlJ.com
For quotation: marketing@gensetlJ.com

EUROPE & ASIA (outside Japan)
Order At: oligos@genset.fr
For quotation: marketing@genset.fr

JAPAN
Order and Quotation At:
oligos@po.iljnet.or.jp

Boehringer Mannheim
Worldwide
Representatives

Australia
Tel.: (02) 899 7999

Austria
Tel.: (0222) 277 87
DW 420 to 423

Belgium
Tel.: (02) 247 4930

Brazil
Tel.: 55 11 66 3565

Canada
Tel.: (514) 686 7050

Central/Eastern Europe
Tel.: (0222) 277 87

China
Tel.: (852) 2465 7996

Czech Republic
Tel.: (032) 45 58 71-2

Denmark
Tel.: 49 13 83 42

Finland
Tel.: (09) 429 2342

France
Tel.: 78 76 30 86

Germany
Tel.: 0621 759 8568

Greece
Tel.: (01) 64 96 683-6

Hong Kong, see China

India
Tel.: (02) 837 0794

Indonesia, see Singapore

Ireland
Tel.: 1 800 409 041

Israel
Tel.: (03) 493111

Italy
Tel.: (02) 270 9209

Japan
Tel.: (03) 3432 3155

Malaysia, see Singapore

Mexico
Tel.: (5) 227 8967

Netherlands
Tel.: (036) 539 4911

New Zealand
Tel.: (09) 276 4157

Norway
Tel.: 22 07 65 00

Philippines, see Singapore

Poland
Tel./Fax: (02) 37 42 35
Tel./Fax: (026) 62 63 03

Portugal
Tel.: (01) 417 1717

Singapore
Tel.: 65 479 4111

South Africa
Tel.: (011) 886 2400

South Korea
Tel.: 02 569 6902
(5 lines)
(02) 562 9947

Spain
Tel.: (93) 201 4411

Sweden
Tel.: 08 98 8150

Switzerland
Tel.: 042 65 4242

Taiwan
Tel.: (02) 736 7125

Thailand, see Singapore

Turkey
Tel.: 1 349 8176, -77, -78, -79

United Kingdom
Tel.: 0800 521578

USA
Tel.: 800 428 5433

Circle No. 34 on Readers' Service Card
Increased productivity

Spiraling beneath a school of fish, several humpback whales use their blowholes to create a circular "net" of bubbles. The open-mouthed whales then swim up through the school and engulf the disoriented prey. This communal "bubble-netting" enables the whales to take in more food than normal surface feeding by individuals.

Boehringer Mannheim's complete line of nonradioactive alternative products can help you generate similar productivity increases in your lab.

Accomplish more in less time

Our nonradioactive kits and reagents let you obtain experimental results faster. Many of them save you hours, even days, per experiment. Even when experimental time remains the same, you save the set-up, clean-up, and record-keeping time required for the use of radioactive compounds.

Alternatives for common techniques

Boehringer Mannheim now offers products that allow you to greatly reduce or completely eliminate the use of radioactive compounds in your lab, creating a safer, less stressful working environment.

<table>
<thead>
<tr>
<th>Isotope Eliminated</th>
<th>Nonradioactive Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>$^{3}H/^{51}Cr$</td>
<td>Cell Proliferation Assays,</td>
</tr>
<tr>
<td></td>
<td>Cell Death Assays, Reverse</td>
</tr>
<tr>
<td></td>
<td>Transcriptase Assay</td>
</tr>
<tr>
<td>$^{14}C$</td>
<td>CAT ELISA, Glycoconjugate</td>
</tr>
<tr>
<td></td>
<td>Analysis System</td>
</tr>
<tr>
<td>$^{35}S$</td>
<td>Biotin In Vitro Translation</td>
</tr>
<tr>
<td></td>
<td>System</td>
</tr>
<tr>
<td>$^{125}I$</td>
<td>Chemiluminescent Western</td>
</tr>
<tr>
<td></td>
<td>Blotting Kits</td>
</tr>
<tr>
<td>$^{32}P/^{33}P$</td>
<td>Genius™ System, Tyrosine</td>
</tr>
<tr>
<td></td>
<td>Kinase/Phosphorylase Assays</td>
</tr>
</tbody>
</table>

A full-service focus

In addition to quality products, customer-focused services combine to increase the productivity of your lab:

- **Accurate, next business day delivery**, so you have the products when you need them
- **Highly trained technical and sales representatives** to help you attain your laboratory objectives.

Your nonradioactive future is a phone call away

Take the first step towards a safer, more productive nonradioactive laboratory by contacting Boehringer Mannheim for more information. Or call us to place your order at 1-800-428-5433 (514-686-7141 in Canada).

Federal Express trademark used by permission.

© 1994 Boehringer Mannheim. All Rights Reserved.
Pharmacia Biotech & SCIENCE Prize for Young Scientists in Molecular Biology 1995

Pharmacia Biotech and SCIENCE are joining forces to encourage scientists at the start of their careers. This major new world-wide prize will include US$20,000 awarded to the best young scientist of the year, and up to 7 additional prizes of US$5,000 each.

For 115 years SCIENCE has been one of the world's leading scientific journals, promoting science through print, exhibitions and conferences. Pharmacia Biotech, as one of the pioneers of biotechnology, is committed to serving the changing needs of the international scientific community.

Call for entries
You must be a recent Ph.D. graduate (awarded between 1 January and 31 December 1994) working in molecular biology. Submissions must be in the form of a 1000 word essay, in English, on your thesis, highlighting the significance of its contribution and overall implications in the field. The winning essay will be published in SCIENCE.

Closing date for entries is 5 July 1995. The prizes will be presented in Stockholm, Sweden, during December 1995.

Full details can be requested from the administrator, at the address below, or via Internet to: science_editors@aaas.org (US /ROW enquiries) or to: science@science-int.co.uk (European enquiries)
Deutsch, Dessen, Davis, James Cremers, Dammer, Curtin, Damashek, Hilger; Modulation of linked mixed deafness and Greene, Mark language-independent proteoglycans Vaucouleurs, Sousa, Rufus 1995.


Frenk, Edgar: See Huber, Marcel.
Freundt, Christina: See Susan.
Fried, Laura M. See Kirkcudbright, Cordula U.
Frieden, A. James: See West, Robert A.
Fried, J. See Orton, G.
Froidevaux, L. See Santee, M. L.
Fujii, Satoshi: See Moriyama, Noboru.
Fulmer, Mark T. See Cotter, Brent.
Fusco, Alfredo: See Santoro, Massimo.

G and H

Gallagher, William: See Dougall, Vincent M.
Garber, D. P. See Cess, R. D.
Garcia, N. See Pascual, J. L.
Garigan, Delia. See Shear, Jason B.
Gates, W. L. See Cess, R. D.
Gath, Eldon M. See Dolan, James F.
Gazit, Aviv. See Levitski, Alexander.
Gehring, Walter J. See Halder, Georg.
Geller, Laurie S. See Lobert, Jurgen M.
Gelles, Jeff. See Finzi, Laura.
Genoa, John: See Lages, Richard J.
Giordano, Mille M. See Wühr, Birgitta M.
Gerard, Jean-Clauude: See Clarke, John T.
Gerlt, John A. See Babitt, Patricia Clement.
Germain, Ronald N. See Madrugas, Joaquín.
Germanovich, Leonid N. See Lowell, Robert P.
Gersdorfer, Susan. See Stroh, Keith.
Gheskeher, Charles L. See Baumann, Eileen.
Ghiara, Paolo. See Marchetti, Marta.
Gilchrist, George. See Kingolov, Joel G.
Gilman, S. E. See Barry, J. F.
Gilmore, D. See Orton, G.
Gladstone, R. See McGrath, M. A.
Glinka, C. See Frouzi, A.
Godbout, Roseline. See Lees-Miller, Susan P.
Goepen, J. See Orton, G.
Goldhar, Mitchell. See Feldman, Benjamin.
Goldfinger, Chris. See McCaffrey, Robert.
and Mervis, Jeffrey (news): Federal budget: House panel hands in on NIH. p1579 23 Mar 1995. See also Clery, Daniel.
Le Grice, Stuart F. J. See Wohlr, Birgitta M.
Leder, Philip. See Seldin, David C.
Lederer, W. Jonathan. See Cheng, Heipveid. See Davleva, Hector H.
Lederman, Seth. See Cheng, Genhong.
Lee, D. N. See van der Meer, A. L. H.
Lee, Sanguch. See Van Ryn, Wolfgang.
Lee, Seoheung; Corti, Nigel G.; Van Heiden, Gert; Bow- ers, Michael T.: Evidence from ion chromatography ex- periments that met-cars are hollow cage clusters. p1999 17 Feb 1995.
Leflevre, Phillippe. See Staecker, Heinrich.
Leiden, Jeffrey M. See Chang, Mark W.
Lennik, Richard E. See Travisano, Michael.
Lennard, D. See Leon, R.
Levine, James D. See Bersani, Anna C.
Levy, D. H. See Weiss, E. A.
Li, Cun. See Shi, Qingquan.
Li, Guangnu. See D’Souza, Michael; Crislyn.
Li, Heng-Chun. See Zhang, Xiaokuo.
Li, Lin. See Forge, Andrew.
Li, Nan. See Tulja, Sanip.
Lilly, Brenda; Zhao, Bin; Ranagahayakul, Gogineni; Pax- ton, Bruce M.; Schults, Robert A.; Olson, Eric N.: Require- ment of MADS domain transcription factor DMEF2 for muscle formation in Drosophila. p688 3 Feb 1995.
Lin, Dong; Sugawara, Tetuo; Strauss, Jerome F.; Ill.; Clark, Barbara; Bohn, Martin; McNaug, Paul; Rogol, Alan; Miller, Walter L.: Role of steroidogenic acute regulatory protein in adrenal and gonadal steroido- genesis. p1282 24 Mar 1995.
Lippke, Judith A. See Kuida, Kenseki.
Lisse, C. See Otter, C.
Litterle, Diane S.; Litterle, Mark M.
Liu, Katharine S. See Mendel, Jane E.
Liu, Michael C. See Graham, James R.
Lubinsky, J. See Ay, Andrew E.
Liva, Stephanie M. See Halanych, Kenneth M.
Livengood, T. A. See McGrath, M. A. See also Otter, G.
Livingston, David J. See Kuida, Kenseki.

Orton, G. S. See Hamblet, H. B.

Osborne, A. E. See Bowyer, P.

Overdorf, M.; Michel, Timothy S.; Bagby, Stefan; Tong, Kir; I.; Yu, Partner; Takeichi, Matsouchi; Ikura, Mitsuhiko: Solution structure of the epithelial cadherin domain responsible for selective cell adhesion. p226 8 Jan 1995.

Owen, Susan; Segall, Paul; Freymueeller, Jeff; Miklis, Asta; Denlinger, Roger; Ánrudóttír, Thóra; Sachs, Maurice; Birgmann, Roland: Rapid deformation of the south flank of Kiluaea volcano. p1328 13 Feb 1995.

Pabo, Carl O. See Pomermanz, Joel L.

Palade, P. See Sachs, F.

Pang, Stephen C. See John, Simon W. M.

Papadimitrioupolos, Fortis. See Senejko, Marko.

Papahadjopoulos, D. See Lasic, D. D.

Papiasouannou, Virginia E. See Feldman, Benjamin.

Pardoe, Arthur B. See Liang, Feng.

Parker, R. See Loew, David M.


Parr, John; See Malnati, Mauro S.


Parks, Daniel C. See Walba, David M.

Parmacek, Michael S. See Chang, Mark W.

Pascual, J. I.; Mendez, J.; Gomez-Herrero, J.; Baró, A. M.; Garcia, N.; Landman, Uri; Luethke, W. D.; Bogachek, E. N.; de Miguel, Carlos; G. See Neel, Charles C.; de Miguel, Carlos A.; Neel, Charles C.


Paterson, Bruce M. See Lilly, Brenda.

Patil, P.; Fordyce, Keith K. See Kirchgemeier, Cordula U.


Paulerini, Nikolai P. See Jeffrey, Philip D.

Peachey, Neal S. See Chen, Jeannie.

Peaco, Donald R. See Doug, Halliang.

Peckham, G. E. See Santer, M. L.


Pembrey, M. See de Kok, Yvette J. M.

Penfold, Jeffrey. See Franginato, Giovanna.

Pennings, H.; Wieme, René van; de Ruijter, Wim; Pernik, M.; Pernita, B.; Caglietta, G.; Pervin, Brian A. See Coglin, Vincent M.

Peruzzi, Marta. See Malnati, Mauro S.


Petroff, P. M.; Pae, L. E. R.; Petko, Gregory A. See Babbitt, Patricia Clement.

Pietracco, Stephen. See Zhang, Min.


Pinnovia, Thomas J.; See Blane, Peter T.

Pinnock, Robert D. See De Felipe, Carmen.


Phan, G. See Bethell, Beat N.

Plasterk, Ronald H. A. See Mendel, Jane E.


Plummer, Mark. See Mark, Charles C.


Ponec, Maria. See Huber, Marcel.
Romand, R. See Chardin, S.
Romani, P. See Orton, G.
Romano, Alfredo. See Santoro, Masimmo.
Root-Bernstein, Root-Blair, Roush, Schirato, Schell, Scadden, Samelson, Sanchez, what does it mean?
S.; Brona; Read, 27 Jan 1995.
S.; See Flower, H. See Cross, Thomas, B., see peak, Timothy W.
S. Ryan, A. See Br, W.
S. Sacchettini, James C. See Desen, Andrea.
S. Sacha, F. See Pimentel, David.
Safinya, Cyrus R. See Thomas, Britt N.
Sagarin, R. D. See Barry, J. P.
Sakaguchi, Kanyasu. See Clore, G. Marius.
Sako, Maurice. See Owen, Susan.
Salman, D. L. See Norman, S. W.
Samelson, Lawrence E. See Madrinas, Joaquin.
Saner, Paul. See Lin, Doeg.
Sassfouri, R. See Pimentel, David.
Sayers, W. M. See Pimentel, David.
Schein, Steven J. See Santer, Kenneth.
Schade, B. See Epichilinase.
Schaden, David T. See Berardi, Anna C.
Schiller, Richard H. See Shear, Jason B.
Schien, A. See Lappas, A.
Schikum, Mark. See Torello, Cross, Shawn M.
Schimel, Paul. See Auld, Douglas S.
Schindler, Chris. See Zhong, Xiaokui.
Schirmer, Tilman; Keller, Thomas A.; Wang, Yan-Fei; Rosenbaum, Jurg P.: Structural basis for sugar alcolina through maltoporin channels at 3.1 Å resolution. p512 17 Mar 1995.
Schmitt, Jurgen H. M. See Drake, Jerome J. See Schell, Steven J.
Schneider, N. M. See McGrath, M. A.
Schoch, Russell. See Baumann, Elen.
Schoen, Daniel J. See Johnston, Mark O.
Schorderet, Daniel F. See Huber, Marcel.
Schramm, David N. See Copi, Craig J.
Schultz, B. See Vomast, Karl.
Schult, Robert A. See Lilly, Brenda.
Schum and Ermin M. See Kang, Hyejin.
Seymour, Mark. See West, Robert A.
Shapiro, D. N. See Morris, S. W.
Sharp, Phillip A. See Pomerantz, Joel L.
Shatz, Carla J. See Cabelli, Robert J.
Shaw, John. See Dolan, James P.
Shaw, Brenda. See Hoff, Mary Lou.
Sheets, Michael P. See Kumar, Janandan.
Shepherd, Dawn. See Tong, Geng.
Sheppard, Haynes W. See Ascher, Michael S.
Shimizu, Tomoyuki: See Nureki, Osamu.
Shomaker, C. S. See Weaver, H. A.
Shomaker, E. M. See Weaver, H. A.
Showalter, Kenneth. See Steinbock, Oliver.
Showers, William J. See Barrick, Reese E.
Shultz, L. See Pimentel, David.
Shure, M. See Orrick, Paul.
Siebenlist, Ulrich. See Brown, Keith.
Sieger, P. See Fioroni, A.
Siegel, E.; See Dolan, James F.
Silk, Joseph. See Bartlett, James G.
Simion, A. O.: review of Hamlet, H. B.
Simion, Liviu I. See Chern, Jeanne. See also Mendel, Jane.
Sinclair, K. See Pimentel, David.
POSITIONS OPEN

THE UNIVERSITY OF NEVADA, RENO
Medical Molecular Biology/Molecular Genetics

The University of Nevada, Reno seeks applications or nominations for outstanding candidates for appointment in the Department of Biochemistry at the rank of ASSOCIATE or FULL PROFESSOR. This appointment represents an unusual opportunity to join a related biomedical science and adds to the already recognized postdoctoral experience. Individuals with research interests broadly related to biochemistry are encouraged to apply. The Department of Biochemistry is interested in attracting diverse candidates with active research programs in molecular, microbial, and cellular pathology.

Agricultural Experiment Station.

The Department of Agricultural Experiment Station seeks candidates for a tenure-track position at the rank of ASSISTANT or ASSOCIATE PROFESSOR. Qualiﬁed candidates should have a Ph.D. degree in a related discipline such as plant pathology. The candidate will be expected to develop and sustain an extramurally funded research program in areas such as plant pathology, disease prevention, and related biology.

University of South Alabama College of Medicine

The University of South Alabama College of Medicine invites applications for a tenure-track faculty position at the rank of ASSISTANT or ASSOCIATE PROFESSOR. Qualiﬁed candidates should have a Ph.D. degree in a related discipline such as pharmacology. The candidate will be expected to develop and sustain an extramurally funded research program in areas such as pharmacology.

University of Michigan

The Department of Immunology and Microbiology seeks applications for a tenure-track position at the rank of ASSISTANT PROFESSOR. Candidates must be committed to developing an extramurally funded research program that includes collaboration with other investigators. The candidate will be expected to develop and sustain an extramurally funded research program in areas such as immunology.

University of Victoria

The Department of Biochemistry seeks candidates for two positions at the ASSISTANT PROFESSOR level. Applicants should have at least two or more of the following areas: biochemistry, medicinal chemistry, and genetics. Successful candidates will be expected to develop and sustain an extramurally funded research program in areas such as biochemistry and medicinal chemistry.

The University of Victoria is an Equal Opportunity/Affirmative Action Employer. Women and minorities are especially encouraged to apply. The University of Victoria is responsible to the needs of dual career couples.

UNIVERSITY OF VICTORIA

In accordance with immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. However, if suitable Canadian applicants cannot be found, other individuals will be considered. The University of Victoria is an equal opportunity employer and encourages applications from women, persons with disabilities, visible minorities, and aboriginal persons.

ASSISTANT OR ASSOCIATE PROFESSOR
CELLULAR/MOLECULAR PHYSIOLOGY

Applications are invited for a tenure-track position at the rank of ASSISTANT OR ASSOCIATE PROFESSOR in the Department of Physiology of The Ohio State University College of Medicine. Individuals with an extramurally funded research program in cellular/molecular approaches complementing existing departmental programs are encouraged to apply. Departmental programs exist in: neurosciences, gastrointestinal physiology, cardiovasculature, and endocrinology. Applications will be accepted until June 1, 1995, or until suitable candidates have been selected. Send a curriculum vitae, a brief description of research interests and names of three references to:

George E. Billman, Ph.D.
Chair, Search Committee
Department of Physiology
302 Hamilton Hall
1645 Neil Avenue
Columbus, OH 43210-1218

The Ohio State University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR
Departments of Cellular Biology & Anatomy

This is a full-time, tenure-track, joint faculty position available 1 July 1995. Applicants should have a Ph.D./M.D., two plus years of postdoctoral experience and a record of excellent research accomplishments. Candidates should have research experience in cell/molecular biology of reproduction with special interest in reproductive immunology or human fertility and development including oocyte maturation and implantation. The successful candidate will be expected to establish externally funded research and participate in departmental teaching. An attractive package including research facilities and start-up funds is available. Send curriculum vitae and description of current and future research directions to:

Leonard L. Selck, Ph.D.
Department of Cellular Biology & Anatomy, LSU Medical Center, P.O. Box 33932, Shreveport, LA 71130. Louisiana State University Medical Center is an Affirmative Action Employer.
Molecular Immunology Investigator

SmithKline Beecham Pharmaceuticals, a world leader in pharmaceutical research, has an exciting opportunity for a molecular Immunologist to join the newly formed Department of Molecular Immunology. This unit, consisting of 40 molecular biologists and immunologists, focuses on cytokines, cytokine receptors, B and T cell biology and antibody engineering. Disease foci include autoimmunity, RA, asthma, allergy and diabetes. Using the DNA sequence base available through our mass sequencing effort, the unit identiﬁes novel targets relevant to immune modulation as well as innovative approaches to more conventional drug targets.

The ideal candidate will have at least three years postdoctoral experience in a leading laboratory performing state-of-the-art research in molecular immunology. Extensive biological/immunological expertise in a particular area of relevance is required, as is being versed in the standard repertoire of molecular techniques. Publication records must include senior author papers in leading journals.

SmithKline Beecham broadly seeks the best possible scientists, but areas of interest include cytokines, kinases, hematopoiesis, T cell biology, autoimmunity and allergy. The desire to work in a highly interactive environment on problems directly relevant to drug discovery is a must, as are excellent communication and interpersonal skills.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send a resume and salary requirements to: SmithKline Beecham Pharmaceuticals, Job #HS-0050, PO Box 679, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.

SB
SmithKline Beecham Pharmaceuticals

Challenging the natural limits.

THE NEUROSCIENCES INSTITUTE
La Jolla, California

The Neurosciences Institute (NSI) is an independent, not-for-proﬁt organization at the forefront of research on the brain. The NSI, located on the campus of The Scripps Research Institute in La Jolla, is also the home of the Neurosciences Research Program and serves as an international meeting place for neuroscientists; Fellows have opportunities to interact with visitors from many institutions worldwide.

Fellow in Theoretical Neurobiology

Applications are invited for positions as Fellow in Theoretical Neurobiology. Since 1987, the NSI has had a research program dedicated to developing biologically based, experimentally testable theoretical models of neural systems. Current projects include large-scale simulations of neuronal networks, the design of behaving automata, and detailed formulations of biologically based models of perceptual systems. Fellows will have daily opportunities to interact with NSI’s Fellows in Experimental Neurobiology.

Applicants should be at the postdoctoral or assistant professor level with strong backgrounds in theoretical or experimental neuroscience or related ﬁelds. Positions are now available.

Fellows will receive stipends appropriate to their qualiﬁcations and experience. Candidates should send a short statement of research interests, a curriculum vitae, and the names of three references to: Dr. W. Einar Gall, Research Director, The Neurosciences Institute, 3377 North Torrey Pines Court, Suite 310, La Jolla, California 92037.

CELLULAR & MOLECULAR CANCER RESEARCH

The College of Medicine and the H. Lee Moffitt Cancer & Research Institute at the University of South Florida are seeking applications from Assistant, Associate and Full Professor level individuals to participate in the Cancer Center Research Programs under a stimulating academic environment that includes excellent laboratory and clinical facilities. Research programs include Immunology, Cancer Cell Biology, Molecular Oncology and Cancer Genetics. Academic rank and salary will be commensurate with experience and qualiﬁcations. These positions will be assigned to a speciﬁc, mutually agreed upon department within the College of Medicine with the possibility of tenure.

Successful individuals must hold an M.D. or Ph.D. with a minimum of 2 years post doctoral training. Individuals at the rank of Associate Professor must have a demonstrated potential for extramural funding. Individuals for Full Professor must have a proven track record of independent research, leadership ability and training backed by publications and extramural funding.

Send current curriculum vitae and a brief statement of major academic interests to W.J. Pledger, Ph.D., Associate Center Director for Basic Research, Office of Faculty Recruitment, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, Florida 33612. Applicants who need a reasonable accommodation in order to participate in the selection process must notify Jody Swanson in the Office of Faculty Recruitment, (813) 975-7894, five days in advance. Applications must be postmarked by deadline of April 20, 1995.

The H. Lee Moffitt Cancer Center & Research Institute is a free standing Cancer Center located adjacent to the Health Sciences Center on the Tampa campus of the University of South Florida. In addition to a 162-bed full service cancer treatment facility, the Center has research laboratory space in four buildings including over 50,000 square feet of dedicated laboratory and support space in a new Cancer Research Center slated to open in June 1995.

H. LEE MOFFITT CANCER CENTER & RESEARCH INSTITUTE
University of South Florida College of Medicine

Moffitt Cancer Center is an Equal Opportunity Employer.
The University of South Florida is an EO/Equal Access/Affirmative Action Employer.
FACULTY POSITION
Dana Farber Cancer Institute
Joint Center for Radiation Therapy
Harvard Medical School

Facility position at the rank of ASSISTANT PRO- FESSOR (or higher) for the study of signal transduction, protein phosphorylation and transcrptional regulation in normal and malignant cells responding to hypoxia or oxidative stress in tumors. Applicants should have Ph.D. and/or M.D. and will be expected to establish an independent extramurally funded research program utilizing innovative approaches and technologies. Applicants will be expected to contribute to the National Cancer Institute’s Epithelial Ovarian Cancer SPOC Program and will be expected to collaborate with investigators of diverse disciplines.

Electrophysiologist. Tenure-track position at the AS- SISTANT/ASSOCIATE PROFESSOR level for Ph.D. and/or double board certification. Responsibilities include teaching and conduct of research in congenital heart disease and electrophysiology. A commitment to trainees and an ability to establish an independent research program is expected.

ASSISTANT/ASSOCIATE PROFESSOR
Applications are invited from individuals for a TEN-URE-TRACK POSITION in the Department of Pharmacology and Toxicology at the Medical College of Georgia. The successful candidate should have a Ph.D. and/or M.D. and will be expected to establish an independent extramurally funded research program utilizing multidisciplinary approaches in an area of interest in the signal transduction and tissue response to chemotherapeutic agents.

ASSISTANT PROFESSOR in Oral Pathology—Applications are invited for a tenure-track position in the Department ofPathology at the University of Medicine and Dentistry of New Jersey—Newark. The candidate must hold a D.D.S. or equivalent degree, and be Board-certified or Board-eligible in Oral Pathology. The candidate is expected to have a graduate degree with rigorous research training and experience sufficient to maintain a viable research program. College teaching, extramural development, and involvement in our National Institutes of Health programs are expected.

The University of Maryland Cancer Center/Department of Microbiology/Immunology is recruiting a RE-SEARCH ASSISTANT PROFESSOR in Microbiology/Immunology. We are seeking an individual with background and interest in products of gene modulation by interferon and how these products influence biology and clinical effects. Successful applicants will have a Ph.D. or M.D. with at least four years of postdoctoral experience in a relevant area. Qualifications for this position should include a strong research background in the study of the role of cytokines in immune function.

The Cardiovascular Perfusion Program in the School of Natural and Health Sciences at Barry University is seeking an ASSISTANT/ASSOCIATE PROFESSOR. Responsibilities include didactic instruction in Anatomy and Physiology, Pathology and Perfusion Science as well as minor clinical education. A Ph.D. and teaching experience is required. Knowledge of perfusion is preferred. Applicants should send CV and three letters of recommendation by May 30, 1995.

Chair
Department of Reproductive Medicine, University of California, San Diego
School of Medicine

Applications from and nominations of highly qualified individuals for the position of CHAIR, Department of Obstetrics and Gynecology at the University of California, San Diego (UCSD) School of Medicine are now being solicited. The Search Committee is seeking candidates with distinguished background in academic obstetrics and gynecology. Candidates are being sought with demonstrated ability, credentials and achievements in scholarly research, academic administration and clinical care, who will sustain and enhance the academic and clinical excellence which has characterized the UCSD Department of Reproductive Medicine since its inception in 1970. Successful candidates are expected to seek and secure extramural support for an endowed chair position (with tenure) with salary commensurate to faculty rank and step based upon published UC pay scales.

ASSISTANT PROFESSOR IN MICROBIOLOGY
CHANG GUNG COLLEGE OF MEDICINE ANDencodeURIComponent(0x2060)TAYWAN, ROC

The School of Medical Technology at the Chang Gung College of Medicine is seeking applicants for a tenure-track ASSISTANT PROFESSOR position in the Department of Microbiology and Immunology. The position requires a Ph.D. or M.D. and is expected to continue the scientific work in the department.

The Department of Anatomy at the Louisiana State University Medical Center–New Orleans seeks to identify a FACULTY POSITION at the assistant professor level at least three years of postdoctoral experience. Scientists with research programs in the general area of cell/developmental biology that use molecular biology techniques are especially encouraged to apply. Salary levels are competitive with ample space and start-up funds. Co-appointments in the Cancer and Neuroscience Centers of Excellence are encouraged. Teaching responsibilities will be in the area of cell and molecular biology. For consideration, send a curriculum vitae, research interests, and names of three references to: Dr. R. Ranney Mize, Department of Anatomy P6-2, LSU Medical Center, 1901 Perdido Street, New Orleans, LA 70112. An Equal Opportunity/Affirmative Action Employer.
Department of Energy Human Genome Program Announcement

Program Notice 95-15: Human Genome Program - Ethical, Legal, and Social Implications

ACTION: Notice inviting grant applications

SUMMARY: The Office of Health and Environmental Research (OHER) of the Office of Energy Research (ER), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications in support of the Ethical, Legal, and Social Implications (ELSI) subprogram of the Human Genome Program (HGP).

The HGP is a coordinated, multidisciplinary, goal-oriented, research effort aimed at improving technologies that will have far-reaching effects on the understanding of the human genome at all levels of molecular detail. This particular research notice encompasses research grants that address ethical, legal, and social issues that may arise from the use of information and knowledge resulting from the HGP. The DOE encourages the submission of applications to conduct multidisciplinary, empirical research on privacy issues from the creation, use, maintenance, and disclosure (including but not limited to) (i) issues not addressed elsewhere in this solicitation; (ii) privacy issues at the intersection of genetic information and the protection of the privacy of genetic information in various settings including the workplace. Applications should demonstrate knowledge of the relevant literature, and should include detailed plans for the gathering and analysis of factual information and the exploration of the specific issues of interest. All applications should include, where appropriate, detailed discussion of human subjects protection issues; e.g., storage of, manipulation of, and access to data. Where appropriate, provisions to ensure the inclusion of women, minorities, and potentially disabled individuals must be described, unless specific exclusions are scientifically necessary and justified in detail. All proposed research applications should address the issue of efficient dissemination of results to the widest appropriate audience.

The DOE is also soliciting applications for the preparation and dissemination of educational materials in any appropriate medium that will provide for enhanced public understanding of both the scientific aspects and the ethical, legal, and social aspects of the HGP. In addition, the DOE is encouraging applications for the support of conferences focusing on specific issues or areas of concern related to the ethical, legal, and social implications of the HGP. This may include (but is not limited to) implications of advances in the genetic characterization of complex traits and diseases. Conference applications should detail plans for accomplishing project goals, including, where appropriate, appropriate, video productions. In the case of applications that propose the production of series for broadcast, audiovisuals or other educational materials, the DOE strongly recommends that samples of previous similar work be submitted along with the application. In the case of the proposed activities, the DOE strongly recommends inclusion of assessments of effectiveness of the proposed activities. In the case of all conferences, a fairly detailed and complete roster of committed speakers is necessary. At the completion of the conference, a summary or report is required. Educational and conference applications must also demonstrate awareness of the need to reach the widest appropriate audience.

PREAPPLICATIONS: Potential applicants are strongly encouraged to submit a brief preapplication, in accordance with 10 CFR 600.100(c), that consists of two to three pages of narrative describing the scope and project objectives and methods of accomplishment. These will be reviewed relative to the scope and research needs of the DOE’s Human Genome Program. Preapplications referencing Program Notice 95-15 should be received by April 13, 1995, and sent to Dr. Daniel W. Drell, Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585. For express deliveries, please send to Dr. Daniel W. Drell (telephone 301/903-6488, 19901 Germantown Road, Germantown, MD 20874). Addressee by electronic mail should be genome@er.doe.gov (in ASCII text please). Telephone and FAX numbers are required parts of the preapplication, and electronic mail addresses are desirable. A response to the preapplications discussing the potential program relevance of a formal application generally will be communicated within 30 days of receipt.

SUPPLEMENTAL INFORMATION: It is anticipated that approximately $700,000 will be available for grants awarded during FY 1996 contingent upon availability of appropriated funds. Multiple-year funding of grant awards is expected, and is also contingent upon availability of funds. Previous awards have ranged from $60,000 per year up to $500,000 per year with terms from one to three years; most awards average about $200,000 per year for two to three years. Similar award sizes are anticipated for new grants.

Information about development and submission of applications, eligibility, limitations, evaluation, selection process, and other policy considerations may be found in the Applications Guide for the Office of Research and Development, Grant Program-Ethical, Legal, and Social Implications, 1995.

Telephone requests may be made to (301) 903-6450, extension 7100. Written applications should be sent to: Office of Health and Environmental Research, ER-72 (GTN), Washington, DC 20585. In the case of ER and performing research involving recombinant DNA molecules and/or organisms and viruses containing recombinant DNA molecules shall comply with the National Institutes of Health “Guidelines for Research Involving Recombinant DNA Molecules” (51 FR 16958, May 7, 1986) or such later revision of those guidelines as may be published in the Federal Register.

The dissemination of materials and research data in a timely manner is essential for progress towards the goals of the DOE Human Genome Program. The OHER requires the timely sharing of resources and data. Applicants should, in their applications, discuss their plans for disseminating research results and materials that may include, where appropriate, publication in the open literature, wide-scale mailings, etc. Once OHER and the applicant have agreed upon a distribution plan, it will become part of the award conditions. Funds to defray direct costs of or results and materials will be available to the degree that the project team determines that the results and materials are sufficiently detailed and adequately justified. Applicants should also provide timelines projecting progress toward achieving proposed goals.

DATES: Formal applications submitted in response to this notice must be received by 4:30 p.m., E.D.T., July 13, 1995, to be accepted for merit review in September 1995, and to permit timely consideration for award in Fiscal Year 1996.

ADDRESSES: Formal applications referencing Program Notice 95-15 should be forwarded to: U.S. Department of Energy, Office of Health and Environmental Research, Acquisition and Assistance Management Division, ER-64 (GTN), Washington, DC 20585, ATTN: Program Notice 95-15. The following address must be used when submitting applications by U.S. Postal Service Express Mail or any commercial mail delivery service, or when-handcarried by the applicant: U.S. Department of Energy, Office of Energy Research, Acquisition and Assistance Division, ER-64 (GTN), 19901 Germantown Road, Germantown, MD 20874.


ENDOWED CHAIR IN NEUROSCIENCE

The Department of Neurology and the Center for Investigative Neuroscience is seeking an outstanding individual with a strong, well-established research program who is using cellular and molecular approaches for studying basic neurobiological mechanisms related to neurodegeneration, development of special interests include pharmacological/physiological, axonal growth and regeneration, synaptic formation, and animal models of disease and gene therapy.

OREGON HEALTH SCIENCES UNIVERSITY (OHSU)

Center for Research on Occupations and Environmental Toxicology (CROET)

Growing multidisciplinary research institute focused on the brain and behavior invites applications for FACULTY POSITIONS in molecular toxicology or pharmacology. Interactive, team-oriented, independent scientists focusing on the roles of gene expression in neurodegeneration, development or aging are sought. Start-up funds, competitive salaries (50% start-supported), and generous lab packages. Applications accepted until positions filled; review begins May 1, 1995. Send curriculum vitae, career goals, representative publications to: Dr. R.J. Spence, Center for Research on Occupational and Environmental Toxicology (L606), Oregon Health Sciences University, Portland, OR 97239-3095. OHSU is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR

Indiana University School of Medicine

The Indiana University School of Medicine, Evanston Campus, is inviting applications for a TENURE-TRACK POSITION from candidates with a Ph.D. or M.D. degree and at least three years of postdoctoral experience, who have published in an appropriate area of basic science and have a strong record of grant support. The position offers an attractive start-up package, including adequate support, and equipment. Applications should be received immediately, but will be reviewed until the position is filled. Send curriculum vitae, career goals, and names of three references, to: Dr. K. Mathieson, Research Committee, Indiana University School of Medicine, 8600 West 21st Street, Indianapolis, IN 46268. Indiana University is an Equal Opportunity/Affirmative Action Employer.


PROFESSOR AND CHAIR OF THE DEPARTMENT OF ANATOMY AND CELL BIOLOGY

The F. Edward Hébert School of Medicine at the Uniformed Services University of the Health Sciences (USUHS) invites applications for the position of PROFESSOR/FACULTY CHAIR, Department of Anatomy and Cell Biology. USUHS School of Medicine seeks a distinguished Ph.D. or M.D. scientist with a vigorous, well-funded research program and an outstanding record of scholarship and research productivity. The candidate should have a strong commitment to excellence in education, mentoring and clinical practice, and must have a record of administrative excellence and independent mission. The current Department of Physics and Biomedical Sciences will be linked to USUHS School of Medicine with 25 graduate students and about 70 faculty. In addition, opportunities exist for interactions with many other faculty using cellular/molecular approaches in several departments including Neurobiology and Anatomy, Pharmacology, Biochemistry, Molecular Genetics, Immunology and Cancer Biology. Please send a curriculum vitae, a statement of research interests, two recent publication papers and the names of three references to: Dr. Donald Woodward, Director, Center for Investigative Neuroscience, Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, NC 27157-1010. Affirmative Action/Equal Opportunity Employer.

OREGON HEALTH SCIENCES UNIVERSITY (OHSU)

Center for Research on Occupations and Environmental Toxicology (CROET)

Growing multidisciplinary research institute focused on the brain and behavior invites applications for FACULTY POSITIONS in molecular toxicology or pharmacology. Interactive, team-oriented, independent scientists focusing on the roles of gene expression in neurodegeneration, development or aging are sought. Start-up funds, competitive salaries (50% start-supported), and generous lab packages. Applications accepted until positions filled; review begins May 1, 1995. Send curriculum vitae, career goals, representative publications to: Dr. R.J. Spence, Center for Research on Occupational and Environmental Toxicology (L606), Oregon Health Sciences University, Portland, OR 97239-3095. OHSU is an Equal Opportunity/Affirmative Action Employer.

DEVELOPMENTAL GENETICS VISITING ASSISTANT PROFESSOR

The Department of Biology, Hamilton College, invites applications for a VISITING ASSISTANT PROFESSOR level, effective 1 July 1995. Applicants must have a Ph.D.; postdoctoral and prior teaching experience preferred. Teaching for the successful applicant will include an introductory genetics course, an upper level and molecular genetics course, and undergraduate research projects may be involved. Send curriculum vitae, statement of teaching and research interests, and three letters of reference to: David A. Gapp, Chair, Biology Department, Hamilton College, 198 College Hill Road, Clinton, NY 13323. Review of applications will begin on 24 April 1995 and continue until the position is filled. Women and minority members of the college are encouraged to apply. Hamilton College is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITION

GENETIC APPROACHES TO RODENT MODELS OF HUMAN SUBSTANCE ABUSE AND BEHAVIORAL DISORDERS

The Departments of Psychiatry, Human Genetics and Pharmacology at the Medical College of Virginia/Virginia Commonwealth University are seeking a full-time, tenure-track faculty member, at a level commensurate with the candidate’s qualifications and experience, with expertise in genetic approaches to rodent models of human substance abuse or behavioral disorders in order to multidisciplinary research group with expertise in basic pharmacology (Dr. R. Balster), gene mapping (Dr. R. Straub), psychiatric genetics (Dr. K. Kessler) and human quantitative behavioral genetics (Dr. L. Eaves). Research approaches could include traditional breeding or molecular strategies (including high throughput genetic screening) with the goal of identifying genetic/molecular mechanisms of susceptibility in rodents that may be tested in human populations. Applicants must have a doctoral degree and at least two years of postdoctoral research experience. Tenure-track appointment is possible. Send applications including a curriculum vitae, statement of research goals, and names of three references to: Kenneth S. Kendler, M.D., Psychiatric Genetics Research Program, Department of Psychiatry, MCV, P.O. Box 980120, Richmond, VA 23298-0120. Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, and persons with disabilities are encouraged to apply.

ANATOMY AND CELL BIOLOGY

Applications are invited for a TENURE-TRACK POSITION starting academic year 1995-96. Experience in molecular methods in neurobiology, cell and developmental biology or paleobiology preferred. Ph.D. plus two years of postdoctoral experience required. Must be willing to teach human gross anatomy to medical/graduate students. Submit a curriculum vitae and names, addresses, and telephone numbers of three references to: Anatomy/Embryology Search Committee, Howard University College of Medicine, Washington, DC 20059. FAX: 202-265-7005. Equal Opportunity Employer.

DIRECTOR

CENTER FOR MARINE SCIENCE RESEARCH

The University of North Carolina at Wilmington invites applications and nominations for the position of DIRECTOR, Center for Marine Science Research. The Director, with faculty rank, has management responsibility for the Center for Marine Science Research and is administrator of the university’s Marine Science Program; assists in securing extramural funding in the marine sciences and maintains active connections with federal marine science programs and boards; and advises the Provost concerning marine sciences. Candidates should hold a doctorate, have an exceptional record of research/ scholarship, and be recognized as an administrative executive, have a record of success in securing external funding, and have university-level teaching experience. Salary competitive with experience and qualifications. Requests for additional information, letters of application, curriculum vitae, and the name, address, and telephone number of four references should be sent to: Chair, CSMR Search Committee, Office of the Provost, University of North Carolina at Wilmington, Wilmington, NC 28403. The University of North Carolina at Wilmington is an Equal Opportunity/Affirmative Action Employer. Minorities and women are particularly encouraged to apply.

CHAIRPERSON—Department of Pharmacology and Toxicology, The University of Medicine and Dentistry of New Jersey (UMDNJ)-New Jersey Medical School invites nominations and applications for the position of Chairperson of the Department of Pharmacology and Toxicology. The successful candidate will have a nationally recognized record of achievement in research, a strong interest in the development of effective teaching programs, and be qualified for an appointment as a full professor. For further information or to apply, please send your curriculum vitae, no later than June 30, 1995, to: Linda C. Reich, Office of the Provost, UMDNJ New Jersey Medical School, MSB-C 662, University Heights, 185 South Orange Avenue, Newark, NJ 07103. The UMDNJ- New Jersey Medical School is an Equal Employment Opportunity/Minorities/Female/Disabled/Veteran and is a member of the University Health System of New Jersey.

SENIOR FACULTY IN BIOENGINEERING

University of California, San Diego

The Department of Bioengineering in the University of California, San Diego, with the support of the Whitaker Foundation, is developing a SENIOR FACULTY member who has made outstanding contributions and has national and international recognition in areas related to tissue engineering and/or biomechanics. The candidate is expected to lead a rigorous program of high-quality research that complements the existing activities in the Department and to teach at the undergraduate and graduate levels. Applications and nominations (with the candidate’s consent) received by June 1, 1995, will be assured full consideration; search will continue until position is filled. Salary is commensurate with experience and based on UC pay scales. Please send curriculum vitae, statement of research interests and teaching experience, samples of publications, and the names, addresses, and telephone and FAX numbers of five references to: Shu Chien, M.D., Ph.D., Department of Bioengineering, UCSD, La Jolla, CA 92039-0412. FAX: 619-543-6472. The University of California is an Equal Opportunity/Affirmative Action Employer and encourages women and minorities to apply.

2038

SCIENCE • VOL. 267 • 31 MARCH 1995
**Director of Technology Management**
*University of Pittsburgh*

The University of Pittsburgh seeks a person to lead its effort to create a nationally recognized program in technology management and transfer. In addition to its main campus, the University has one of the nation's largest academic medical centers, and its biomedical and bioengineering research is now ranked tenth in the nation. The city of Pittsburgh is consistently ranked among the best places to live in America.

Since the key responsibility of the Director will be to evaluate disclosures for University patents to determine which could be the basis for a new company and which could be licensed, we are seeking a person who has a solid record of accomplishment in completing license agreements and assisting in the formation of new companies with the support of outside investors, including national venture capital firms.

The ideal candidate will have a background in licensing of technology, commercialization of technology, business development and/or venture capital. A technical background, particularly in life sciences, is a plus. Experience with biotechnology, pharmaceutical or other high-tech companies and national venture capital firms is desirable. Candidates must be able to manage projects effectively with a team approach with other professionals of the University and must be sensitive to University policies that relate to intellectual property and conflict of interest.

Salary is negotiable and commensurate with qualifications and experience. Please send resume, along with names and addresses of at least three references and a statement of your vision for University technology management, by May 15, 1995, to: Thomas DeTre, M.D., Senior Vice Chancellor for Health Sciences, University of Pittsburgh, 3811 O'Hara Street, Pittsburgh, PA 15213.

*The University of Pittsburgh and University of Pittsburgh Medical Center are equal opportunity/affirmative action employers.*

---

**POST DOCTORAL SCIENTIST - JOB # 9510**

Ciba's Agricultural Biotechnology Research Unit has a Postdoctoral position available for a Scientist with a Ph.D. in biochemistry, molecular biology and/or cell biology. Studies will involve the characterization of the structure and function of novel insecticidal proteins as well as elucidation of their mode of action. A strong background in insect physiology/cell biology preferred. Molecular biology experience is desired. Interested candidates should forward a cover letter (which must include the job #9510), curriculum vita, a list of publications and names of three references, to Ciba Biotechnology Research Unit, Human Resources Dept., P.O. Box 12257, Research Triangle Park, N.C. 27709-2257. **DEADLINE DATE:** May 1, 1995. (NO CALLS). We offer a competitive salary and benefits package.

*WE ARE AN EQUAL OPPORTUNITY EMPLOYER*

---

**Faculty Position**

Applicants are sought for the position of **Director of the Biotechnology Center at Tufts University**. This is a tenure-track position in the **Chemical Engineering Department**, 50% devoted to directorship activities. The latter will consist primarily of supervision and promotion of interdisciplinary biotechnology teaching/research at Tufts, which, besides Medford-based science and engineering departments, includes veterinary and medical schools. A Ph.D. in chemical engineering or related field is required; entry level is open. Of particular interest are those at a relatively early stage in their careers, who have established or shown great promise of establishing i) a successful research program in biotechnology; ii) collaboration across disciplines and/or with industry; and iii) leadership of teaching and research programs. Women and minorities are especially encouraged to apply. Submit vitae including references and teaching/research plans to: Faculty Search Committee, Chemical Engineering Department, Tufts University, 4 Colby Street, Medford, MA 02155. Screening begins April 21, 1995. **Tufts University is an equal opportunity/affirmative action employer.**

---

**ASSOCIATE SCIENTISTS, PROTEIN AND RECEPTOR BIOCHEMISTRY**

SmithKline Beecham Pharmaceuticals, a leader in pharmaceutical research and development, has exciting opportunities for two associate scientists to investigate structure/function relationships of G-protein coupled receptors and to evaluate potential disease markers for their diagnostic efficacy.

---

**Macromolecular Sciences**

As a member of a multidisciplinary group, the scientist will investigate the structure and ligand interactions of bioactive peptide receptors. Requirements include a BS or MS in biochemistry, pharmacology or a related field. Experience in receptor characterization (ligand binding and signal transduction assays) and familiarity with data analysis programs is preferred. Additional experience in molecular biology (subcloning, mutagenesis, PCR, sequencing, and gene expression) and the operation of laboratory robots is desirable. Refer to Job #H5-0047.

---

**Molecular Diagnosis**

The scientist will join an ongoing effort involved with the discovery, purification, and characterization of proteins for diagnostic applications. Requirements include a BS or MS in biochemistry or a related field with experience in protein biochemistry (protein purification, gel electrophoresis, Western blots, and ELISA). Additional experience in ligand binding assays, HPLC, and chemical modification of proteins would be an advantage. Refer to Job #H5-0063.

Located in our state-of-the-art research facility in suburban Philadelphia, SmithKline Beecham offers a competitive compensation/benefits/relocation package. For confidential consideration, please send resume with salary requirements to: Job # , SmithKline Beecham Pharmaceuticals, PO Box 799, Conshohocken, PA 19428. We are an Equal Opportunity Employer, M/F/D/V.

---

**SmithKline Beecham Pharmaceuticals**

Challenging the natural limits.
POSITIONS OPEN

POSTDOCTORAL POSITION—Invertebrate Larval Ecology. The Oregon Institute of Marine Biology seeks to fill two positions in a program investigating physical and nutritional linkages between larval and estuarine environments. Appointments will begin September 1995, pending final approval by the University of Oregon. Salary is commensurate with experience. Position 1: A Ph.D. interested in coastal oceanography and behavior of larval invertebrates. Experience should include sampling of zooplankton, sampling and processing of physical oceanographic data, identification of larval species, and experimental analysis of larval behavior. Position 2: A Ph.D. interested in larval nutrition and development. Experience should include culture of marine larvae, and techniques for analyzing growth, development, and biochemical composition of larval and field populations of larval stages in various environments. Strengths in lab and field work are of particular value.

Interested applicants should send: 1) a letter detailing research experiences and interests; 2) a curriculum vitae; and 3) name, address, and telephone number of three references to: Dr. Lynda Shapiro, Director, Institute of Marine Biology, University of Oregon, Charleston, OR 97424. The University of Oregon is an Affirmative Action/Equal Opportunity Employer committed to cultural diversity and compliance with ADA.

Three POSTDOCTORAL POSITIONS in Legume Biotechnology: one for design and analysis of tissue-specific expression of desired genes; and two to refine regeneration and transformation of peanut and soybean. Candidates will participate in establishing and/or maintaining plant cell culture and genetic transformation should submit a letter describing their research experience and career interests, a curriculum vitae, transcripts, and names of three references to: Dr. William Wiegert, Department of Botany, University of Georgia, Athens, GA 30602. Email: wwiegert@uga.bitnet. The University of Georgia is an Equal Opportunity/Affirmative Action Institution.

POSTDOCTORAL POSITION in molecular and cell biology is available immediately to study the role of membrane phospholipids in growth factor signal transduction. The focus of the project is the investigation of the mechanisms of cell proliferation and cell death regulated by proliferation factors. Ph.D. Applicants should have a strong background in molecular biology.

Three POSTDOCTORAL POSITIONS in structural biology are available immediately to study the molecular mechanisms that control the formation of microtubules and microfilaments. The project involves the use of a variety of techniques, including X-ray crystallography, electron microscopy, and computer modeling. Ph.D. candidates are expected to have a strong background in biochemistry and molecular biology.

POSTDOCTORAL POSITION in neuroendocrinology. The project involves the study of the role of neuropeptides in the regulation of physiological functions. The project involves the use of techniques such as Western blotting, immunohistochemistry, and electrophysiology. Ph.D. candidates are expected to have a strong background in molecular biology and neuroscience.

POSTDOCTORAL POSITION in cardiovascular biology. The project involves the study of the role of cell adhesion molecules in the regulation of vascular smooth muscle cell proliferation. The project involves the use of techniques such as fluorescence microscopy and immunohistochemistry. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

POSTDOCTORAL POSITION in cell biology. The project involves the study of the role of intracellular signaling pathways in the regulation of cell proliferation. The project involves the use of techniques such as Western blotting, immunochemistry, and confocal microscopy. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

POSTDOCTORAL POSITION in developmental biology. The project involves the study of the role of gene expression in the regulation of embryonic development. The project involves the use of techniques such as RT-PCR, in situ hybridization, and microarray analysis. Ph.D. candidates are expected to have a strong background in molecular biology and developmental biology.

POSTDOCTORAL POSITION in oncology. The project involves the study of the role of oncogenes in the regulation of cell proliferation. The project involves the use of techniques such as Western blotting, immunohistochemistry, and microarray analysis. Ph.D. candidates are expected to have a strong background in molecular biology and oncology.

Position 4: A Ph.D. interested in the study of the role of protein kinases in the regulation of cell proliferation. Experience should include expertise in the use of biochemical techniques for the identification and characterization of protein kinases. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 5: A Ph.D. interested in the study of the role of transcription factors in the regulation of gene expression. Experience should include expertise in the use of biochemical techniques for the identification and characterization of transcription factors. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 6: A Ph.D. interested in the study of the role of microRNAs in the regulation of gene expression. Experience should include expertise in the use of biochemical techniques for the identification and characterization of microRNAs. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 7: A Ph.D. interested in the study of the role of epigenetic modifications in the regulation of gene expression. Experience should include expertise in the use of biochemical techniques for the identification and characterization of epigenetic modifications. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 8: A Ph.D. interested in the study of the role of ion channels in the regulation of cell proliferation. Experience should include expertise in the use of biochemical techniques for the identification and characterization of ion channels. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 9: A Ph.D. interested in the study of the role of posttranslational modifications in the regulation of gene expression. Experience should include expertise in the use of biochemical techniques for the identification and characterization of posttranslational modifications. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.

Position 10: A Ph.D. interested in the study of the role of stress response pathways in the regulation of cell proliferation. Experience should include expertise in the use of biochemical techniques for the identification and characterization of stress response pathways. Ph.D. candidates are expected to have a strong background in molecular biology and cell biology.
EXECUTIVE DIRECTOR

The Search Committee for Sigma Xi, The Scientific Research Society, invites nominations and applications for the position of Executive Director. The Executive Director will be located at the Society’s Headquarters in the Research Triangle Park in North Carolina.

With a membership of approximately 90,000 individuals and more than 500 chapters worldwide, Sigma Xi occupies a unique position in the scientific community. The purpose of the Society is to honor scientific achievements, improve the quality of science and access to science, enhance scientific literacy, encourage interdisciplinary research, inform policy makers about science, and foster worldwide interaction among researchers.

The Executive Director, in association with the Board of Directors of the Society, will have the opportunity to lead Sigma Xi into the 21st Century. The successful candidate will be a leader with commitment to the goals and growth of Sigma Xi.

The Executive Director must be an effective communicator; a consensus builder with the 3-D structure and dynamics have broad implications in health, environment, and industry. This symposium will address the current status and prospects of experimental and theoretical methods for determining DNA and protein structure-function-dynamics relationships. Examples will be given of progress involving health, environment, and industrial applications. The chairman is Rick L. Ornstein. Speakers, papers, and poster presentations are invited in the following areas: (1) Structure-Function, (2) Structure-Function Relationships, and (3) Applications.

Confirmed speakers include: L.S. Beebe (Duke University); A.M. Chakrabarty (University of Illinois, Chicago); R.E. Dickerson (University of California, Los Angeles); D.S. Eisenberg (University of California, Los Angeles); A.M. Kilbano (Massachusetts Institute of Technology); P.A. Kollman (University of California, San Francisco); A.A. Kosiofok (Genentech); B.W. Matthews (University of Oregon); J.A. Peterson (University of Texas, Dallas); G.A. Petito (Brandeis University); A. Rich (Massachusetts Institute of Technology); H.A. Sheraga (Cornell University); B.A. Singer (University of California, Berkeley); S.G. Stigler (University of Illinois, Urbana); B.D. Sykes (University of Alberta, Edmonton); L.P. Wackett (University of Minnesota, St. Paul).

Abstracts: Typewritten, double-spaced informational abstracts not to exceed 250 words must be received in Richland, Washing- ton, no later than May 15, 1995. Title should be followed by names of the authors, mailing addresses, phone numbers, fax numbers, and e-mail addresses. Abstracts and inquiries should be addressed to R.W. Baillie, Manager, Planning and Communications, K-10, Life Sciences Center, Battelle, Pacific Northwest Laboratories, Richland, WA 99352. Phone 509 375-3665; Fax 509 375-3686.

BIOMACROMOLECULES: FROM 3-D STRUCTURE TO APPLICATIONS


Biomacromolecular 3-D structure and dynamics have broad implications in health, environment, and industry. This symposium will address the current status and prospects of experimental and theoretical methods for determining DNA and protein structure-function-dynamics relationships. Examples will be given of progress involving health, environment, and industrial applications. The chairman is Rick L. Ornstein. Speakers, papers, and poster presentations are invited in the following areas: (1) Structure-Function, (2) Structure-Function Relationships, and (3) Applications.

Confirmed speakers include: L.S. Beebe (Duke University); A.M. Chakrabarty (University of Illinois, Chicago); R.E. Dickerson (University of California, Los Angeles); D.S. Eisenberg (University of California, Los Angeles); A.M. Kilbano (Massachusetts Institute of Technology); P.A. Kollman (University of California, San Francisco); A.A. Kosiofok (Genentech); B.W. Matthews (University of Oregon); J.A. Peterson (University of Texas, Dallas); G.A. Petito (Brandeis University); A. Rich (Massachusetts Institute of Technology); H.A. Sheraga (Cornell University); B.A. Singer (University of California, Berkeley); S.G. Stigler (University of Illinois, Urbana); B.D. Sykes (University of Alberta, Edmonton); L.P. Wackett (University of Minnesota, St. Paul).

Abstracts: Typewritten, double-spaced informational abstracts not to exceed 250 words must be received in Richland, Washington, no later than May 15, 1995. Title should be followed by names of the authors, mailing addresses, phone numbers, fax numbers, and e-mail addresses. Abstracts and inquiries should be addressed to R.W. Baillie, Manager, Planning and Communications, K-10, Life Sciences Center, Battelle, Pacific Northwest Laboratories, Richland, WA 99352. Phone 509 375-3665; Fax 509 375-3686.

CONFERENCE

3rd Annual Conference

AIDS, Drugs of Abuse and the Neuroimmune Axis

A Satellite Symposium to be held before the 1995 Meeting of the Society for Neuroscience November 9-11, 1995 (Thursday-Saturday) Bristol Court Hotel; San Diego, California

The twin focal points of the meeting will be: 1. the use of drugs of abuse as informative agents in studying the mechanisms linking the neural-endocrine-immune axes; and 2. the effect of drug-induced immunomodulation on resistance to diseases including AIDS.

Travel awards are available for young investigators.

For further information and registration forms contact: Ms. Suzanne Ingalls; PNI Program Office; MMRF; 914 South 8th St., D3; Minneapolis, Minnesota 55404; Telephone # (612) 337-7381.

Funded in part by a grant from the National Institute on Drug Abuse

Postdoctoral Fellowship in Plant-Insect Interactions

The Interdisciplinary Research Training Program (TRT) on Plant-Insect Interactions at the University of Arizona invites applications for a Postdoctoral Fellowship focusing on insect physiology. Areas of particular interest include gut physiology and biochemistry, chemoreception and nutrition in phloem feeding insects. The RTP is funded by the DOE/NSF/USDA Joint Program on Collaborative Research in Plant Biology. Its overall goals are to provide effective interdisciplinary training in plant and insect sciences and to develop a better understanding of the complex interactions between plants and insects to serve as a guide for genetic engineering of plants for protection against insect attack. In particular, novel approaches to mechanistic studies are sought, with an emphasis on the insect-plant interaction. Faculty involved are in the Departments of Biochemistry, Ecology and Evolutionary Biology, Entomology, Neurobiology and Plant Sciences. For more detailed information, please contact E.A. Bernays (schistos@ccit.arizona.edu) or R. Feyereisen (feyereisen@biosci.arizona.edu).

Fellowships include a stipend, as well as support for research supplies and travel to scholarly meetings. Appointments are normally for two years, with the second year of funding dependent on progress and the development of active research interactions. Applicants should send an introductory cover letter, research interest statement, curriculum vitae, and names of three references to: Plant-Insect Interdisciplinary Program, Center for Insect Science, Attention: E.A. Bernays, Life Sciences South Building, Room 225, University of Arizona, Tucson, AZ 85721 1. Applications will be accepted throughout the month of May, 1995. Please note that according to the conditions of the grant, fellowship recipients must be citizens or permanent residents of the United States. Women and minorities are urged to apply. The University of Arizona is an Affirmative Action/Equal Employment Opportunity/ADE Employer.
POSTDOCTORAL POSITIONS

**CELLULAR NEUROPHYSIOLOGY**

Applications are invited for the POSTDOCTORAL POSITION of Junior Fellow in Experimental Neurobiology to study synaptic physiology, plasticity, and specificity. The successful candidate will be supervised by Dr. Ronald B. Langdon, The Rockefeller University, 1230 York Avenue, New York, NY 10021. Applications will receive appropriate consideration in regard to the Department's affirmative action plan. Submit curriculum vitae, statement of research interests, and names of three references to: Dr. Ronald B. Langdon, The Rockefeller University, 1230 York Avenue, New York, NY 10021. FAX: 619-544-9159.

**GENE MAPPING/EXPRESSION**

The Children's Hospital of Philadelphia.

The Children's Hospital of Philadelphia is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

**POSTDOCTORAL MATERNITY/ACADEMIC EMPLOYMENT**

USA, Agricultural Research Service (ARS), U.S. Meat Animal Research Center, Clay Center, Nebraska has POSTDOCTORAL RESEARCH ASSOCIATE positions available immediately in a group developing high resolution linkage maps for livestock. Candidates with a strong background in molecular biologic techniques are encouraged to apply. Excellent facilities and established reference families provide unique opportunities in this high priority ARS program. Minimum starting salary $35,578. Submit curriculum vitae and names of three references to: Dr. Craig W. Beattie, U.S. Meat Animal Research Center, P.O. Box 166, Clay Center, NE 68933. USDA-ARS is an Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION**

Macromolecular Structure

Position available immediately to develop computational approaches to map the structure of macromolecular complexes. The research will require a knowledge of programming (C, FORTRAN), numerical methods and familiarity with crystallographic and cryo-EM methodology. Forward resume and three letters of reference to: Dr. Michael Chapman, Institute of Molecular Biophysics, Florida State University, Tallahassee, Florida 32306-3015. Florida State University is an Equal Opportunity/AffirmativeActionEmployer.

**POSTDOCTORAL POSITION**

available to study the transcriptional regulation of the human choline acetyltransferase gene using cell transfection and transgenic mouse models. Experience in molecular biological techniques and exposure to current literature and cryo-EM techniques is recommended. Submit curriculum vitae and three references by mail or fax to: Dr. Louis B. Hersch, Department of Biochemistry, University of Kentucky, Lexington, KY 40536-0084. An Affirmative Action/Equal Opportunity Employer.

**POSTDOCTORAL POSITION**

available immediately for research on physico-chemical and immunological evaluation of recombinant coxsackievirus A21 as vaccines against diphtheria. Ph.D. in Microbiology, Immunology or related subject with strong background in development and evaluation of vaccines. Salary $25,000 annually. Send curriculum vitae with names of three references to: Theobald Smith Public Health Services Laboratory Personnel Office 305 South Street Jamaica Plain, MA 02130

**POSTDOCTORAL POSITION**

Marine Biomaterials are available immediately for postdoctoral research associates to investigate the relationship between gene expression and the biosynthesis of structural biomass materials such as byssus having well defined protein gradients. (J Expr. Biol., March 1995) We are looking for someone with expertise in molecular biology and well-grounded in the principles of integrative and organismal biology. These are three-year, full-time positions at starting salary of $25,000 to $32,000 per annum. To apply, send a cover letter with curriculum vitae and the names, addresses, and telephone numbers of at least three references to: Dr. Herbert Waite, College of Marine Studies, University of Delaware, Newark, DE 19716. FAX: 302-831-6335. An Equal Opportunity/AffirmativeAction Institution.

**POSTDOCTORAL POSITIONS**

The Neurosciences Institute, La Jolla, CA 92037.

Applications are invited for the POSTDOCTORAL POSITIONS in Experimental Neurobiology to study synaptic physiology, plasticity, and specificity. The successful candidate will be supervised by Dr. Ronald B. Langdon, The Rockefeller University, 1230 York Avenue, New York, NY 10021. Applications will receive appropriate consideration in regard to the Department's affirmative action plan. Submit curriculum vitae, statement of research interests, and names of three references to: Dr. Ronald B. Langdon, The Rockefeller University, 1230 York Avenue, New York, NY 10021. FAX: 619-544-9159.
Postdoctoral Fellow
Cardiac Muscle Gene Regulation

A postdoctoral position is available in the Department of Cardiovascular Therapeutics, to participate in a research program directed toward identifying mechanisms that regulate cardiac muscle-specific gene expression in the normal and diseased heart.

Applicants with recent PhD's should provide evidence of quality experience in molecular biology related to transcriptional regulatory mechanisms and protein-protein interactions. Additional expertise in one or more of the following areas is preferred: integrative physiology; gene targeting by homologous recombination; or cell culture.

This position offers a competitive salary/benefits package and possible interactions with academic institutions and biotech companies as well as with our scientists in Ann Arbor. Candidates should send their curriculum vitae and names of three references to:

PARKE-DAVIS Pharmaceutical Research, P.O. Box #DCS-2130, Human Resources, 2800 Plymouth Road, Ann Arbor, MI 48105. “Smoke-Free Work Environment”

National Institutes of Health / Public Health Service
Department of Health and Human Services

NIH is an Equal Opportunity Employer

POSTDOCTORAL FELLOWSHIP

Gene Therapy

A position is available immediately to participate in research leading to the use of retrovirally transmitted genes to protect hematopoietic cells from the toxic effects of agents used in the chemotherapy of solid tumors. The research involves directed mutagenesis of cDNA for certain mammalian enzymes, the insertion of these cDNAs into retroviral vectors, and transduction of hematopoietic cells with corresponding viruses. Candidates should have a Ph.D. or M.D. with research experience in structure/function studies on proteins, cell biology, or a closely related discipline. Experience with molecular biology techniques and/or cell culture is an advantage. Salary as for NIH fellowships. Relocation expenses reimbursed up to $1,500, and professional development funds of $1,000 annually. Send curriculum vitae with names of three references to: Dr. Brian P. Sorrentino, Department of Biochemistry, St. Jude Children's Research Hospital, 332 North Lauderdale, Memphis, TN 38101. Affirmative Action/Equal Opportunity Employer.

Protein Formulation

At Amgen, you'll discover a research environment that emphasizes collaboration, intellectual honesty, scientific integrity, and a supportive culture. This unique approach has helped us grow into a global biotechnology leader in just fifteen years.

The Protein Formulation Department seeks several qualified individuals to play an integral role in a collaborative research team.

RESEARCH ASSOCIATES

Candidates must have a BS/MS in Chemistry, Biochemistry, or related field, as well as experience in protein characterization. Experience in one or more of the following protein characterization methods is highly desirable: electrophoresis, HPLC, radiolabelling, immunoassays, and spectroscopy. Industrial experience is also preferred.

At Amgen, you'll find our approach to scientific research as rewarding as it is effective. We offer a highly competitive compensation and benefits package that includes a retirement and savings plan, an on-site fitness center, and three weeks' vacation. Please mail your resume/c.v. to: Amgen Inc., Staffing, Job Code: OXP-SC-2324-S, Amgen Center, Thousand Oaks, CA 91320-1789. Principals only, please. For information on other research opportunities available at Amgen, please call 1-800-446-4007. EEO-Affirmative Action Employer M/F/D/V. We recognize that diverse perspectives are a key factor in the process of discovery.
Two POSTDOCTORAL POSITIONS available on July 1, 1995, in a research group at the University of Pittsburgh investigating the functional architecture of the mammalian prefrontal cortex. Integrated studies focus on (1) the intrinsic connectivity of prefrontal prefrontal cortex using tract-tracing, intracellular filling, immunocytochemical and electron microscopy techniques; and (2) the electrophysiological properties of prefrontal cortical neurons and rat slices using visually-guided intracellular recordings with sharp microelec-
FibroGen, Inc. is an emerging biotechnology company committed to the development of therapeutics for the treatment of fibrotic diseases and excessive scarring. This has been a common, serious, and difficult area — until now. FibroGen’s extensive worldwide cooperation with university scientists has prompted the development of lead compounds which block fibrosis and collagen deposition. In addition, new treatments for inflammatory diseases, the aging of skin and other connective tissue disorders are under development. Cell and animal models relevant to human disorders are also to be undertaken. Other key areas will involve evaluating drug delivery systems and toxicity as well as pro-drug development.

FibroGen is currently building an active, in-house team at all levels. We are looking for individuals in the following areas:

- **Organic Drug Synthesis**
- **Medicinal Chemistry**
- **Pharmacology**
- **Biochemistry**
- **Cell Biology**
- **Animal Physiology**
- **Assay Development**

The successful candidates for our new team will assess the potency of enzyme inhibitors as modifiers of collagen synthesis in vitro, in tissue and cell culture, as well as in animal models. They will synthesize modified forms of enzyme inhibitors, develop drug delivery systems, and evaluate toxicity.

FibroGen has recently opened a new laboratory facility in the San Francisco Bay Area. To learn more about our company and our current activities, we invite you to send your C.V./resume to: FibroGen, Inc., 772 Lucerne Drive, Sunnyvale, CA 94086 or fax to: (408) 720-7212. We are an equal opportunity employer.
ASSISTANT VICE PRESIDENT  
RESEARCH ADMINISTRATION

Saint Louis University Health Sciences Center, a division of Saint Louis University, invites nominations and applications for the position, Assistant Vice President for Research Administration. As the chief research officer reporting directly to the Vice President for the Health Sciences Center, this individual will provide resources throughout the Health Sciences Center to encourage and promote research activities; will coordinate the exchange of information across departmental boundaries; will provide advice and counsel to the Institutional Review Board and the Animal Care Committee; and will foster collaboration among researchers. Also, this position will be responsible for overseeing research programs with specific responsibilities in the following areas: use of human and animal subjects in research; research laboratory safety issues; coordinator of patient activities, intellectual property rights, royalty agreements and copyrights; conflict of interest issues and material transfer agreements. This Assistant Vice President will develop and monitor research policies which will comply with both University and statutory regulations and provide leadership to the Health Sciences Center Research Administration Office.

The Health Sciences Center is seeking an individual who has a proven record in collaboration and success in a complex academic research environment. Relevant experience with NIH, NSF, AHCPR, VA HSRA&D or with other research sponsors will be an important consideration. Proven success is essential in developing effective working relationships with financial officers, government and community representatives, legal counsel, as well as research/investigators.

Candidates will be required to possess an earned doctorate (Ph.D., M.D.,Ph.D., or the equivalent) in science medicine, dentistry, nursing, allied health professions, public health, health services, research or a related discipline. Several years of relevant health-sciences research is important with experience in university level research administration. Effective interpersonal and management skills will be important for success in this key position.

Send resume to Search Committee, Assistant Vice President for Research Administration:

c/o Janette Taaffe, Recruitment Supervisor
Saint Louis University
Health Sciences Center
3635 Vista at Grand
P.O. Box 15250
St. Louis, Mo. 63110-0250

Equal Opportunity Employer.

Research Opportunities in Tropical Forestry!

The International Institute of Tropical Forestry, located in Rio Piedras, Puerto Rico, is a unit of the USDA Forest Service. The Institute's research and development mission is to develop and disseminate knowledge of scientifically sound practices that contribute to sustainable use of tropical forest resources, the conservation of primary forests, the rehabilitation of degraded lands and the management of tropical forests, wildlife, and watersheds in tropical America.

Applications are invited for three PhD level positions to strengthen the Institute's programs.

Research Biologist/Forest Products Technologist/Botanist - Research relates to the development of practices to optimize the culture, production and marketing of non-timber forest products in support of sustainable use of tropical ecosystems. Starting salary range $40,000 to $48,000.

Research Forester/Forest Ecologist - Research focuses on the development of models of secondary forests, organization and management of large, long term data sets, and serves as a statistical resource for other scientists at the Institute. Starting salary range $40,000 to $48,000.

Research Economist - Research related to resource economic analysis addressing the problem of market and non-market values of tropical forest ecosystems. Starting salary range $40,000 to $48,000.

For information about applications and further details about the positions and closing dates, contact: Wanda Marrero at 809 766-5335 or FAX 809 766 6302.

We anticipate filling the following position in the near future.

Assistant Director - Research - Combines a strong research role in any discipline related to tropical forestry with a broad range or managerial activities which provide a work environment that stimulates high productivity and high morale by a diverse group of scientists and support personnel in a culturally diverse atmosphere. Starting salary range $56,000 to $66,000.

Contact Bill Edwards at 809 766 5335, FAX 809 766 6302 or by mail at:

PO Box 25000
Rio Piedras, Puerto Rico 00928-5000

Ability to live and work in a culturally diverse setting as well as language capability in Spanish and/or Portuguese is required.

Starting salary is dependent on the qualifications of the individual. A cost of living adjustment, currently 10 percent, would be added.

The US Department of Agriculture is an Equal Opportunity Employer.

Postdoctoral Fellowship in Plant-Insect Interactions

The Interdisciplinary Research Training Program (RTP) on Plant-Insect Interactions at the University of Arizona invites applications for a Postdoctoral Fellowship focusing on the molecular and genetic analysis of plant sterol metabolism. The RTP is funded by the DOE/NSF/USDA Joint Program on Collaborative Research in Plant Biology. Its overall goals are to provide effective interdisciplinary training in plant and insect sciences and to develop a better understanding of the complex interactions between plants and insects to serve as a guide for genetic engineering of plants for protection against insect attack. In this particular case, the position is part of a long-term program directed at increasing our understanding of higher plant sterol synthesis at the molecular level by isolating and studying biosynthetic and regulatory genes involved in this pathway. A molecular genetic approach is underway to identify key sterol biosynthetic enzymes by 1) complementation of yeast sterol biosynthetic mutants with functional plant homologs and 2) identification of plant genes by heterologous probes and database searches. To date several candidate genes have been isolated by these methods. The successful candidate will participate in ongoing screening and perform molecular characterization, complementation and analysis of one class of clones already identified. Previous experience in molecular biology, genetics, biochemistry or yeast complementation is desirable. For more detailed information, please contact E.A. Bohnsack (bohnsack@ccit.arizona.edu), K. Feldmann (feldmann@ccit.arizona.edu), or D.W. Galbraith (dgalbrai@ccit.arizona.edu).

Fellowships include a stipend, as well as support for research supplies and travel to scholarly meetings. Appointments are normally for two years, with the second year of funding dependent on progress and the development of active research interactions. Applicants should send an introductory cover letter, research interest statement, curriculum vitae, and names of three references to: Plant-Insect Interdisciplinary Program, Center for Insect Sciences, Attention: D.W. Galbraith, Life Sciences South Building, Room 225, University of Arizona, Tucson, Arizona 85721. Applications will be accepted throughout the month of May, 1995. Please note that according to the conditions of the grant, fellowship recipients must be citizens or permanent residents of the United States. Women and minorities are urged to apply. The University of Arizona is an Affirmative Action/Equal Employment Opportunity/ADA Employer.

Pathology Research Professor

The Pathology Department of Pathology, SUNY Health Science Center at Syracuse, is accepting applications and nominations for Endowed Research Professor. The successful candidate should have an MD or PhD degree (in one or more of the biological sciences), and a distinguished record of achievement in research and demonstrated excellence in education. The applicant is expected to maintain a vigorous and productive research program, facilitate the research programs of the department and contribute to the training of young investigators in biomedical research and molecular pathology. The department has diverse research interests and faculty collaborate with members of other departments. Rank listed as Associate Professor/Professor, depending on qualifications and experience. Review of applications will begin immediately and continue until the position is filled. Send CV, supporting information and names of three references to Frederick Davey, M.D., Chair of Endowed Research Professor Committee, Department of Pathology, SUNY Health Science Center at Syracuse, 750 East Adams Street, Syracuse, New York 13210. Phone (315) 464-5739. SUNY-HSC is an AA/EEO/ADA employer, committed to achieving excellence through cultural diversity. Nominations of women, persons of color and members of the underrepresented groups are encouraged.
The R. W. Johnson Pharmaceutical Research Institute performs R&D activities for the Johnson & Johnson pharmaceutical companies; Cilag, Ortho-McNeil Pharmaceutical, and Ortho Biotech.

R.W. Johnson Pharmaceutical Research Institute, La Jolla is engaged in a program to identify novel drug targets. Using a combination of molecular subtraction, bioinformatics, and protein expression we are developing novel high throughput drug screening assays. We are seeking highly qualified scientists for the following positions:

**Gene Discovery**
Associate scientist in molecular biology. Qualifications: B.S. plus 2-3 years expertise in PCR, RNA extraction, subcloning is required. Experience in cDNA library construction is advantageous.

Senior associate scientist in molecular biology. Qualifications: B.S. plus 5 years experience. Familiarity with differential display technologies is advantageous.

**Protein Expression**
Associate scientist in protein chemistry. Qualifications: B.S. plus 2-3 years experience in recombinant protein expression and purification.

**Assay Development**
Associate/Senior Associate Scientist in protein chemistry/biochemistry. Qualifications: B.S. and experience in a wide variety of in vitro assays. Experience in developing and validating high throughput screening assays is desirable.

These positions are provided liberal research support, excellent library facilities and a good benefits package as part of Johnson & Johnson, the world’s largest and most comprehensive provider of health care products. Please submit your curriculum vitae to: Human Resources Manager, R. W. Johnson Pharmaceutical Research Institute, 3535 General Atomics Court, Suite 100, San Diego, CA 92121. Equal Opportunity Employer M/F/D/V.

---

**Expanding Minds**

**Improving Bodies**

At Chiron, our sights are set on helping people be their best. Whether they’re benefiting from our biotech breakthroughs ... or working with us to make it happen. Scan the following for an opportunity to transform your life and the practice of medicine.

**Scientist** - You will supervise and assist in the development of DNA assays required to support therapeutic and vaccine product development. Additionally, you will develop assays to monitor nucleic acid host impurities, plasmid identity and copy number; write protocols and validation reports; and develop DNA assays for release of final product and transfer to QC.

The qualified candidate will possess a Ph.D. with three years, or M.S. and five years of experience, or equivalent experience in molecular biology or related field. Five or more years experience in quantitation of DNA; experience with dot blot hybridization (isotopic and nonisotopic), assay development, and validation are also required. Demonstrated knowledge in PCR and threshold assay techniques preferred. The ability to work independently together with strong problem-solving and communication skills are essential.

If you have the dedication, spirit and flexibility to rise to our many challenges, send your resume to: Chiron Corporation, Human Resources, Box #95-042, 4560 Horton Street, Emeryville, CA 94608. We are an equal opportunity employer.

---

**Chairperson and Endowed Professorship**

**Chairperson and Endowed Professorship**

**Department of Environmental Health**

**The College of Medicine**

**University of Cincinnati**

Applications and nominations are invited for the CHAIR of the Department of Environmental Health and the Schmidtpap ENDOWED PROFESSORSHIP. The person filling this position will assume the leadership of a strong, well-funded, nationally recognized department with major areas of expertise in molecular and cellular toxicology, carcinogenesis, environmental health and hygiene, occupational medicine, biostatistics, epidemiology, and policy and risk assessment. Collaborative research and training programs involve the Colleges of Medicine, Engineering, and Arts and Sciences, and the Children's Hospital Research Foundation. The CHAIR will have the opportunity to expand the department in new directions and lead the recruitment of another endowed professorship within the department. The department currently has 38 full-time faculty members, more than 100 graduate students and postdoctoral fellows, and is housed in an independent research complex with recently constructed laboratory, office and classroom space.

We seek an individual with an internationally recognized research program in any aspect of environmental health science and a strong commitment to graduate biomedical education. The successful candidate must have a Ph.D., M.D., or equivalent degree and an established, well-funded research program. Preference will be given to individuals with demonstrated leadership skills and vision for the future advancement of environmental health science.

Interested applicants should submit a curriculum vitae (including publications, funding history, and graduate educational activities) and the names of at least three references to:

Dr. David Millhorn  
Chair, Search Committee  
Chairman, Department of Molecular and Cellular Physiology  
College of Medicine  
University of Cincinnati  
PO Box 670576  
Cincinnati OH 45267-0578

Review of candidates will begin immediately and continue until a suitable candidate is selected.

The University of Cincinnati is an affirmative action/equal opportunity employer. Women, minorities, disabled persons, Vietnam era and disabled veterans are encouraged to apply. UC is a smoke-free work environment.
1995 Prize for Research and Studies of the Repercussions of the Iraqi Invasion of Kuwait

The Kuwait Foundation for the Advancement of Sciences has institutionalized a prize for research and studies of the repercussions of the Iraqi Invasion of Kuwait, to recognize distinguished accomplishments in the Arts, Humanities and Sciences. The Foundation, in establishing this Prize, is fulfilling its objectives in encouraging scientists and researchers to participate in studies of the effects and repercussions of the Iraqi Invasion of Kuwait and its aftermath.

The Prizes awarded annually in the following fields:

A. Environmental Research
B. Historical Research
C. Psychological and Social Research
D. Economic Research
E. Story and Novel

Each Prize consists of a cash sum of K.D. 10,000/- (approx. U.S. $33,000/-) and a Certificate of Recognition.

The Conditions for awarding the Prize:

1. Nominee or researcher should be a qualified and acknowledged as a practitioner in the specific field of the Prize.
2. The scientific research submitted must be innovative and distinctive in its ideas, of direct relevance to the State of Kuwait, and must represent a significant contribution to knowledge in the specific field of the Prize.
3. The scientific research submitted must be based substantially on original work undertaken and must be published (in the form of books or articles in the recognized scientific literature) during the period subsequent to the Iraqi Invasion of Kuwait.
4. The candidate should not have been awarded a prize for the submitted work by any other institution.
5. KFAS announces the Prizes and its conditions annually.
6. Nominations for these Prizes are accepted from individuals, academic and scientific centers worldwide. No nominations are accepted from political entities.
7. The results of KFAS decisions regarding the selection of winners are final and the works submitted for nominations will not be returned regardless of the outcome.
8. Nominations with five copies of the scientific research and any inquiry concerning the Prize should be addressed before 31/10/1995 to:

The Director General
The Kuwait Foundation for the Advancement of Sciences
P.O. Box: 25263 Safat 13113, Kuwait
Tel: (+965) 2429780/Fax: (+965) 2403891
Telex: 44160 KEFAS
Tenure-Track and Postdoctoral Opportunities

Listed below are some of the outstanding research training opportunities that are currently available at the National Institutes of Health.

--- Tenure-Track Positions ---

**Assistant Professor Equivalent**

*Immunology*

**Stephen E. Straus, MD**

A tenure-track position is available for an MD or MD/PhD scientist to develop an independent research program on the nature and regulation of mucosal immune responses to viruses or bacteria. A record of imaginative bench research is required. Subspecialty training in Allergy/Immunology or Infectious Diseases is desirable. Space, a technician, postdoctoral fellows, research budget, and competitive salary are committed. Applicants must be US citizens or permanent residents. A two-page statement of research interests and goals should be submitted in addition to three letters of recommendation. Laboratory of Clinical Investigation (OE-74), NIAID, Building 10, Room 11N228, 10 CENTER DR MSC 1888, BETHESDA MD 20892-1888.

*Structural and Molecular Biochemistry*

**Kiyoshi Mizuuchi, PhD**

A position is available to work on a structural and molecular biochemical study of the mechanism of the transpositional recombination reaction of phage Mu. Candidates should have a strong background in X-ray crystallography, enzymology, or molecular biochemistry and have less than five years of postdoctoral experience. Laboratory of Molecular Biology (OE-74), NIDDK, Building 5, Room 237, 5 CENTER DR MSC 0540, BETHESDA MD 20892-0540.

*Transcriptional Gene Regulation*

**Keiko Ozato, PhD**

Mechanisms of action of transcription factors involved in gene regulation mediated by interferon/virus or by retinoids/vitamin A are studied. Functional interactions of these factors with the basal transcriptional machinery are studied using in vitro transcription assays. Genomic footprinting is used to study promoter occupancy in cells with targeted gene disruption. Candidates should have less than five years of postdoctoral experience. Laboratory of Molecular Growth Regulation (OE-74), NICHD, Building 6, Room 2A01, 6 CENTER DR MSC 6753, BETHESDA MD 20892-6753.

--- Postdoctoral Positions ---

*Immunology*

**Rachel R. Caspi, PhD**

The research focuses on cellular and molecular mechanisms in T cell-mediated autoimmunity affecting the retina. The goal is to understand the normal development and the pathological breakdown of self-tolerance to retinal antigens, and to use this information to develop immunotherapeutic approaches to uveitis. Rodent models and clinical material are available. Applicants must have experience in cellular and/or molecular immunology. Laboratory of Immunology (OE-74), NEI, Building 10, Room 10N222, 10 CENTER DR MSC 1858, BETHESDA MD 20892-1858.

*Signal Transduction and Oncogenesis*

**Jacalyn H. Pierce, PhD**

The role of oncogenes, growth factors, growth factor receptors and "downstream" mitogenic signal transducing molecules in neoplastic and normal cell proliferation is being studied. Emphasis is placed on signaling pathways mediated through cytokine and tyrosine kinase-containing receptors. Candidates should have experience in molecular and/or cellular biology techniques and less than five years of postdoctoral experience. Laboratory of Cellular and Molecular Biology (OE-74), NCI, Building 37, Room 1E24, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

*Additional Postdoctoral Fellowship Opportunities*

For an on-line listing of additional postdoctoral openings, you may access the NIH EDNET Bulletin Board POSTDOC conference via Internet (wylbur.eunih.gov) or modem (1,301-402-2221 or 1,800-358-2221) with parameters set at "E, Even, 11". When connected to NIH, type in "vtlOO" for terminal emulation, "F5E" for initials, and "A5L" for account number.

The Postdoctoral Research Fellowship Opportunities catalog, which describes intramural laboratories at the NIH, is also available by request. An electronic version of the catalog may be accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (http://www.nih.gov). When connected, select Research Opportunities at the NIH. If you would like to request a catalog or have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, 301-402-1603, Fax 301-402-0483.

**To Apply**

If you hold a doctoral degree (e.g., PhD, MD/PhD, MD, DO, DDS, DMD or DVM) accompanied by previous laboratory research experience, and would like to be considered for one of these positions, please send a cover letter, curriculum vitae, bibliography, and statement of research interests to the address listed with each position. In addition, please arrange to have letters of recommendation sent from three scientists who can provide an evaluation of your qualifications.
STA FELLOWSHIP PROGRAM

Postdoctoral Fellowships in Japanese National Laboratories

Introduction
The Science and Technology Agency (STA), an administrative organ of the Government of Japan, established the STA Fellowship Program in 1988 in order to offer opportunities for promising young foreign researchers in the fields of science and technology to conduct research at Japan's national laboratories and public research corporations (excluding universities and university-affiliated institutes).

The Program is also a response to calls from the international community of science and technology for greater international cooperation through the exchange of promising researchers.

Since Oct. 1, 1989, the Program has been managed by the Research Development Corporation of Japan (JRDC), a statutory organization under the supervision of STA, in cooperation with the Japan International Science and Technology Exchange Center (JISTEC). JRDC also has the strong support and cooperation of the Responsible Organizations listed in Table 1.

Fellowship Qualifications
The fellowships are open to young PhD holders of under 35 in principle, from universities, research councils, government research laboratories and industry. Any science or engineering discipline will be considered except military R & D.

Applicants should be of sufficient good health to pursue research activities in Japan.

Have sufficient language ability to pursue research activities in Japan, Japanese language ability is preferable, but English is sufficient in most cases. With the agreement of the host research institute, other languages may suffice.

Tenure and Field of Research
The tenure will be from 6 months to 2 years, to be decided upon through negotiation between the candidate and the host institute. The field of research will also be decided upon through negotiation between the candidate and the host institute, the results of research activities produced during the tenure will be subject to the regulations of the host institute.

Research field include: Mathematics; Physics; Geology; Electricity; Electrons; Information Engineering; Mechanics; Engineering Works; Architecture; Erosion Control; Landscaping; Chemistry; Metals; Resources Engineering; Medical Science; Pharmaceuticals; Agricultural Technology; Farming; Forestry; Fisheries; others in the Natural Science.

FELLOWSHIP AWARDS
Fellowships include round-trip air tickets (economy class; not available for dependents) and the following allowances:
1) Living allowance: 270,000 a month
2) Family allowance: 50,000 a month
3) Housing: Apartments will normally be provided to awardees. The apartment floor area is 40m² for awardees unaccompanied by their family and 60m² for awardees to stay with their family in other than metropolitan areas such as Tokyo. If an awardee prefers to use a larger apartment because of the family size or otherwise 106,000 maximum per month may be paid as housing allowance; any shortfall is to be borne by the awardee.
4) An initial international settling-in allowance: 200,000
5) An annual allowance of up to 115,000 for travel within Japan related to research activities.
6) Medical insurance (N.B. not available for dependents)

Assistance for Fellows
If they wish, Fellows may take advantage of the following assistance:
1) Free Japanese language courses for Fellows whose host research institutes are in Tsukuba area. Fellows whose institutes are located elsewhere are entitled to reimbursement of reasonable amounts for language tuition at a private school. (N.B. not available for dependents);
2) Since most apartments in Japan are unfurnished, basic furniture and electric appliances will be provided free of charge to Fellows.
3) Counseling on problems relating to such aspects of daily life as children's schooling, medical care and shopping, is available for Fellows living in Tsukuba area.

APPLICATION PROCEDURE FOR STA FELLOWSHIP (Fig 1)
Applicants possessing the nationality or citizenship or permanent resident status of a country listed in Table 1 should:
1) Contact the Responsible Organization in their country to obtain an application form and information about the host research institutes.
2) Communicate with host research institutes of interest to ascertain their suitability for the applicant's area of specialization.
3) After agreeing with the prospective host institute on the subject of research, the length of tenure and starting date for the Fellowship, the applicant should obtain from the institute a formal letter of acceptance expressing its willingness to serve as a host.
4) Submit the completed application form and the letter of acceptance to the Responsible Organization concerned. The Responsible Organization will then screen applicants, and submit its recommendations for Fellowship candidates to JRDC through JISTEC, accompanied by a complete dossier on the candidates.
5) JRDC will then conduct a further screening and notify successful applicants by sending a Letter of Award through JISTEC.

The Responsible Organization and the host research institute concerned will also be informed in this respect.
Table 1 RESPONSIBLE ORGANIZATIONS

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td>THE AUSTRALIAN ACADEMY OF SCIENCE</td>
</tr>
<tr>
<td></td>
<td>Ms. Bonnie Bauld</td>
</tr>
<tr>
<td></td>
<td>International Exchange Officer</td>
</tr>
<tr>
<td></td>
<td>GPO Box 783, Canberra ACT 2601</td>
</tr>
<tr>
<td></td>
<td>Tel: 61-6-247-3966 Fax: 61-6-257-4620</td>
</tr>
<tr>
<td>AUSTRIA</td>
<td>FEDERAL MINISTRY FOR SCIENCE AND RESEARCH</td>
</tr>
<tr>
<td></td>
<td>Ms. Susana Peterka</td>
</tr>
<tr>
<td></td>
<td>Administrative Officer, International Affairs</td>
</tr>
<tr>
<td></td>
<td>Minoritenpl atz 5, A 1014 Vienna</td>
</tr>
<tr>
<td></td>
<td>Tel: 43-222-531-20-6794 Fax: 43-222-531-20-6205</td>
</tr>
<tr>
<td>CANADA</td>
<td>NATURAL SCIENCE AND ENGINEERING RESEARCH COUNCIL</td>
</tr>
<tr>
<td></td>
<td>Ms. Dawn Conway</td>
</tr>
<tr>
<td></td>
<td>Director, International Programs</td>
</tr>
<tr>
<td></td>
<td>Constitution Square, Tower II</td>
</tr>
<tr>
<td></td>
<td>350 Albert Street, Ottawa, Ontario K1A 1H5</td>
</tr>
<tr>
<td></td>
<td>Tel: 1-613-947-0190 Fax: 1-613-992-5337</td>
</tr>
<tr>
<td>GERMANY</td>
<td>ALEXANDER VON HUMBOLDT-STIFTUNG</td>
</tr>
<tr>
<td></td>
<td>Dr. Michal Meier</td>
</tr>
<tr>
<td></td>
<td>Department Sponsorship Abroad</td>
</tr>
<tr>
<td></td>
<td>Jean-Paul-Str. 12, D-53173 Bonn</td>
</tr>
<tr>
<td></td>
<td>Tel: 49-228-833-101 Fax: 49-228-833-199</td>
</tr>
<tr>
<td>FINLAND</td>
<td>THE ACADEMY OF FINLAND</td>
</tr>
<tr>
<td></td>
<td>Ms. Ritva Helle</td>
</tr>
<tr>
<td></td>
<td>International Affairs</td>
</tr>
<tr>
<td></td>
<td>P.O. Box 57, SF-00551 Helsinki</td>
</tr>
<tr>
<td></td>
<td>Tel: 358-0-7748-316 Fax: 358-9-7748-379</td>
</tr>
<tr>
<td>FRANCE</td>
<td>CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE</td>
</tr>
<tr>
<td></td>
<td>Ms. Françoise Aubujeaut</td>
</tr>
<tr>
<td></td>
<td>Chief of Asia Division, Mission of International Relations</td>
</tr>
<tr>
<td></td>
<td>3-5 rue Michel-Ange, 75781 Paris Cedex 16</td>
</tr>
<tr>
<td></td>
<td>Tel: 33-1-44-96-46-91 Fax: 33-1-44-96-49-10</td>
</tr>
<tr>
<td>ITALY</td>
<td>MINISTERO DELL'UNIVERSITÀ E DELLA RICERCA SCIENTIFICA E TECNOLOGICA</td>
</tr>
<tr>
<td></td>
<td>Dr. Antonella Carrrisa</td>
</tr>
<tr>
<td></td>
<td>Department for International Relations-UFFICIO III</td>
</tr>
<tr>
<td></td>
<td>Piazzale J.F. Kennedy 20-00144 Roma</td>
</tr>
<tr>
<td></td>
<td>Tel: 39-6-59912819 Fax: 39-6-59912967</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN (STW)</td>
</tr>
<tr>
<td></td>
<td>Dr. C. A. M. Mombers</td>
</tr>
<tr>
<td></td>
<td>Program Officer</td>
</tr>
<tr>
<td></td>
<td>Postbus 3021, 3502 GA Utrecht</td>
</tr>
<tr>
<td></td>
<td>Van Vollenhovenlaan 661, Utrecht</td>
</tr>
<tr>
<td></td>
<td>Tel: 31-30-929275 Fax: 31-30-961536</td>
</tr>
</tbody>
</table>

Further information regarding the STA Fellowship and host institute is available from the responsible organizations, JISTEC and JRDC. (See below)

Japan International Science and Technology Center (JISTEC)
20-5, Takezono, 2-chome, Tsukuba City, Ibaraki Pref. 305 Japan
Tel: 81-298-53-8250 Fax: 81-298-53-8260

Research Development Corporation of Japan (JRDC)
Kawaguchi Center Building 1-8, Hon-cho 4-chome, Kawaguchi-city, Saitama Pref. 332, Japan
Tel: 81-48-226-5634 Fax: 81-48-226-5652
**Research Scientist**

**Biology of Cartilage**

The successful candidate will have a PhD in a relevant area with post-doctoral experience. A strong background in the biochemical and molecular aspects of cartilage is required. Within our rheumatology research department, the candidate will join a multidisciplinary team and will be responsible for research projects aimed at the discovery of new drugs for the treatment of osteoarthritis.

Please address a C.V. with handwritten letter, photo and salary expectations to PUBLIVAL/3071 – 27 Route des Gardes 92190 MEUDON (FRANCE)

---

**Faculty Psychiatrists**

*Research-Oriented Positions*

Payne Whitney Clinic, Manhattan & Westchester Division, White Plains

The Department of Psychiatry at Cornell University Medical College is recruiting research-oriented psychiatrists with MD-PhD or MD degrees and interests in biological and/or psychosocial areas. Potential openings exist in molecular and developmental neurobiology, epidemiology, services delivery, and psychotherapy research as well as fields related to developmental and child & adolescent psychiatry. Excellent facilities and support are available. Please send a curriculum vitae with list of publications, brief description of research interests, and copies of selected reprints. Jack D. Barchas, MD, Professor and Chair, Department of Psychiatry, CORNELL UNIVERSITY MEDICAL COLLEGE, 1300 York Avenue, Box 171, New York, NY 10021. EEO/AA/M/F/DV.

CORNELL UNIVERSITY MEDICAL COLLEGE

---

**The Third Research Grant Offer by Mizutani Foundation for Glycoscience**

**Mizutani Foundation for Glycoscience** invites grant applications for basic research on glycoscience. The suggested projects for this year include general studies in glycoconjugates: their organic chemistry, biochemistry, biophysics, molecular biology, cellular biology, and medical science.

**Qualification:** An applicant must (a) have a doctor’s degree, (b) have a documented capability of performing independent studies, and (c) be a member of a research institute where he or she can carry out the proposed project.

**Grant:** As much as ¥10,000,000 (approximately US$100,000 at the current exchange rate) may be requested per annum. As a rule the grant will be approved for one (1) year, but exceptional proposals may be considered for two (2) years. The total budget for research grants is approximately ¥100,000,000 per annum. However, the budget allocated for new research proposals may vary each year. The approved grant will be issued to the research institute to which the principal investigator is affiliated. The grant may be used for various items, but not for the stipend of the principal or collaborative investigators. No more than 10% of the grant may be used for indirect costs (overheads).

**Selection:** A new research proposal will be reviewed by members of a committee consisting of specialists appointed by the board of trustees of the foundation for originality, scientific merit, and feasibility. The potentiality of the principal investigator and the research environment will also be considered.

**Application Form and Deadline:** The official application form (in English) may be obtained by sending a letter or fax (no telephone calls) to the North American Office of Mizutani Foundation for Glycoscience: Department of Biochemistry, Meharry Medical College, 1005 David Todd Jr. Blvd., Nashville, TN 37208, USA (Fax: [1] 615-327-6442). A completed application form for a grant to be awarded on April 1, 1996 must be mailed on or before August 31, 1995 to:

Mizutani Foundation for Glycoscience: Sen-i Kaikan, Suite 5F, 3-1-11, Nihombashi-honcho, Chuo-ku, Tokyo 103, Japan (Fax: [81] 3-3246-1265, Phone [81] 3-3246-0224).

---

1. See this Journal 263, 1051 (1994) for a list of current awardees and their project titles.
BOSTON UNIVERSITY
SCHOOL OF MEDICINE
DEPARTMENT OF OPHTHALMOLOGY

The Department of Ophthalmology at Boston University School of Medicine seeks to recruit a basic science investigator with PhD, MD or equivalent degree to join the Massachusetts Lions Eye Research Laboratory. Faculty appointment in Ophthalmology with joint faculty appointment in appropriate basic science department; level commensurate with experience. Molecular biology/biochemistry or physiology/pharmacology preferred disciplines.

Candidate must have currently funded NIH or comparable independent support. Supplemental support and prime laboratory space in medical school's basic science building available. Minimal teaching and administrative obligations.

Interested individuals should send a curriculum vitae (including current funding), a concise statement of research plans and the names of three references to:

Search Committee
o Howard M. Leibowitz, M.D.
Department of Ophthalmology
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118

Boston University is an equal opportunity/affirmative action employer. Women and minority candidates are encouraged to apply.

GLOBAL CAREER OPPORTUNITIES

NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF BIOCHEMISTRY

Applications are invited for teaching appointments in the Department of Biochemistry.

Candidates should have either a PhD degree or an approved basic medical degree with a recognised higher academic/professional qualification. Preference will be given to candidates with teaching and research experience. A proven track record of high calibre, self-directed research in (a) regulation of gene expression; genetic forms of treatment for human diseases; and (b) physical and structural biochemistry, enzymology, bioenergetics and intermediary metabolism will be advantageous.

Gross annual emoluments range as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary Range (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturer</td>
<td>55,910-71,400</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td>65,200-122,820</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>108,820-151,480</td>
</tr>
</tbody>
</table>

(US$1.00 = S$1.40 approximately)

The commencing salary will depend on the candidate's qualifications, experience and the level of appointment offered. In addition, a 13th month Annual Allowance (of one month's salary) and an Annual Variable Component (of normally 2 months' salary) are payable at year end, under the flexible wage system, to staff on normal contracts.

In addition, appointees who possess an approved basic medical degree and a recognised higher academic/professional qualification may opt to retain consultation fees under the Consultation/Outside Work Scheme, or to receive a Fixed Allowance, the annual rates for which are as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary Range (S$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturer</td>
<td>6,000/9,000</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td>15,000</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>21,000</td>
</tr>
</tbody>
</table>

Leave and medical benefits will be provided. Depending on the type of contract offered, other benefits may include: provident fund benefits or an end-of-contract gratuity, a settling-in allowance, subsidised housing or a housing allowance, education allowance for up to three children subject to a maximum of S$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore.

All academic staff will be given a networked personal computer (Pentium or Macintosh Power PC) with access to a Cray supercomputer, UNIX hosts, departmental laser printers, a wide spectrum of software, on-line library catalogue, CD-ROM databases, Teleview, INtv and Internet.

Application forms and further information on terms and conditions of service may be obtained from:

The Director
Personnel Department
National University of Singapore
10 Kent Ridge Crescent
Singapore 0511

Enquiries may also be sent through BITNET to: PERLIMMJ @ NUS3090, or through Telefax: (65)7783948

University of Cambridge
Quick Professorship of Biology

Applications are invited from persons working in the field of molecular cell biology for the above Chair which became vacant on 1 March 1994 on the retirement of Professor C.C. Wylie. The University follows an equal opportunities policy.

Pensionable stipend £37,968.

Further information from the Secretary General of the Faculties, General Board Office, The Old Schools, Cambridge CB2 1TT. Applications (10 copies), marked 'confidential', with names of two referees by 1 May 1995.

The University aims to achieve the highest quality in teaching and research.
ASSOCIATE RESEARCH SCIENTIST—New York University Medical Center is currently looking for experienced molecular biologist with expertise in cloning PCR, RNA and DNA techniques. Familiarity with tissue culture and handling of cells required. Knowledge of immunology desirable. The project involves studies in gene expression in human cell lines and primary cultures of T cells and thymocytes. Send curriculum vitae to: Ms. Maha L. Singh, Professional Recruiter, New York University Medical Center, 550 First Avenue, New York, NY 10016.

RESEARCH ECOLOGIST, GS-408-12
($42,641 to $55,432)
Coastal and Estuarine Community Dynamics

The United States Environmental Protection Agency is looking for a full-time RESEARCH ECOLOGIST. The position is assigned to the Marine Ecosystems Research Branch at the Environmental Research Laboratory in Narragansett, Rhode Island. The Branch conducts scientific research aimed at quantifying, understanding and predicting the cumulative effects of anthropogenic activities on the structure and function of coastal ecosystems. The position serves as a principal investigator in a multidisciplinary team of scientists assigned to model the effects of anthropogenic stressors on productivity and sustainability of coastal marine ecosystems.

To qualify, applicants must have a degree in biology or a related field of science underling ecological research that included at least 30 semester hours in basic and applied biological sciences. These hours must have included at least nine hours in ecology and 12 semester hours in physical and mathematical sciences. In addition, applicants will be evaluated on the basis of their knowledge of coastal marine ecology, ecological modeling techniques and systems ecology.

If you are a current federal employee interested in applying for this position, you must request a copy of the announcement by calling the U.S. Environmental Protection Agency, Human Resources Office, at Las Vegas (HRO-LV) Jobline at 702-792-2418. Applications must be postmarked by April 14, 1995.

Non-federal applicants must call the Office of Personnel Management, Los Angeles Service Center (OPM-LA), at 818-575-6510 and request a special application package. Applications must be requested by April 14, 1995.

You must be a U.S. citizen to apply. The EPA is an Equal Opportunity Employer.

COURSES AND TRAINING
CARDIOVASCULAR PATHOPHYSIOLOGY FOR ENGINEERS AND SCIENTISTS


MARKETPLACE

custom custom custom custom custom custom custom custom custom custom

PEPTIDE and DNA

Phosphoryl, Thio-phosphoryl, Botryll, Chloromethyl, Cyclic, Dimeric, Partially protected, FITC, DNP, JNA, AMG, Phosphonothioate and more

IonSpray MS and LC/MS

Synthetic or natural compounds analysis: Drug metabolites, Enzyme digest, etc.

Call for more information (800-597-7873) or Fax us sequence for quotation (610-371-1154).

Circle No. 1 on Readers' Service Card

CIRCLE 391-2391

MARKETPLACE

DNA SYNTHESIS

CUSTOM

Antibody Only .......... $900.00

2 Rabbits, Conjugation & Delivery Included

With Peptide Synthesis .. $1200.00

Less Than 10 Residues

Purification, 2 Rabbits, Conjugation & Delivery Included

Fax (502) 968-1000 1-800-456-1403

Circle No. 31 on Readers' Service Card

CUSTOM DNA SYNTHESIS

PURE & SIMPLE

Price $2.19

$0.55/mer plus set-up

Superb Technical Support

Impeccable Quality

World’s Fastest Service

Fax 1-800-247-8766 FAX 915-694-2387

Circle No. 3 on Readers' Service Card

KEYSTONE

Reduced Prices
dna oligos

$2.25/base

No set-up fee

600 micrograms

Circle No. 6 on Readers' Service Card

Circle No. 391-2391

SCIENCE LOGO T-SHIRTS

Blue type on gray 100% cotton shirt.

Circle No. 1 on Readers' Service Card

Circle No. 7 on Readers' Service Card

Express Peptides

15 mg in 5 days

$25 per residue

Research Genetics, Inc.

Circle No. 5 on Readers' Service Card

2054

SCIENCE • VOL. 267 • 31 MARCH 1995
NOW THAT Operon's DNA is just $1.20 PER BASE, your savings are sure to multiply.

Here's something you can bank on. A 50 nmole scale synthesis of Operon's custom DNA for just $1.20 per base, with a $10.00 set-up fee.

This new, affordable price not only means you'll be able to conduct more experiments, it means your savings will grow with each project. And with our reputation for high-quality DNA, you'll get the results you need every time.

Of course, we still offer our 0.2 μmole scale for $2.00 per base with a $15.00 set-up fee and our 1.0 μmole scale for $2.80 per base with a $20.00 set-up fee.

Thanks to Operon's knowledgeable and experienced staff, you can always count on us for unmatched customer service, too. Because when it comes to meeting your needs, we really know how to hop to it.

For more information, or to place an order, call us toll-free at 1-800-688-2248.

© 1995 Operon Technologies, Inc. 1000 Atlantic Ave., Alameda, CA 94501, USA. Phone: (800) 688-2248 or (510) 865-8644. Fax: (510) 865-5255. E-mail: dna@operon.com. NIHBP A 263.00033233.

Circle No. 25 on Readers' Service Card
WORLD'S ONLY REFRIGERATED MICROCENTRIFUGE THAT CAN SPIN ALL THIS:

Centra® MP4R

No other refrigerated bench centrifuge can match the Centra-MP4R's extraordinary range of low to high speed applications.

For example, the MP4R can spin more tubes, faster, than dedicated refrigerated microcentrifuges. It separates a liter of sample in less space and in less time than other bench units. It takes batches of most tube sizes to 250 mL. And it has program memory, rate control for delicate samples, direct g-force control, and advanced features to meet the diverse needs of research applications.

So if you're in the market for a multipurpose centrifuge that can do it all, choose the one centrifuge that does it all best. The IEC Centra-MP4R.

WHY DIRECT G-FORCE CONTROL?

This new feature allows the user to program the Centra-MP4 and MP4R directly in g-force as well as in speed, thus eliminating the need for any calculation from one to the other.

Microcentrifugal Applications
- 24 x 1.5 mL to 16,250 xg; fast up/down; to -5°C at top speed. Takes 60 x 1.5 mL drum rotor.
- Large Volume Spins
  - 4 x 250 mL to 3300 xg; accepts a range of bottles including Falcon 175 mL conical.
  - Large Batch Spins
    - Up to 48 tubes/run; multi-place adapters for most tube sizes. Sealed carriers for aerosol-free processing.
- High Speed Pelleting
  - 10, 30 and 50 mL tubes to over 14,000 xg; 15 and 30 mL Corex® tubes to 12,000 xg.

Density Gradients
- Slow start and stop control and floating drive provide gentle sample reorientation for high yields.
- Microplates/Sample Trays
- Spins standard microplates in a variety of well formats; takes tall sample trays and stacked plates.
- Other Applications
- Specialized rotors for TB Sputum; microhematocrits; spin filters, concentrators & columns, microscope slides.

INTERNATIONAL EQUIPMENT COMPANY
300 SECOND AVENUE, NEEDHAM HEIGHTS, MA 02194, USA
TEL: (617) 444-6060 TOLL FREE: (800) 843-1113 FAX: (617) 444-6743

Quality... ISO 9001 • IEC 1010-2-2 • CFC free • CSA certified...Safety