Vignettes: Progress in Transportation

Whereas skiing began as a way of getting about and evolved into a sport, bicycling began as a sport activity and evolved into a means of transport. Even when the rider of a high-wheeled bicycle was not actually racing, he viewed his activity primarily as an athletic pastime. It was not easy to mount the high-wheeled bicycle . . . Uwe Timm . . . gives a convincing and colorful description of his uncle Franz Schröder’s efforts to learn how to ride a high-wheeled bicycle: “Schröder experienced this afternoon the large and fundamental difference between theory and practice. He mounted and fell down. The crowd of spectators was standing there and kept silent. He stood up again and fell off again.” He repeated this motion several times, to increasingly enthusiastic clapping and cheering: “Hopf, hopf, hopf, immer aufem Kopf!” By the end of the afternoon he had learned how to mount and ride in a straight line; making a curve and dismounting were not yet in his repertoire, so each little ride ended in a fall. However, after another week of trying (in which he lost two finger tips between the spokes of the front wheel), he had mastered the art of riding a high-wheeled bicycle. No wonder bicyclists wore an anxious air. “Bicyclist’s face,” this expression was called, and newspapers predicted a generation with hunchbacks and tortured faces as a result of the bicycle crazy.

—Wiebe E. Bijker, in Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change (MIT Press)

I recall Roy Rogers and Trigger—an all-terrain vehicle with abundant onboard intelligence. Trigger always knew where he was, could find his way home if necessary, and understood moment-by-moment what his master needed; horse and cowboy functioned as one. But when the horse vanished from everyday life, leaving behind the horseless carriage, the onboard intelligence went too; there was a technological gap to be filled. (Roy obviously didn’t have quite the same relationship to his jeep.) Increasingly, now, electronics are doing the job. Soon, our automobiles will be at least as smart as Trigger, and the car-and-driver relationship will return to the cowpoke-and-horseflesh mode. And when they get smarter still, the horseless carriage may evolve into the driverless automobile.

—William J. Mitchell, in City of Bits: Space, Place, and the Infobahn (MIT Press)
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Literature

Phenogel GPC/SEC Columns describes a line of columns for gel permeation chromatography and size exclusion chromatography. Phenomenex. Circle 149.

World Databases in Patents allows researchers to identify appropriate databases in the field of patents. Coverage includes trade names, patents, trademarks, and standards used throughout the world. Bowker-Saur. Circle 150.

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FACULTY POSITIONS in Molecular Immunology

The Department of Microbiology and Immunology of Miami has tenure-track faculty positions at the Assistant or Associate level in the area of Molecular Immunologists. We are particularly interested in individuals who examine cellular signaling, transcriptional regulation or molecular mechanisms underlying lymphocyte development, or apoptosis. The chief criteria for a candidate is proven excellence in research and the potential to develop an externally funded research program. Quality research papers on start-up funding will be made available to the successful candidates. Interested individuals are invited to write a letter of intent and enclose curriculum vitae, list of publications, description of future research plans, and names of three references to: Chairman, Molecular Immunology Search Committee, Department of Microbiology and Immunology, University of Miami School of Medicine, P.O. Box 016960 (R 138), Miami, FL 33101. Equal Opportunity/Affirmative Action Employer.

DEVELOPMENTAL/EVOLUTIONARY BIOLOGIST

ASSISTANT PROFESSOR

The Biology Department of St. Lawrence University invites applications for a tenure-track position at the ASSISTANT PROFESSOR level to begin Fall 1996. We are seeking a developmental/evolutionary biologist with a demonstrated competence to teach laboratory courses in developmental biology and genetics. The ability to teach comparative vertebrate morphology, evolution, and other courses in one’s area of expertise is also desired. The typical teaching load will be two lab courses per semester. A Ph.D. is required along with a commitment to teaching and to continue to develop adequate liberal arts level. The successful candidate will be expected to develop a strong research program that would involve undergraduates and to teach in the University’s interdisciplinary program for first year students prior to tenure evaluation. Experience using computer-based multimedia in teaching would also be desirable. Candidates should submit a statement combining philosophy and interest, a statement of current and future research interests, and have three letters of recommendation forwarded to: Dr. T. Budd, Biology Department, St. Lawrence University, Rodoma Drive, Canton, NY 13617. Applications should be postmarked no later than January 26, 1996. St. Lawrence University is an Affirmative Action/Equal Employment Opportunity Employer. Women, minorities, veterans, and persons with disabilities are encouraged to apply.

TERRESTRIAL VERTEBRATE ECOLOGIST

The Department of Biological Sciences, University of Wisconsin-Milwaukee (UWM), anticipates opening a tenure-track position in terrestrial vertebrate ecology at the ASSISTANT PROFESSOR level. We seek applicants with broad training and experience involving population and/or community ecology. Candidates are expected to develop a vigorous externally funded research program and to supervise Ph.D. and M.S. research. The Department has an active research faculty in ecology and evolution, and the UWM Field Station affords unique facilities for research and instruction. Teaching responsibilities include sharing a general ecology course, teaching an advanced course in ecology or area of organismal specialty, and periodic participation in the general biology curriculum. Additional information about the department is available at http://www.uwm.edu/Dept/Biology. Applicants should submit a curriculum vitae, statements of research and teaching interests, pertinent reprints, and three letters of reference to: Chairperson, Ecologist Search Committee, Department of Biological Sciences, University of Wisconsin-Milwaukee, P.O. Box 413, Milwaukee, WI 53201. Deadline for application is February 2, 1996. The names of those nominees and applicants who have not requested that their identities be withheld at the time of being listed to be included in the file. The University of Wisconsin-Milwaukee is an Affirmative Action/Affirmative Action Employer. Women and minority scientists are encouraged to apply for this position.

ASSISTANT DEAN for Engineering, Math, and Science

The College of Charleston, Department of Biology, invites applications for a tenured-track position at the ASSISTANT PROFESSOR level. Candidates must possess the Ph.D. degree, a strong commitment to teaching, and an active research program that has the potential for undergraduate involvement. Teaching responsibilities include plant physiology, gross anatomy, and general biology. There is a strong interest in applicants with a liberal arts institution whose primary aim is teaching excellence. In addition to its undergraduate programs, the department offers graduate degrees in marine biology and environmental studies. Applications should submit curriculum vitae, a statement of teaching philosophy and research interests, reprints of recent publications, and three letters of reference to: January 20, 1996 to: Chair, Department of Biology, Plant Physiology Search Committee, College of Charleston, Charleston, SC 29424. The College of Charleston is an Equal Opportunity/Affirmative Action Employer.

PLANT PHYSIOLOGIST

The College of Charleston, Department of Biology, invites applications for a tenure-track position at the ASSISTANT PROFESSOR level. Candidates must possess the Ph.D. degree, a strong commitment to teaching, and an active research program that has the potential for undergraduate involvement. Teaching responsibilities include plant physiology, gross anatomy, and general biology. There is a strong interest in applicants with a liberal arts institution whose primary aim is teaching excellence. In addition to its undergraduate programs, the department offers graduate degrees in marine biology and environmental studies. Applications should submit curriculum vitae, a statement of teaching philosophy and research interests, reprints of recent publications, and three letters of reference to: January 20, 1996 to: Chair, Department of Biology, Plant Physiology Search Committee, College of Charleston, Charleston, SC 29424. The College of Charleston is an Equal Opportunity/Affirmative Action Employer.

VASCULAR MOLECULAR BIOLOGIST

The Whitaker Cardiovascular Institute at Boston University School of Medicine invites applications for a full time STAFF SCIENTIST/RESEARCH ASSISTANT PROFESSOR beginning as early as January 1996. This is a non-tenure-track position for which a Ph.D. is required. Responsibilities include participating in a research team in vascular biology in the Institute and developing scientific research projects of his or her own. Aggressive grant seeking is not required. Teaching responsibilities include 6 credits per year in vascular, transcriptional and vascular biology, and three letters of recommendation by February 1, 1996 to: Dr. Joseph Loscalzo, Director, Whitaker Cardiovascular Institute, Boston University School of Medicine, 700 Albany Street, Boston, MA 02118-2394. Boston University is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

EVOLUTIONARY NEUROBIOLOGY AND MOLECULAR BIOLOGY

Applications are invited for three tenure-track ASSISTANT PROFESSOR faculty positions in Evolutionary Neurobiology, Immunology and Molecular Biology. The Division of Life Sciences at the University of Texas at San Antonio, San Antonio, TX 78284 by January 31, 1996. Applicant must identify the position for which he or she is applying. Positions are pending budget approval.

ASSISTANT PROFESSOR in Neuronal Development and Neuroimmunology

The Division of Life Sciences at the University of Texas at San Antonio, San Antonio, TX 78284 by January 31, 1996. Applicant must identify the position for which he or she is applying. Positions are pending budget approval.

ASSISTANT PROFESSOR in Immunology

The Division of Life Sciences at the University of Texas at San Antonio, San Antonio, TX 78284 by January 31, 1996. Applicant must identify the position for which he or she is applying. Positions are pending budget approval.

ASSOCIATE PROFESSOR in Immunology

The Division of Life Sciences at the University of Texas at San Antonio, San Antonio, TX 78284 by January 31, 1996. Applicant must identify the position for which he or she is applying. Positions are pending budget approval.
ASSISTANT OR ASSOCIATE PROFESSOR
UNIVERSITY OF CONNECTICUT
Biotechnology Center and Department of Animal Science

The University of Connecticut Biotechnology Center and the Department of Animal Science are seeking applicants with significant experience in order to enhance and help develop a vibrant program in the field of mammalian transgenesis and its application to animal production, health, and/or products of high economic value. This new appointment will be made at the rank of TENURE-TRACK Assistant or Associate Professor. The successful applicant will have responsibility for: (a) developing a transgenic Animal Research Center (ARC) of a large, rapidly growing biomedical research facility that relies heavily on rodents and currently houses 5,000 mice. The Director is responsible for the administrative aspects of the program, including budgets, personnel allocation, physical facilities (120,000 sq ft, including both university-owned animal quarters and surgical facilities) and services that facilitate the humane care and use of animals in research at UT Southwestern Medical Center, and (b) developing a research program that will be responsible for maintaining a cost-effective, virus-free, and pathogen-free environment.

The position of DIRECTOR of Animal Resources Center at The University of Texas (UT) Southwestern Medical Center is available immediately. The Director reports to the Dean through the Office of the Associate Dean for Academic Affairs and is responsible for managing the AAALAC-accredited Animal Resources Center (ARC) of a large, rapidly growing biomedical research facility that relies heavily on rodents and currently houses 5,000 mice. The Director is responsible for the administrative aspects of the program, including budgets, personnel allocation, physical facilities (120,000 sq ft, including both university-owned animal quarters and surgical facilities) and services that facilitate the humane care and use of animals in research at UT Southwestern Medical Center, and (b) developing a research program that will be responsible for maintaining a cost-effective, virus-free, and pathogen-free environment.

The University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.

FACULTY POSITIONS

AIDS and Other Chronic Viral Infections Research

The Institute of Human Virology of the University of Maryland Biotechnology Institute and the University of Maryland at Baltimore (School of Medicine) invite applications for TWO TENURE-TRACK positions. Ph.D. or M.D. with Ph.D. in virology, or M.D. with Ph.D. in virology in addition to a Ph.D. in virology. Experience in virology and/or virology research is required. Submit letter of application, curriculum vitae, a statement of current and future research interests, and three references to: Chair, Search Committee, Department of Animal Science, University of Maryland, College Park, Maryland 20742-2411.

The University of Texas Southwestern Medical Center is an Equal Opportunity/Affirmative Action Employer.

BIOL OGY POSITION

Chowan College invites applications for a TENURE-TRACK position in Biology, effective fall 1996. Applicants must have a Ph.D. in the biological sciences, with an emphasis on environmental biology, and two to four years of postdoctoral research or teaching experience is preferred. The college is currently expanding its Division of Science to include a biology major with an environmental track. New courses will utilize Chowan’s ideal location between the Roanoke River and Chowan River basins about 80 miles from the coast. The primary responsibility of this position is teaching introductory courses and a variety of upper-level courses. Chowan College is a small liberal arts college in rural northeastern North Carolina. Send curriculum vitae, undergraduate and graduate transcripts, and three letters of reference to: Dr. Bonnie C. Reville, Division of Science, Chowan College, P.O. Box 1848, Murfreesboro, NC 27857. Deadline for applications is February 1, 1997. Chowan College is an Equal Opportunity/Affirmative Action Employer.

BIOSTATISTICIAN

The Department of Biometry and Epidemiology of the Medical University of South Carolina (MUSC) in Charleston is expanding its program in clinical trials research. It is seeking candidates for the following positions:

Three FACULTY POSITIONS will be filled this spring. The positions involve research, graduate teaching, and participation in the design and conduct of trials. The academic levels are open.

Please send curriculum vitae and names of three to five references to: David G. Hoel, Chair, Department of Biometry and Epidemiology, Medical University of South Carolina, 155 Ashley Avenue, Charleston, SC 29425-2203. MUSC is an Equal Opportunity/Affirmative Action Employer.

PETROLEUM CONSERVATION BIOLOGIST

The Petroleum Conservation Research Institute seeks applicants for a tenure-track position. Applicants should have a Ph.D. in the biological sciences and should have experience in the area of petroleum conservation. Applications will be accepted until the position is filled.

The Petroleum Conservation Research Institute is an equal opportunity employer.

VERTEBRATE CONSERVATION BIOLOGIST

The University of Wisconsin-Madison, Institute of Zoology, seeks applicants for a faculty position as Assistant Professor. The successful candidate will have a strong background in vertebrate conservation biology and have experience in field and laboratory research. The successful candidate will have a strong background in vertebrate conservation biology and have experience in field and laboratory research. The University of Wisconsin-Madison is an equal opportunity employer.

FACULTY POSITION IN X-RAY CRYSTALLOGRAPHY

The Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School and the Dana-Farber Cancer Institute are seeking a candidate for a position at the ASSISTANT PROFESSOR level to be located at the Dana-Farber Cancer Institute. Applicants should have an interest in the application of x-ray crystallography to study the structure and function of proteins in structural biology, biochemistry, pharmacology, and cancer. The successful candidate will join an outstanding interactive group of drug discovery scientists in the Harvard Medical School community. Interested applicants should send their curriculum vitae, a statement of research interests, and three letters of reference to: Professor Charles K. Schwartz, Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, 240 Longwood Avenue, Boston, MA 02115.

The Dana-Farber Cancer Institute is an equal opportunity employer.

DIRECTOR

Glen H. Brown Liquid Crystal Institute

Kent State University invites applications and nominations for the position of Director, Liquid Crystal Institute, which has a long history of performing research related to the science and technology of liquid crystals, funded by a combination of State of Ohio funds at the level of $4 million per year. Approximately 90 faculty and students are supported by the Institute. In addition to its research mission, the Institute offers a doctoral program in chemical physics. The DIRECTOR of the Liquid Crystal Institute also serves as the Director of the Advanced Liquid Crystal and Optical Materials (ALCOM) Science and Technology Center, a consortium of Kent State, Case Western Reserve University, and the University of Akron, which is jointed supported by the National Science Foundation and the State of Ohio. The successful candidate must present scientific and research qualifications that will support appointment to a tenured position in one of the academic units and have demonstrated University and sufficient administrative experience to support an appointment as the Director of the Liquid Crystal Institute.

Letters of nomination and applications should be sent to:

LCCI Search Committee
e/o Vice Provost and Dean
Research and Graduate Studies
Kent State University
P.O. Box 5190, Kent, OH 44242

Completed applications consist of a letter of application, a curriculum vitae, a statement of research interests, and three letters of reference to be sent to: LCCI Search Committee, e/o Vice Provost and Dean, Research and Graduate Studies, Kent State University, P.O. Box 5190, Kent, OH 44242.
By a very wide margin, the East Coast is home to most of the industrial science in the United States. Almost all of the top 50 pharmaceutical companies are west of the Mississippi. And although California may be the cradle of biotech, the East Coast, according to Biotech '96, Ernst & Young's tenth annual industry report, has six of the top eleven biotech centers in the United States, including New England (second, with 177 companies), the Mid-Atlantic States (third with 111), New York (fifth with 84), New Jersey (seventh with 65), the Philadelphia/Delaware Valley area (eighth with 60), and North Carolina (eleventh with 47).

When scientists look for jobs, then, most will go east. What does 1996 look like from there? And what should job-seekers be considering as they ready their portfolios?

**Plus Ça Change.** In 1995 a now-familiar pattern continued among the traditional pharmaceutical companies: merger, downsizing, reshaping, and regrouping. Glaxo Holdings acquired Burroughs Wellcome plc to create Glaxo Wellcome, the world's largest drug company. Hoechst AG acquired Marion Merrell Dow, the world's third largest. Such activity will continue in 1996.

In biotech, 1995 was an equivocal year. For the first time in history, the total number of US biotech companies decreased (by a couple). Mergers were big in biotech, too, with Agening acquiring Synergen, Ligand merging with Glycomed, and biosys merging with Crop Genetics and AgriDyne. **Consortium** became a watchword in 1995, as at least two giant companies financed and organized multicompany alliances focusing on a particular field. Rhône-Poulenc Rorer created RPR Gencell, an alliance of 14 companies in Europe and the United States, to concentrate on gene therapy and gene cell therapy. Pâžer has created Pfizerg, a group of five companies here and in the United Kingdom, to investigate genomics. While consortia don't necessarily mean more jobs, they do focus hiring interest on particular fields.

**Pharma's New Farm System.** After a cautious decade, big pharma has acknowledged that biotech is where next century's products will be born. Except for a few ultralarge companies (Merck being a prime example), emphasis has shifted from in-house basic research to alliances, mergers, partnerships, and collaborations with smaller biotechs. Schering-Plough has entered at least five such partnerships since 1994; Ciba-Geigy, already 49.9 percent owner of Chiron, entered collaborations with Medarex and Myriad Genetics. Johnson & Johnson, Warner-Lambert, and Eli Lilly, among many others, are all creating new biotech farm teams.

**The Hot Fields of 1996.** Cost-cutting, a competitive market, and the national health-care debate have focused everyone on their strongest products and technologies. For the huge phamas, such focusing is both a huge gamble and their best chance for continued success. Biotechs, in general, have accepted that they are suppliers rather than do-it-alls, meaning that they, too, increasingly are putting their best fields forward. So what will those fields be in 1996? The list is truly august:

- **Genomics.** Scientists who can identify and exploit segments of the human genome for therapeutic purposes, please apply.
- **Informatics.** This field will produce the scientists who can make the genomic numbers sing. Big pharma is spending a great deal to gain entry.
- **Combinatorial chemistry.** What was once a test tube is now a mainframe. Those who can create libraries and make them speak, protein to organic molecule, will be welcome up and down the East Coast.
- **Gene therapy.** Yes, it's seductive, but will it work? Many companies believe it can, and they are looking for scientists who will prove them right.
- **Oncology, virology, cardiology, neurology, gerontology.** Pharmaceutical companies make most of their money from one or more of these fields. Biotech pipelines are full of products related to cancer, AIDS and other immunologic diseases, and cardiovascular disease.
- **Clinical experience.** The position of clinical research associate—who may have anything from a PhD to a BS—is probably the hottest job in industrial science.

**East Coast Job Prospects.** Some good, some mixed. The total number of new positions opening in 1996 is not likely to be very different from that in 1995. That's the mixed part. The good part is that competition for excellent science talent has never been keener. If you're good, and good in an attractive field, people will be interested.

It's worth noting that most experts expect 1996 to be a record year for FDA approvals of biotech products. Job-seekers should know what's being approved, how it's doing, and what else is coming up. Success creates markets, which in turn create jobs.

**Becoming Your Own Expert.** Since hiring needs will vary from company to company, the job-seeker must become an expert on his or her target companies. A company that has just had an unpromising clinical trial or an FDA turnaround will not be in a hiring mood; neither will one with a slack pipeline. But companies who have recently had a product approved will be looking for people in development and manufacture. Companies with well-stocked pipelines may need people in clinical development.

**Rethinking the Science Career.** Science is changing, business is changing, and the business of science is changing. Old conceptions of the scientist's career—lifetime tenure in a single position at a single company—are giving way to what's really happening. Scientists are likely to change jobs about as often as most nonscientists do: four or more times in a working life. Even the very notion of the career is giving way to that of the portfolio—the bag of scientific skills, experiences, and problem-solving abilities the scientist carries from position to position.

The year 1996 will continue a truly explosive period of scientific innovation, and East Coast companies are growing and combining in new ways to make that innovation bear fruit. What job-seekers lose in security, then, they will gain in excitement. Excellence in science, peripheral market vision, and a flair for team science will open doors from Maine to Florida.
Postdoctoral Opportunities In The Biomedical Sciences.

The following research training opportunities are currently available at the National Institutes of Health.

Biochemistry of Development
Brian Oliver, PhD

Germ cells, set aside early in the development of nearly all metazoans with only two differentiation options spermatogenesis or oogenesis, are being studied. Applicants must have an interest in multidisciplinary approaches to development and have less than five years of postdoctoral experience. Laboratory of Cellular and Development Biology (OE-108), NIDDK, Building 6, Room B1-05, 6 CENTER DR MSC 2715, BETHESDA MD 20892-2715.

Cardiac Physiology/Energetics
Robert S. Balaban, PhD

The molecular processes involved in the regulation of cardiac energy metabolism and blood flow are being studied in vivo and in vitro. These studies involve the use of non-invasive technologies including NMR and optical spectroscopy as well as conventional biochemical methodologies. Specific studies on the role of intracellular calcium and mitochondrial F1-ATPase modulation in these processes is being evaluated. A strong background in either cardiac physiology, cellular energetics or mitochondrial metabolism is desirable. Laboratory of Cardiac Energetics (OE-108), NHLBI, Building 10, Room B1D-161, 10 CENTER DR MSC 1061, BETHESDA MD 20892-1061.

Molecular Biology and Fatty Acid Biochemistry
Darryl C. Zeldin, MD

Novel human cytochrome P450 enzymes that metabolize fatty acids are cloned and expressed, and the catalytic properties of the recombinant, purified proteins are evaluated by HPLC. Regulation of gene expression is studied using Northern analysis, RT-PCR, protein immunoblotting, immunohistochemistry and in-situ hybridization. Applicants should have a strong background in cell and molecular biology and less than five years of postdoctoral experience. Laboratory of Pulmonary Pathobiology (OE-108), NIH, Bethesda, MD 20892-5440.

Molecular Biology and Genetics
Stephen J. Marx, MD

The genes regulating growth and secretion in endocrine-related tissues are being studied. Emphasis is upon processes whose disruption causes acquired or hereditary disease in man. Major interests include the parathyroid glands and the tumor suppressor gene causing familial multiple endocrine neoplasia type 1. Position available July 1, 1996. Applicants must have a PhD and/or MD and less than five years of postdoctoral experience. Genetics and Endocrinology Section (OE-108), NIDDK, Building 10, Room SC101, 10 CENTER DR MSC 1002, BETHESDA MD 20892-1802.

Molecular Endocrinology
Sheue-yann Cheng, PhD

The effects of thyroid hormones on the growth and development of tumors are being studied with particular emphasis on the regulation of cell cycles and the interaction of thyroid hormone receptors with the tumor suppressor p53. A strong background in molecular biology, cell biology and biochemistry is preferred. Applicants must have less than five years of postdoctoral experience and be US citizens or permanent residents. Gene Regulation Section, Laboratory of Molecular Biology (OE-108), NCI, Building 37, Room 2D24, 37 CONVENT DR MSC 4255, BETHESDA MD 20892-4255.

Molecular Mechanisms of T-Cell Activation
Brian Safer, MD, PhD

Regulation of translation initiation factor gene expression has an important role in the mitogenic response of T-lymphocytes. The laboratory is studying regulation obtained as the result of two overlapping and opposing promoters which generate double-stranded RNA to regulate eIF-2α. Applicants must have a strong background in molecular biology and less than five years of postdoctoral experience. Molecular Hematology Branch (OE-108), NHLBI, Building 10, Room 7D18, 10 CENTER DR MSC 1654, BETHESDA MD 20892-1654.

Molecular Neurobiology
Ian A. Simpson, PhD

The transport of glucose into the mammalian brain is mediated by a family of transporter proteins. Mutations and altered expression of these proteins in humans is associated with a variety of neurological conditions. Candidates will analyze these conditions and create transgenic equivalents. Candidates must have a strong background in molecular biology and genetics with a clear interest in neuroscience and must have less than five years of postdoctoral experience. Diabetes Branch (OE-108), NIDDK, Building 10, Room S1N2, 10 CENTER DR MSC 1420, BETHESDA MD 20892-1420, Phone 301-496-5953, Fax 301-402-0432.

Additional Opportunities

The NIH/EDNET Bulletin Board POSTDOC (fellowship positions) and TENURE (tenure track positions) conferences are accessed via a modem (301-402-2221 or 800-358-2221 with parameters set at 7,Even,1) or the Internet using Telnet (uyildbr.cu.nih.gov) or the World Wide Web (URL: telnet:uyildbr.cu.nih.gov). When connected to NIH, key in .vt100 for terminal emulation, .FSE for initial, and A,J,L,I for account number. To view tenure track positions, quit the POSTDOC conference and join the TENURE conference.

An electronic version of the Postdoctoral Research Fellowship Opportunities catalog is accessed via the Internet using either the Gopher Information System (gopher.nih.gov) or the World Wide Web (URL: http://www.nih.gov). When connected with Gopher, select Grants and Research Information and then NIH Office of Education. When connected with WWW, select Grants and Contracts and then NIH Office of Education. If you have further questions, please contact the NIH Office of Education, Building 10, Room 1C129, 10 CENTER DR MSC 1158, BETHESDA MD 20892-1158, Phone 301-496-2427, Fax 301-402-0483.

To Apply

If you hold a graduate doctoral degree (e.g., PhD, MD/PhD) or a professional degree (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.
**Sr. or Principal Research Scientist**

The DuPont Merck Pharmaceutical Company has an opening at its facility in Wilmington, Delaware for a candidate to design, implement and conduct enzyme and receptor-based assays leading to novel drug discovery for Inflammatory Diseases. Perform protein purification to enable identification of therapeutically relevant protein targets. Independently plan, schedule and monitor experimental approach. Assume responsibility for research project leading to recommendations of new discovery targets and approaches. Ph.D. in biochemistry. Expertise in enzymology, protein purification and molecular biology. Knowledge and experience inflammation and signal transduction are highly desirable.

DuPont Merck offers a competitive salary and an excellent benefits package. Please send resume to: Human Resources S/IDR, The DuPont Merck Pharmaceutical Company, P.O. Box 80400, E400/2413, Wilmington, DE 19880-0400. An Equal Opportunity Employer M/F/D/V.

**DU PONT M E R C K**

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**Genetic Therapy Inc.**

**Non-Viral Gene Therapy**

Genetic Therapy Inc., based in the Washington D.C. area, is expanding its research activities in the area of non-viral gene delivery. We are seeking highly motivated individuals to join a new research team which will develop non-viral vectors for in vivo applications. This program will complement existing strengths in retrovirus and adenovirus vectors, and will provide opportunities for collaborative interactions with research groups working to develop gene therapies for inherited and acquired disorders.

**Group Leader**

The successful applicant will have a Ph.D. in a scientific discipline or M.D. degree with at least 5 years of relevant research experience. Individual must have experience in gene therapy research and familiarity with non-viral gene delivery vectors. A strong publication record, excellent communication skills and supervisory experience are required for this leadership role. (Attn: 71-072-7/S)

**Research Scientist II**

Applicants should have a Ph.D. in a scientific discipline or M.D. degree with at least 2 years of experience in gene therapy research or a related field. Experience in the development or application of non-viral vectors would be an advantage. Good communication skills and a strong publication record required. (Attn: 70 - 072-7/S)

GTI offers a stimulating and challenging environment in a rapidly growing company, with competitive salary and benefits. Please specify position when applying. Fax or send resume to:

Genetic Therapy, Inc.
938 Clopper Road
Gaithersburg, MD 20878
Fax: (301) 948-0503
Genetic Therapy is an Equal Opportunity Employer.

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**Technology Transfer Services Director**

**The University at Buffalo** invites applications for the position of Director, Technology Transfer Services. The appointee to this position will manage a comprehensive program for technology transfer which will focus on the marketing and licensing of intellectual and tangible property developed by faculty and staff of the university. Responsibilities will include determining patentability and marketability of technologies, administration of intellectual property protection, patent filing and prosecution, preparation and execution of marketing plans, negotiation, drafting and monitoring of license agreements, administration of office and legal services budgets, and review of sponsored program agreements relating to intellectual property. The appointee will also be expected to participate in the formulation, interpretation and implementation of policies relating to technology transfer and university outreach and to inform the faculty and staff of these policies. The position reports to the Vice President for Research.

**The University at Buffalo** is the largest and most comprehensive public research university in New York and New England. Sponsored program expenditures in 1994-95 exceeded $120 million. During this period, 63 disclosures were received, 24 patent applications filed, 14 patents issued and 10 license agreements executed. Inventive activity and licensing income have increased significantly during the five-year history of this office. The campus director supervises three professionals and four graduate/law interns.

Requirements include a thorough understanding of technology transfer, preferably in a university environment, a solid technical background, an advanced degree in management, law, science or engineering, and preferably three years full-time experience with increasing responsibilities in technology transfer. Excellent communication and interpersonal skills are crucial.

Applications/nominations should be sent to:

Chair, Technology Transfer Search
University at Buffalo
516 Capen Hall, Box 601611
Buffalo, New York 14260-1611
Fax: 716-645-6792

Applications will be accepted until the position is filled.

**UNIVERSITY AT BUFFALO**

State University of New York

The University at Buffalo is an Equal Opportunity, Affirmative Action Employer. Applications from members of minority groups and women are encouraged.
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Working in our Plant Sciences Group, you will develop a marker-aided selection program and DNA fingerprinting to support breeding programs in softwoods and hardwoods. The position requires strong interaction with geneticists in the Forest Resources Division.

Ph.D. in Genetics is essential. Experience in genomic mapping and identification of quantitative trait loci required, experience in forest tree genetics a plus. Must provide evidence of experience in recent publications.

The Technology Center is conveniently located at the intersection of I-95 and Princeton Pike in Lawrenceville, NJ. We offer an attractive benefits package in an organization with a strong commitment to excellence and to its employees. For immediate consideration, please fax/mail resume with salary requirements to: Ms. Jacki DiFranco

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NATIONAL CANCER INSTITUTE / DIVISION OF CANCER PREVENTION AND CONTROL
BETHESDA, MARYLAND

Opening Date: December 11, 1995 Closing Date: January 29, 1996
Announcement Number: CA-95-0227

CHIEF, APPLIED RESEARCH BRANCH

The Division of Cancer Prevention and Control (DCPC), National Cancer Institute (NCI), is seeking candidates to fill the position of Chief of the Applied Research Branch (ARB).

ARB is one of five extramural research branches within the Cancer Control Research Program, DCPC. The Branch conducts a variety of research and evaluation activities. Emphasis is placed on interdisciplinary studies that integrate modeling and statistical methods (including specific surveillance research methods), cancer risk assessment (including risk factor surveillance and methodological research to improve risk factor assessment), health services and economics.

The Chief plans, manages, and directs the activities of ARB, utilizing a variety of resources and funding mechanisms, as well as trans-agency and private sector collaborations. Individuals interested in the Branch Chief position should have skills and expertise relevant to the following areas: knowledge of statistical techniques and methodology sufficient to develop new or improved methods related to cancer studies (involves independent applications research); ability to initiate, manage and assess cancer prevention and control research programs (can lead research teams, including scheduling and resource allocation); ability to communicate orally and in writing related to area of expertise (includes publications and presentations, group, committee work); ability to collaborate and confer with scientists both within and outside NIH in a variety of biomedical disciplines on study design, methodology, implementation, analysis and presentation of results.

Because of the diverse nature of the research performed within the Applied Research Branch, individuals with a range of backgrounds will be considered for the position, e.g., statisticians, operations research scientists, health services research scientists, economists, epidemiologists, and medical officers. Candidates must hold a doctoral level or medical degree in a relevant scientific field. In addition, candidates must have extensive interdisciplinary research experience using analytic and epidemiologic approaches to the study of disease in community-based and clinical settings. Candidates must have satisfactory experience in the administration and management of a research program related to cancer surveillance. Candidates must be a United States citizen.

The salary range is $67,941 to $88,326 commensurate with education and experience. Qualified physicians who are employed as Medical Officers may be paid a salary range of $72,471 to $92,856 and an additional Physician's Comparability Allowance of up to $20,000.

To obtain information on the application procedures and documents required for consideration for this position, candidates may contact the National Cancer Institute, Office of Human Resources and Consulting Branch at 301-462-7286. To obtain a fax of this information, call 1-800-728-5627 and enter fax ID # 1605.

FOR INFORMATION REGARDING THE POSITION CONTACT BRENDA K. EDWARDS, PHD, ASSOCIATE DIRECTOR, CANCER CONTROL RESEARCH PROGRAM, (301) 496-8506.

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

NCI IS AN EQUAL OPPORTUNITY EMPLOYER

ASSISTANT PROFESSOR

The Department of Biology and Biotechnology at Worcester Polytechnic Institute (WPI) invites applications for a tenure track position at the assistant professor level. Preference will be given to researchers of exceptional promise who are using modern techniques to study problems in immunology or neurobiology, but other research areas will also be considered. Ph.D. and postdoctoral experience are required. Since all WPI majors complete a senior research project, the successful candidate will supervise the research of undergraduate students, as well as graduate students in our M.S. and Ph.D. programs. Teaching responsibilities include a sophomore level general biology lab course, and an advanced course in the specialty area.

Send letter of application, curriculum vitae, statement of research goals, and 3 letters of reference to Human Resources, WPI, Box BIO, 100 Institute Road, Worcester, MA 01609-2280. Visit our web site at http://www.wpi.edu

WPI offers a smoke free environment. To enrich education through diversity, WPI is an affirmative action, equal opportunity employer.

The R. W. Johnson Pharmaceutical Research Institute (RWJPRI) is a worldwide research and development organization within Johnson & Johnson, the world's largest and most comprehensive provider of health care products. RWJPRI performs R&D activities for the Johnson & Johnson companies ... Cilag, Ortho-McNeil Pharmaceutical, Ortho Biotech and Ortho Dermatological.

To move our current research forward, we are now seeking two talented individuals to join us in CENTRAL NEW JERSEY and participate in a multi-disciplinary team effort directed towards identifying and exploiting novel targets and approaches for manipulating the immune response.

SCIENTIST/SENIOR SCIENTIST

Position requires a PhD in Molecular Biology or Molecular Immunology with 3+ years of postdoctoral training. Experience in cloning, protein expression/biochemical characterization and T-cell or cytokine receptor-mediated signal transduction required. Experience in enzymeology and assay development is a plus. Dept. 533

ASSOCIATE SCIENTIST/SCIENTIST

Position requires a BS/MS in Molecular Biology, Immunology or Biochemistry and experience in cloning, protein expression/purification and cell culture. Knowledge of enzymeology and receptor-mediated signal transduction is a plus. Dept. 534

To apply for these openings and/or to be considered for future opportunities with Johnson & Johnson, please forward a copy of your resume, suitable for scanning and input into our state-of-the-art database (clean/clear, no graphics, and preferably unfolded). Send to Dept. number listed above for position of interest, Johnson & Johnson Recruiting, P.O. Box 16597, New Brunswick, NJ 08906-6597.

We are an equal opportunity employer and support diversity in the workplace.

THE R.W. JOHNSON PHARMACEUTICAL RESEARCH INSTITUTE
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TEACHING OVERSEAS

The Department of Biology at the American University of Beirut in Beirut, Lebanon (AUB) invites applications for a FACULTY POSITION in Plant Systematics, beginning October 1, 1996. The completed doctorate is required, with postdoctoral teaching and /or research experience normally. AAssistant PROFESSOR, usual contract is for three years. The Department offers both Bachelor's and Master's degrees, with a research thesis required for the Master's degree. Candidates will be expected to engage in research and teach on the undergraduate and graduate levels, and to be qualified to supervise student research and thesis writing. The language is English.

Interested candidates should send a letter of application (with a copy to the Director of Personnel, c/o AUB NY Office), and should arrange for three letters of reference to be sent before 1 April 1996 to: Dean, Faculty of Arts and Sciences, American University of Beirut, c/o New York Office, 850 Third Avenue, New York, NY 10022-6277, USA. Incomplete and/or late applications will not be considered. AUB is an Equal Opportunity/Affirmative Action Employer. U.S. passport holders are usually invited to travel to, or through, Lebanon, and for residence in Lebanon, by order of the Department of State, and therefore applications from individuals who would travel to or reside in Lebanon on a U.S. passport cannot at this time be considered.

ASSISTANT PROFESSOR

The Department of Fish and Wildlife Resources at the University of Idaho is seeking applications for TWO TENURE-TRACK positions at the Assistant Professor level: 1) conservation biology/wildlife ecology, 2) wildlife ecology. Candidates should have demonstrated interest in populations of conservation biology, mammal ecology, and small- and population biology. They should be quantitatively oriented. For the second position, the candidate should have experience dealing with large mammals and/or predator ecology. Special consideration will be given to those with experience in dealing with ecological problems at the landscape level. Candidates for either position must be able to demonstrate their effectiveness as teachers. Applications will be reviewed after February 15, 1996. Send materials including curriculum vitae and names of three referees to: Conservation Biology Search or Wildlife Ecology Search, Department of Fish and Wildlife Resources, University of Idaho, Moscow, ID 83844-1136. Telephone: 208-885-6274, Fax: 208-885-9080; Email: glaber@uidaho.edu. Affective Action/Equal Opportunity Employer.

RESEARCH PROFESSOR

Department of Dermatology

The George Washington University School of Medicine, Washington, DC

A full-time research position is available for a Ph.D. molecular biologist with an established publication record to join a multidisciplinary group investigating the immunosuppressive effects of UVB radiation. Will be expected to initiate, develop, and encourage, a funded externally funded research program. Applicants would send curriculum vitae, statement of research interests and training, names, addresses, and telephone numbers of three referees, and copies of recent publications to: Dr. Frances P. Noonan, Department of Dermatology, The George Washington University School of Medicine, Ross Hall Room 111, 2300 I Street, NW, Washington, DC 20037.

The George Washington University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF BIOLOGY

Wheeling Jesuit College, a Jesuit liberal arts college located one hour from Pittsburgh, invites applications for a tenure-track position beginning fall 1996. In addition to general biology courses, the successful candidate will teach classes primarily in anatomy, physiology, and cardiodiopulmonary physiology to nursing and clinical science students. Participation in research is encouraged. A Ph.D. and some research experience are required. A list of interest and experience in departmental administration is desirable. Applicants must be willing to participate actively in the pursuit of excellence as a Jesuit educational institution. Send letter of application, resume, transcripts, and three letters of recommendation by January 15, 1996: to Susan Tate, Assistant Professor of Biology, Wheeling Jesuit College, 316 Washington Avenue, Wheeling, WV 26003. Women and minorities are strongly encouraged to apply. Affective Action/Equal Opportunity Employer.

EXECUTIVE ASSOCIATE DIRECTOR FOR ACADEMIC AFFAIRS

The University of Texas Health Center at Tyler (UTHCT) seeks to fill a high-level administrative position. The individual will lead the academic mission and will be responsible for the research and education missions of the Health Center and will report to the Dean. The ideal candidate will have an M.D. or M.D. and Ph.D. degree(s) and a solid history of NIH grant support. Prior organization of a Center or Program project grant is highly desirable. UTHCT is a community-oriented University of Texas with missions in patient care, teaching, and research. Tyler is in the beautiful East Texas area. Salary and benefits will be competitive.

Interested applicants should submit a curriculum vitae to: Dr. Richard Kronberg, Executive Associate Director for Academic Affairs, University of Texas Health Center at Tyler, P.O. Box 2003, Tyler, TX 75710. FAX: 903-877-2870. Equal Employment Opportunity/Affirmative Action Employer, Minority/Female/Veterans/Disabled.

FACULTY POSITION IN HEMATOLOGY

STANFORD UNIVERSITY

School of Medicine

The Division of Hematology invites applications for a SENIOR FACULTY POSITION, starting in 1996. Candidates should have teaching experience, and an outstanding record of productivity in these areas of interest: hemostasis and thrombosis, angiogenesis, homologous recombination, and transgenesis. Newly renovated laboratory space and well-endowed support will be available. Generous start-up support. This position is in the Research Professorate. The successful candidate will participate in the Program of Molecular and Genetic Medicine at Stanford.

Applicants should send a curriculum vitae, statement of research interests and training, the names and addresses of three references to: Lawrence Leung, M.D., Chief, Division of Hematology, Room S161, Stanford University School of Medicine, 380 Pasteur Drive, Stanford, CA 94305-5112.

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

The Natural History Museum of Los Angeles County solicits applications for an ASSISTANT CURATOR to head its Molecular Systematics Laboratory. We seek an individual who will develop a vigorous research program in systematics and molecular biology. An understanding of molecular techniques, and who will interact successfully on collaborative projects with other Museum curators. This is a full-time, curatorial staff position, which will become available as funding becomes available. Requirements: Ph.D. with a zoological background and a strong research orientation. Postdoctoral experience is desirable but not required. The successful candidate will be a member of the Museum's Systematics Division with 35 million specimens and worldwide research initiatives; the Molecular Systematics Laboratory is a modern and well-equipped facility. Applicants should submit a curriculum vitae, statement of research interests, and names of three references by 15 February 1996 to: Dr. Tod F. Stuessy, Deputy Director for Research and Collections, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007. The Natural History Museum of Los Angeles County is an Equal Opportunity/Affirmative Action Employer.

SYSTEMIC PHYSIOLOGIST

Tenure-track ASSISTANT/ASSOCIATE PROFESSOR

The University of Texas Health Science Center at Houston, School of Biomedical Engineering, invites applications for a tenure-track position beginning fall 1996. The successful candidate will be expected to engage in research and teaching. The successful candidate must have received the Ph.D. in physical chemistry, biophysics, food science, or a related discipline. Proposals will be considered for positions for which they are applying. For full consideration, submit a letter of application, a detailed research statement, a complete curriculum vitae, and three letters of recommendation to: Dr. Andrew Martin, Aquatic Biologist Search, University of Nevada, Las Vegas, 4505 Maryland Parkway, Las Vegas, NV 89154-4500. Review of applications will begin February 15, 1996. Affective Action/Equal Opportunity Employer.

SOLIDS NMR SPECTROSCOPIST

Purdue University has available a TENURE-TRACK position for a faculty member who will establish an innovative research program in solids NMR spectroscopy of biological materials like food systems. Required is a Ph.D. in physical chemistry, biophysics, food science, or a related discipline. Good teaching and a desire to work with colonies on practical problems are essential. Faculty salary rank is negotiable. For application details contact: Dr. James N. BeMiller, Department of Food Science, Purdue University, 210 Biological Sciences, West Lafayette, IN 47907-1160. Telephone: 317-494-6171, Email: bmiller@foodsci.purdue.edu. Purdue University is an Equal Opportunity/Affirmative Action Employer.
PROGRAM OF EXCELLENCE IN MOLECULAR BIOLOGY OF THE HEART AND LUNG

Special Postdoctoral Positions

The University of Cincinnati Program of Excellence in Molecular Biology of the Heart and Lung, funded by the National Heart, Lung and Blood Institute of NIH, has as its goal the application of molecular genetic approaches to study heart and lung function. The Program is open to Ph.D.s or M.D.s with training in molecular biology who wish to apply their skills to significant problems of heart or lung or to individuals with strong backgrounds in heart and lung who wish to develop molecular tools for continued study of these problems. We are particularly interested in recruiting women and minorities to the Program. Stipends begin at $31,000 per year with benefits. The faculty and their interests are described below.

Jerry B. Lingrel
Na, K-ATPase gene regulation, enzyme phosphorylation and structure-function studies

Jeffrey Whitsett
Molecular biology of lung development of lung specific gene expression

Paul Rosevar
Calcium and troponin I binding to cardiac troponin C

Gary Shull
Role of ion-transport proteins in cardiac function and control of arterial blood pressure using gene targeting technology

Jeffrey Robbins
Targeted modification of the cardiac contractile proteins and growth and developmental control of cardiac muscle

Steven Potter
Manipulating genes important in heart and lung development by insertional mutagenesis and targeted modification in ES cells

Thomas Doetschman
Role of growth and differentiation factors in the development and function of heart and lung using targeted gene modification in the mouse

Anil Menon
The genetics of human cardiovascular disease

Stephen Liggett
Molecular biology, pharmacology and structure/function of cardiopulmonary adrenergic receptors

Applicants should submit a C.V. and the names of three references to Jerry B. Lingrel, Ph.D., Director, Program of Excellence in Molecular Biology, Department of Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, Ohio 45267-0524.

Affirmative Action/Equal Opportunity Employer

To be an R&D scientist at Pfizer Inc is to focus on discovering innovative answers to the world’s unmet pharmaceutical needs. Over the last few years, scientists working in Pfizer labs have discovered, developed and introduced more new chemical entities than can be said of any other pharmaceutical firm. Investing over $1 billion annually in worldwide R&D, Pfizer is committed to the principle of workforce diversity and to being the industry’s premier new-product innovator. Come discover what’s in it for you. Find your place among the following positions.

RESEARCH SCIENTIST - Ph.D.
Allergy & Respiratory Diseases

You will join a multidisciplinary team focused on the discovery of novel therapeutics. We will look to you for supervising a biochemistry lab devoted to the identification of novel targets and developing assays for the discovery of novel drug leads. We require a Ph.D. and 3 years of postdoctoral training in biochemistry, molecular science or the equivalent. The ideal candidate will have a demonstrated record of creative research in the biochemical pharmacology of cytokine signaling. Drug discovery experience is desirable. Ad #1062

NEUROSCIENCE - Ph.D.

We seek an individual skilled in neurochemical and neuropsychopharmacological techniques, with expertise in two or more of the following: receptor binding, second messenger systems, enzymatic assays, neurotransmitter release, molecular biological techniques, and in vivo biochemical approaches. Our team is engaged in the discovery of novel psychotherapeutic agents; areas of interest include depression, anxiety, psychosis, substance abuse, and cognitive disorders. This position requires a Ph.D. in Neuroscience, Pharmacology or related discipline and at least two years of postdoc experience. Strong written and communication skills are a must. Ad #1063

COMPUTATIONAL CHEMISTS - Ph.D.

We seek independent, creative computational chemists who will work directly with our synthetic chemists discovery efforts in combinational chemistry, pharmacophore development, lead optimization and structure assisted drug design. These challenging positions require a Ph.D., or the equivalent, in computational or physical chemistry; postdoctoral and/or pharmaceutical experience is desirable. We prefer a strong background in statistical mechanics and experience with the Sybyl programming language in a UNIX environment. Ad #1064

COMPUTATIONAL BIOLOGY - Ph.D., BS/MS

This is an opportunity to become part of a growing team of scientists working to develop and apply computational tools for molecular biology. We require expertise in current computational sequence analysis methods for database searching, gene and protein structure prediction, and pattern discrimination. You will need a strong Unix/Macintosh background. Experience with molecular modeling tools and VAX/VMS desirable; molecular biology research experience preferred. Strong communication and presentation skills a must. Ad #1065

COMPUTER SKILLED CHEMISTRY EXPERIMENTALIST - BS/MS

We will rely on you for discovering and troubleshooting new analytical technologies for non-routine micro scale physicochemical assays. Programming/scripting skills are essential; automation experience is a plus. You will need good experimental problem solving ability and manipulative skills. A BS or MS in Chemistry, or the equivalent, is a requisite. Ad #1066

Pfizer offers rewarding compensation and excellent benefits packages. Relocation assistance is available. Please send resume suitable for electronic scanning (i.e., eliminate italics, bullets, bold, underlines and staples, indicating Ad #, to: Employee Resources, Pfizer Inc, Central Research Division, Eastern • Point Road, Groton, CT 06340. We are an equal opportunity employer M/F/D/V.
POSITIONS OPEN

ORNITHOLOGY/VERTEBRATE ECOLOGY
Ball State University
Muncie, Indiana

Applications are invited for a tenure-track position at the ASSISTANT PROFESSOR level in the Department of Biology, available August 23, 1996. Candidates are expected to have a Ph.D. and to be competent in current approaches used in the study of vertebrates with a special emphasis in ornithology, and to establish an active research program. Responsibilities: teach courses at all levels, including upper-level electives; and maintain an extramural research program. Close of applications will begin January 19, 1996, and continue until the position is filled. Ball State University is an Equal Opportunity/Affirmative Action Employer and is strongly committed to diversity within its community.

The University of Chicago/Radiation and Cellular Oncology seeks an individual for a SENIOR (pre-tenure) FACULTY POSITION. We seek an internationally recognized expert in radio-protection research and aminothiol mediated chemoprevention with significant skills in both in vivo (preclinical) and in vitro (Ph.D. and/or M.D.) to establish and direct an expanding program in chemoprevention related to radiation oncology. Successful candidate must possess strong and integrated expertise in tumor biology, biophysical methods of cell separation, molecular and cellular mechanisms underlying the antimutagenic properties of aminothiols, and murine models of mutagenesis and carcinogenesis. Candidate's professional interests and achievements should be complemented by an extensive record of existing programs in radiation biology, molecular biology, gene therapy and chemoprevention. Participation in teaching elective courses in radiation biology for radiation therapy residents and medical students is expected. The successful candidate will have a vigorous research program supported by extramural funding. Candidates should submit a curriculum vitae, statements of research and teaching interests, up to five selected reprints, and three references to: University of Chicago, Radiation and Cellular Oncology, 5841 South Maryland Avenue, MC0085, Chicago, IL 60637. The University of Chicago is an Affirmative Action/Equal Opportunity Employer.

PHARMACOLOGY FACULTY POSITION

The Division of Pharmacology, University of Missouri-Kansas City (UMKC) School of Pharmacy, is seeking candidates for a tenure-track position at the ASSISTANT or ASOCIATE PROFESSOR level. Candidates should have a Ph.D. degree in pharmacology, toxicology, or related field and at least two years of postdoctoral experience. The successful candidate will be expected to establish an independent research program with extramural funding and participate in teaching for both the undergraduate and graduate programs. Review of applications will begin February 15, 1996 and will continue until the position is filled. The position is available beginning mid-August 1996 with a curriculum vitae, a statement of research and teaching interests, and the names and addresses of three references to: Dr. Juan-Sum Lau, Division of Pharmacology, UMKC School of Pharmacy, 4201 Holmes Street, M3-111, Kansas City, MO 64108. UMKC is an Equal Opportunity Employer.

DEPARTMENT OF PATHOLOGY
THE UNIVERSITY OF TEXAS
MEDICAL BRANCH
Center for Tropical Diseases

The WHO Collaborating Center for Tropical Diseases of the University of Texas Medical Branch (UTMB) at Galveston invites applications for a non-tenure-track FACULTY POSITION in research on arboviral and other emerging zoonotic diseases. Applicants should have a Ph.D. and advanced training with a focus on arboviral and other emerging viral diseases at the molecular and cellular level. Previous experience in the experimental infection of mosquitoes with arboviruses and in laboratory transmission studies is also desirable. Duties include supervision of students and postdoctoral fellows, investigation of the pathogenesis of arboviral and other emerging diseases and the development of new diagnostic tests for arboviral infections. The successful applicant will also be expected to participate in the graduate and medical education program. UTMB employs more than 9,100 people and consists of two colleges, five schools, and two research institutes. The Center, under the auspices of the Department of Pathology, includes both clinical and basic scientists. Interested applicants should send a detailed curriculum vitae, an outline of current and future research interests, recent reprints, and three letters of reference to: Dr. Robert T. Tesh, Department of Pathology, The University of Texas Medical Branch, 301 University Boulevard, Galveston, TX 77555-0609. UTMB is an Equal Opportunity/Affirmative Action Employer. Minority/Females/Disabled/Handicapped.

MOLECULAR BIOLOGIST

ASSISTANT/ASSOCIATE PROFESSOR

The Department of Urology and Center for Excellence in Cancer Research, Treatment and Education (the Cancer Center) at Loyola University Medical Center—Shreveport invite applications for a full-time academic position at the Assistant or Associate Professor level. The general mission of the Urology/Cancer Center is to work together in the molecular biology of urological malignancies within the context of a multidisciplinary team including molecular biologists, biochemists, medical oncologists, and urologists with a specific focus on prostate cancer. Applicants must hold a Ph.D. or M.D./Ph.D., have a minimum of three years of postdoctoral training, and be capable of establishing a strong independent research program. Please send curriculum vitae, statement of research interests, and names of three references to: Dr. James Eastham, M.D., Chief, Urologic Oncology, Department of Urology, Louisiana State University Medical Center—Shreveport, 1501 Kings Highway, Post Office Box 10710, Shreveport, LA 71130. Loyola University is an Equal Opportunity/Affirmative Action Employer.

BIOL OGY FACULTY POSITIONS

Two full-time positions as ASSISTANT PROFESSOR of Biology starting August 1996. Seeking broadly trained biologists who have a Ph.D. in biology or a closely related field. Teaching requirements include one course in biology and one course in ecology, at least one in upper-level. Responsibilities include teaching introductory biology and at least one upper-level course in biology and ecology. The successful candidate will participate in other activities of the division including clinical care and teaching. Please submit curriculum vitae, names of three references, and a statement of research interests to: Dr. R. D. T. LaRue, Chair, Search Committee, Department of Biology, University of New Orleans, New Orleans, LA 70148. UO is an Affirmative Action/Equal Opportunity Employer.

Assistant Professor

FISH POPULATION ECOLOGY

Tenure-track, nine-month FACULTY POSITION in the Department of Biology, University of Wisconsin-Stevens Point (UWSP). UWSP is a residential, student advising, and development of a sustained program of professional growth that includes research and service. Teaching load averages 12 credits per semester. Courses will be in general biology, community biology (graduate course), and population ecology (graduate course). "Life History and Population Dynamics of Fishes" and regular involvement in ecology and freshwater biology. Must possess a Ph.D. with specialization appropriate to instruction and research in fish population dynamics and ecology, a broad background in general animal biology, and a demonstrable commitment to high quality undergraduate teaching and research. Applications must be received by February 1, 1996, and must include a letter of interest outlining qualifications and background, a brief statement of teaching philosophy, a complete curriculum vitae, three letters of reference, and copies of undergraduate and graduate transcripts. Send applications and materials to: David L. Manahan, Chair, Search Committee, Department of Biology, University of Wisconsin-Stevens Point, P.O. Box 5481, Stevens Point, WI 54481.

ASSISTANT PROFESSOR

GEOGRAPHY

The University of Utah seeks an Assistant Professor in Geography to develop an active research and teaching program in the field of urban ecology. Ph.D. in Geography required. Applications from qualified candidates are encouraged. The University of Utah is an affirmative action/equal opportunity institution. Send letter of application, CV, and three letters of recommendation to: Chair, Search Committee, Geography, University of Utah, Mail Slot 1048, 2574 Main, Salt Lake City, Utah 84112-0048. The University of Utah is an equal opportunity/affirmative action employer.

POSITIONS OPEN

The Division of Endocrinology, University of California at San Diego, School of Medicine, Department of Medicine, seeks a full-time, tenure-track Assistant Professor to direct a research program in adrenal biology. Ph.D. in endocrinology or related discipline. Working with investigators studying the normal and disease states of the adrenal gland, and in cooperation with other faculty members. Applicants must hold a Ph.D. or M.D. in a biological science with expertise in adrenal biology. Applicants should submit their curriculum vitae, names of three references, and a statement of research and teaching interests to: Dr. James M. Seidman, Ph.D., Chair, Endocrinology Search Committee, Department of Medicine, University of California at San Diego, School of Medicine, 9500 Gilman Drive, La Jolla, CA 92037. The University of California at San Diego is an affirmative action/equal employment opportunity institution.

POSITIONS OPEN

The Division of Biology at the University of Pennsylvania seeks applications for the following positions: ASSISTANT PROFESSOR. Non-tenure eligible faculty member to perform independent research relating to the molecular mechanisms underlying vertebrate muscle function in health and disease. PhD in biochemistry, cell biology, genetics, molecular biology, or a related area. Excellent communication skills required. Arrange to submit three letters of recommendation prior to February 15, 1996. The University of Pennsylvania is an equal opportunity employer.

POSITIONS OPEN

The Division of Biology at the University of Pennsylvania seeks applications for the following positions: ASSISTANT PROFESSOR. Non-tenure eligible faculty member to perform independent research relating to the molecular mechanisms underlying vertebrate muscle function in health and disease. PhD in biochemistry, cell biology, genetics, molecular biology, or a related area. Excellent communication skills required. Arrange to submit three letters of recommendation prior to February 15, 1996. The University of Pennsylvania is an equal opportunity employer.

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NEW ENGLAND BIOLABS
Postdoctoral Fellows
Molecular Genetics

Two postdoctoral positions are available for the study of the regulation and/or distribution of restriction modification systems. Experience with molecular cloning methods is essential. Expertise with E. coli genetics or protein purification procedures is desirable.

New England Biolabs, Inc. is a world leader in the production of restriction endonucleases and other related products for the recombinant DNA field. NEB offers competitive salaries, benefits and a bonus plan. Interested candidates should forward curriculum vitae and the names of three references (with addresses and telephone numbers) to the address below. Review of applications will begin immediately.

Human Resources
New England Biolabs, Inc.
32 Tozer Road
Beverly, MA 01915-5510

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Lab Head,
High Throughput Assays

Be at the forefront of drug discovery research with The DuPont Merck Pharmaceutical Company. We are focused on meeting unmet medical needs through the discovery and development of innovative compounds leading to novel pharmaceuticals. We have an immediate opening within our Research group at our facilities in Wilmington, DE.

We are searching for an individual with demonstrated experience in both drug screening and assay development. The individual must be able to guide and manage an existing chemical leads seeking discovery group and also establish state of the art high throughput screening capabilities within the Research organization. Partnering with our synthetic chemists, pharmacologists, and molecular biologists, you will facilitate our efforts in lead optimization and high throughput assay development. These assays will be receptor-based, cell-based, as well as, enzyme-based. In addition, you will play a critical role of helping to integrate our emerging efforts in combinatorial chemistry into the leads discovery/high throughput screening effort. The qualified candidate will have a Ph.D in Pharmacology or related discipline, a minimum of five years experience in assay development/high throughput screening and a record of research accomplishment.

DuPont Merck offers a competitive salary and a generous benefits package including 401K plan as well as excellent working conditions and challenging assignments. Please send a letter of introduction and resume to: Human Resources LH/HTA, The DuPont Merck Pharmaceutical Company, Experimental Station, E400/2413, P.O. Box 80400, Wilmington, DE 19880-0400. An equal opportunity employer M/F/D/V.

The DuPont Merck Pharmaceutical Company
Merging Strengths...Emerging Opportunities
CHIEF, Division of Rheumatology. The Department of Medicine at The Mount Sinai Medical Center is initiating a search for a scientist for the position of CHIEF of the Division of Rheumatology. The scheduled opening of a new research building will permit ample space and support for investigation. The position requires emphasis is placed on a strong basic science background and the ability to build a cohesive research base. This may be linked to the recruitment of a director as well as faculty for an Immunology-Immunobiology graduate program. Applications and references may be sent directly to: Dr. Lloyd Mayer, Chairman, Rheumatology Search Committee, Division of Clinical Immunology, The Mount Sinai Medical Center, Box 1095, Gustave L. Levy Place, New York, NY 10029. Mount Sinai is an Equal Opportunity/Affirmative Action Employer.

Industrial Hygiene Faculty Position. Full-time FACULTY position is available at the ASSISTANT or ASSOCIATE PROFESSOR level. UC Davis is a NIOSH Agricultural Health Center and affiliated with the NIOSH ERC. Applicants must possess a doctoral degree in an appropriate specialty of public health, engineering, or chemistry, but with a demonstrated professional commitment and competence in industrial hygiene. Candidate should have demonstrated experience in research. Responsibilities include developing an externally funded research program in exposure assessment and teaching. Send curriculum vitae and the names of three referees to: Marc B. Schenker, M.D. P.H. Chair, Department of Community and International Health, TB 168, University of California, Davis, CA 95616. This position will be open until filled but no later than February 15, 1996. The University of California is an Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITIONS available to study mechanisms of action of the environmental toxic, 2,3,7,8-tetrachlorodibenzo-p-dioxin, in a chick embryo model, with particular emphasis on the role of arachidonic acid and cytochrome P450 in dioxin-generated signal transduction events. Applicant will be sought with experience in one or more of the following areas: 1) molecular biology techniques, for example, Northern and Southern blotting, EMSA, PCR, DNA sequencing; 2) lipid biochemistry, phospholipases, S protein kinases, or 4) intracellular calcium. Applicants should be U.S. citizens or permanent residents. Send a letter of application, curriculum vitae, and names and addresses of three references to: Dr. Arleen Rikkind, Department of Pharmacology, Cornell University Medical College, 1300 York Avenue, New York, NY 10021. Email: arr@med.cornell.edu. Equal Employment Opportunity/Affirmative Action/Minority/Female/Disability/Veteran.

TULANE/XAVIER CENTER FOR BIOENVIRONMENTAL RESEARCH Postdoctoral Fellowship

The Tulane/Xavier Center for Bioenvironmental Research is an interdisciplinary research organization conducting cutting-edge research and teaching in a broad range of environmental studies. The Center, a partnership between Tulane and Xavier Universities, invites applications and consideration for the position of POSTDOCTORAL FELLOW, to investigate the biochemical and molecular actions of steroid hormone/growth factor receptors. Mammalian and mammalian systems will be used to study the intracellular signaling between the growth factor receptor and the estrogen receptor. A Ph.D. in biochemistry or related degree is required. Salary commensurate with background and skills. Qualified candidates should send resume, along with cover letter and three references, to Tulane University Medical School, Personnel Services, 1430 Tulane Avenue, New Orleans, LA 70112 on or before December 29, 1995. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately to study the biochemical effects of complex mixtures containing PAH. Experience in detecting and identifying chemical DNA adducts is desired. Please send curriculum vitae, brief statement of research interests, and three references to: Dr. Eric Weyand, Rutgers University College of Pharmacy, P.O. Box 789, Piscataway, NJ 08855, FAX: 908-445-6312. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately in the area of neuroepitope and ectopeptidase involvement in prostate cancer. Research will involve protein expression, regulation, cell-cell adhesion, and enzyme kinetics. Strong background in molecular biology including protein chemistry required. Please send curriculum vitae and references by FAX: 212-794-5813. D. M. Nisus, Department of Medicine, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately on NIDA-supported projects investigating the behavioral and pharmacological effects of cocaine. The position emphasis is placed on a strong basic science background and the ability to build a cohesive research base. This may be linked to the recruitment of a director as well as faculty for an Immunology-Immunobiology graduate program. Applications and references may be sent directly to: Dr. Lloyd Mayer, Chairman, Rheumatology Search Committee, Division of Clinical Immunology, The Mount Sinai Medical Center, Box 1095, Gustave L. Levy Place, New York, NY 10029. Mount Sinai is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH ASSOCIATE A POSTDOCTORAL POSITION is available immediately to join in histopathological/genetic study of a new mouse model of Niemann-Pick Disease, Type C. Candidates must be U.S. citizens or permanent residents, with an M.D. degree, and at least two years of laboratory experience in mammalian genetics. Experience with gene targeting and mouse colony maintenance is desirable. Send curriculum vitae and the names of three references to: Dr. Nick E. Goeers, Department of Pharmacology and Therapeutics, Louisiana State University Medical Center, P. O. Box 33932, Shreveport, LA 71130-3932. Email: ngoede@mail-sh.lsumc.edu. Louisiana State University Medical Center is an Equal Employment Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available immediately to join in histopathological/genetic study of a new mouse model of Niemann-Pick Disease, Type C. Candidates must be U.S. citizens or permanent residents, with an M.D. degree, and at least two years of laboratory experience in mammalian genetics. Experience with gene targeting and mouse colony maintenance is desirable. Send curriculum vitae and the names of three references to: Dr. Nick E. Goeers, Department of Pharmacology and Therapeutics, Louisiana State University Medical Center, P. O. Box 33932, Shreveport, LA 71130-3932. Email: ngoede@mail-sh.lsumc.edu. Louisiana State University Medical Center is an Equal Employment Opportunity/Affirmative Action Employer.

LABORATORY MANAGER

The Tulane/Xavier Center for Bioenvironmental Research is an interdisciplinary research organization conducting cutting-edge research and teaching in a broad range of environmental studies. The Center, a partnership between Tulane and Xavier Universities, invites applications and consideration for the position of LABORATORY MANAGER to manage and supervise the activities of the newly established Research/Teaching Laboratory of Environmental Biotechnology. The laboratory comprises 1,200 square feet of space in the middle of the Health and Environmental Research building, and is a focal point for Tulane and Xavier faculty research and teaching innovation. Emphasis is on flexibility and interdisciplinary work. The candidate should possess good interpersonal skills, knowledge of lab management, and experience in several aspects of molecular biology. Salary commensurate with background and skills. Qualified candidates should send resume with cover letter and three references, to Tulane University Medical School, Personnel Services, 1430 Tulane Avenue, New Orleans, LA 70112 on or before December 29, 1995. Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available immediately on January 1996 to study growth factor (PDGF) signal transduction in vascular cells. Involves intracellular Ca2+/second messenger measurements, gene expression/biological activity analyses, indirect/confocal microscopy. Recent Ph.D. in cell biology, biochemistry, or related field with experience in imaging, protein chemistry, and molecular biology preferred. Send curriculum vitae and names of three references to: Dr. Pamela A. DiLiberto, Department of Cell Biology and Anatomy, CB 7909, 202 Taylor Hall, University of North Carolina, Chapel Hill, NC 27599. Email: dilb@med.unc.edu.

POSTDOCTORAL POSITION available immediately to study TGF-beta1 autocrine regulation in colon carcinoma by antisense approaches (see COEID, December 95). TGF-beta1-initiated intracellular signalling (JBC, 269:13231, 1994; COEID, 5:267, 1994), and a novel MAP kinase, p75 (JBC, 268:2535 and 8118, 1993). Salary competitive and based on experience. Send curriculum vitae, a statement of research interests and capabilities, and the names and telephone numbers of three references to: Dr. Eileen Friedman, John M. Rohrer Professor of Experimental Pathology, Pathology Department, SUNY Syracuse Health Science Center, 750 East Adams Street, Syracuse, NY 13210.

Diversity Conference '95 Highlights

Don't miss the 26 January 1996 issue of SCIENCE, where we will highlight our 1995 conference: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries.

This special advertising supplement will feature interviews with key speakers from the conference and will examine diversity programs at leading pharmaceutical companies.

The results of an industry-wide survey on diversity programs will also be explored.

This special advertising supplement is the perfect place to showcase career opportunities at your company and to reaffirm your company's commitment to diversity.

Other benefits include:
• Bonus Distribution to scientific minority organizations.
• Placement at no charge on SCIENCE Global Career Network. http://www.aaas.org

Issue date: 26 January
Reservation deadline: 9 January

Please contact Janis Crowley at phone: 212-496-7704 fax: 202-682-0816
Call For Papers

University of Massachusetts
Amherst
11th Annual Conference on Contaminated Soils
Analysis, Fate, Environmental & Public Health Effects, and Remediation
October 21-24, 1996

General Sessions
Papers and Posters are invited for presentation in the general sessions in the following areas:
- chemical analysis
- hydrocarbon identification
- site assessment/method sampling
- regulatory programs and policies
- environmental fate and modeling
- soil chemistry
- hazard, exposure, and risk assessment
- standard remedial technologies/corrective actions
- innovative remedial technologies
- case studies on any of the above

Special Sessions
Presentations for special sessions related to the following areas are encouraged:
- contamination at military installations
- chlorinated hydrocarbons, pesticides and heavy metals
- ecological risk assessments
- jet fuel contamination
- state regulatory programs
- innovative technologies
- cleanup standard setting
- risk based cleanups
- Association of American Railroads sponsored session on diesel fuel contamination & railroad cleanups

DEADLINE for submission is February 9, 1996

For More Information Contact The Conference Directors: Edward J. Calabrese, Ph.D. or Paul T. Kostecki, Ph.D. at (413) 545-2934

NORTHWESTERN UNIVERSITY DENTAL SCHOOL
DEPARTMENT OF BASIC AND BEHAVIORAL SCIENCES
ANNOUNCES 2 FACULTY OPENINGS

Faculty Position in Behavioral Science - Tenure Track
The Division of Behavioral Science is seeking an individual whose responsibilities include teaching in the behavioral sciences to undergraduate dental students and MS and Advanced Dental Education students in addition to carrying out an independent research program. Preferred candidates should hold a PhD in one of the social sciences such as Psychology with interests in Health Psychology, Old Age Adult Psychology, Pain, Health Services Research. Salary will be commensurate with the candidate’s qualifications and experience. Interested parties should submit a curriculum vitae to: Dr. William A. Ayer, Director, Division of Behavioral Sciences, Northwestern University, 311 E. Chicago Ave., Chicago, IL 60611.

Faculty Position in Biological Materials - Tenure Track
The Division of Biological Materials is seeking a full-time Assistant Professor. Qualified candidates must have a PhD in materials science, biomedical engineering, or other relevant scientific field. They should be able to develop strong, independent, interdisciplinary research programs within the Dental, Medical and Engineering schools and with other health units utilizing materials for patient treatment. Preference will be given to those candidates also holding either a DDS or MD degree. Primary research interests include, but are not limited to: development of advanced materials for use in the human body; novel polymer and biocomposites; tissue-material interface structure-property relationships and interactions; surface engineering of materials for controlled tissue reactions; tribology of biomaterials; bioceramics; and degradation and corrosion in physiological environments. Candidates should be able to compete for external grant funding, advise and direct graduate students, and teach graduate level engineering, advanced dental education, and DDS level courses. Interested parties should submit a curriculum vitae to: Eugene P. Lautenschlager, PhD, Professor and Director, Division of Biological Materials, Northwestern University, 311 E. Chicago Avenue, Chicago, IL 60611.

Applications for both positions will be accepted until March 31, 1996. The proposed starting date is September 1, 1996. The Department is located on the shores of Lake Michigan in the Gold Coast area of Chicago. Equal consideration will be given to all candidates irrespective of gender, race, or creed. Northwestern University is an Affirmative Action/Equal Opportunity Employer and welcomes applications from qualified women and minorities. Hiring is contingent upon the ability to work in the United States.

East Coast Careers

TECHNICAL SUPERVISOR
Integrated Genetics, a $50M division of Genzyme, applies advanced molecular biology techniques to develop and provide high quality, sophisticated genetic testing services for physicians, hospital laboratories, and health maintenance organizations throughout the U.S. and internationally.

We are seeking a working Supervisor for our Molecular Diagnostic Lab to coordinate operations of a high volume DNA laboratory. Responsible for technical performance reading and interpretation of assays, QC of reagents and equipment, staff training and continuing education, protocol maintenance, data management and training for new tests.

Requires an MS and 5+ years’ experience in human molecular genetics, preferably in a clinical lab setting. Some supervisory experience is required.

Integrated Genetics offers excellent compensation and benefits including incentive stock options in Genzyme, a 401(k) plan with a company match and extensive insurance plans. Please send resume to: Human Resources Dept., Integrated Genetics, One Mountain Road, P.O. Box 9322, Framingham, MA 01701-9322 or fax to (508) 872-2460. An equal opportunity employer.

Integrated Genetics

PRINCIPAL SCIENTIST
HELPING PEOPLE LIVE BETTER LIVES

Boehringer Mannheim Corporation, a rapidly growing leader in the field of Medical Diagnostics, Biochemicals, and Medical Research, is currently seeking a qualified candidate for the position of Principal Scientist.

This position's minimum requirements include a Bachelor's degree in a scientific discipline with at least four years experience in cartilage biology/biochemistry. Ph.D. or D.V.M. preferred. This position is responsible for inventing, testing and developing new devices which include biologics for orthopedic markets with initial responsibility for a cartilage repair product.

The cartilage program includes selection of appropriate biologics, carrier materials, and models for testing concepts. Project management and supervisory skills and experience essential.

At Boehringer Mannheim, we offer an exciting and challenging work environment as well as an excellent compensation and benefit program including a 401(k). Qualified applicants should send a resume with salary history, in confidence to: BOEHRINGER MANNHEIM CORPORATION, Human Resources, Dept. 48123, 9115 Hague Road, P.O. Box 50457, Indianapolis, Indiana 46250-0457. Principals only please.

An equal opportunity employer.

Call to inquire about additional career opportunities currently available at Boehringer Mannheim Corporation:

JOB LINE 317-845-7035

BOEHRINGER MANNHEIM CORPORATION

NORTHWESTERN UNIVERSITY DENTAL SCHOOL
DEPARTMENT OF BASIC AND BEHAVIORAL SCIENCES
ANNOUNCES 2 FACULTY OPENINGS

Faculty Position in Behavioral Science - Tenure Track

The Division of Behavioral Science is seeking an individual whose responsibilities include teaching in the behavioral sciences to undergraduate dental students and MS and Advanced Dental Education students in addition to carrying out an independent research program. Preferred candidates should hold a PhD in one of the social sciences such as Psychology with interests in Health Psychology, Older Adult Psychology, Pain, Health Services Research. Salary will be commensurate with the candidate’s qualifications and experience. Interested parties should submit a curriculum vitae to: Dr. William A. Ayer, Director, Division of Behavioral Sciences, Northwestern University, 311 E. Chicago Ave., Chicago, IL 60611.

Faculty Position in Biological Materials - Tenure Track

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POSITIONS OPEN

PSYCHONEUROIMMUNOLOGY AT THE UNIVERSITY

NISH-supported postdoctoral training grant position for scientists or clinicians (Ph.D. and/or M.D., D.D.S., D.V.M.) to conduct research on communication among the nervous, immune, and endocrine systems and their relationship to disease. Applicants must be U.S. citizens or permanent residents of the United States. Applicants should submit a letter stating their research interests along with curriculum vitae and names of three references to: Bruce Zwilling, Department of Microbiology, 484 West 12th Avenue, Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Qualified women, minorities, Vietnam-era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

POSTDOCTORAL FELLOWS wanted for electrophysiological and electochemical studies of transmitter release and release mechanisms using midbrain dopamine and PC12 cell lines. Individuals will collaborate with group providing transfected lines expressing mutant synaptic proteins. Applicants must have Ph.D. or M.D. with equivalent experience. Thomas Jefferson University offers a competitive salary and benefits package. For further information, please contact Dr. J.D. Stow, Director of the Jefferson Biotechnology Research Institute, Black Building 3-307, 630 West 16th Street, New York, NY 10032. Columbia University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

In molecular genetics of novel angiotensin II and vasopressin receptors. [Nature Medicine, 1:1074-1081, 1995]. Projects will involve site-directed mutagenesis, transgenic rat and knockout mouse models. Candidates should have strong background in molecular genetics and/or neurobiology; experience with transgenic/ES cell technology/immunocytochemistry preferred. Must be qualified for NIH training grant. Send curriculum vitae and three references of names of telephone contacts to: Dr. Nelson Ruiz-Ospao, Section of Neuroendocrinology, Weill Medical College, 333 E. 26th Street, Room 3-111, New York, NY 10010. The Graduate Center offers an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

Cleveland Clinic Foundation Research Institute

POSTDOCTORAL POSITIONS are available immediately to study cardiac hypertrophy in hypertension, and its transition to heart failure, focusing on changes in collagen formation, at the cellular and molecular level. Previous experience with tissue culture and molecular biology is desirable. Applicants should send a current curriculum vitae and list of three references to: Dr. Subba Sen, Staff Physician, Molecular Cardiology, Research Institute, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195. FAX: 216-444-9263. The Cleveland Clinic is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION

NEW YORK MEDICAL CENTER

A position is available to study mechanisms of parasite resistance to human serum. Studies are focused on both African and American trypanosomes. Experience in molecular biology or cell biology is preferred. Send applications, including names of referees, to the head of the Michael Heidelberg Division, Rockefeller University, 1230 York Avenue, New York, New York Medical Center, Department of Pathology, MSB 131, 550 First Avenue, New York, NY 10016.

TURFGRASS BIOTECHNOLOGY

Applications are invited for a grant-funded POSTDOCTORAL POSITION to work on the application of biotechnology and molecular biology to turfgrass. The objective is to assist breeders in producing improved cultivars. Skills in monocot tissue culture and transformation are needed. Apply to: Dr. Peter Day, Director, AgBiotech Center, Foran Hall, Cook College, Dudley Road, New Brunswick, NJ 08903-0231. Email: Day@mdc.rutgers.edu.

POSTDOCTORAL POSITIONS are available to study inductive interactions regulating development of carotenoid pigmentation, the molecular mechanisms of signal transduction in plant cells in the interaction of leukocytes and endothelial cells in circulatory disorders. Emphasis will be placed on cellular and molecular approaches to these problems. Candidates must be U.S. citizens or permanent alien status. Interested candidates are invited to apply to: Dr. Allan M. Lefer, Professor and Chairman, Department of Physiology, Jefferson Medical College, 12020 Locust Street, Philadelphia, PA 19107-6799. Thomas Jefferson University is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION available to study motor neuron gene functional coupling during development and reinnervation. Functional approaches include introduction of gene expression products and calcium imaging in spinal cord. Molecular approaches include antisense hybridization, single motor neuron RT-PCR. Experience with one or more of these approaches preferred. Send curriculum vitae and three letters of reference to: Rita Balice-Gordon, Department of Neuroscience, University of Pennsylvania School of Medicine, 215 Stebbins Hall, Philadelphia, PA 19104-6074.

POSTDOCTORAL POSITION available to study the molecular mechanism of antitumor agents. Applicants should hold a Ph.D. in biochemistry or related area and will primarily work in the isolation and characterization of proteins. Interested individuals should submit a resume, description of prior research, and names of three references to: T. Troeger, Department of Chemistry, University of Michigan, 930 North University Avenue, Ann Arbor, MI 48109-1055. FAX: 313-747-4865.

POSITIONS OPEN

TWO POSTDOCTORAL POSITIONS, supported by an NIH Training Grant, are available immediately in systems and integrative neurobiology. Christopher Leonard, whole-cell recording and Ca imaging of NOS neurons related to REM sleep; Ursula Stabilities: synaptic plasticity and memory at thalamic-hippocampal circuit; Joseph LeDoux: synaptic plasticity in the amygdala; Dan Sanes: development of auditory function; Malcolm Semple: binuaral processing in auditory CNS, LeDoux, Sanes, and Semple: excellent salary, benefits, and research facilities. Send curriculum vitae, statement of research goals, and names of three references to: Sam Feldman, Department of Neuroscience, 53-10 Wing, Washington Place, New York, NY 10003. Email: sam@cmn.nyu.edu; FAX: 212-995-4011. New York University encourages applications from women and minority groups.

POSTDOCTORAL POSITION

FUNCTIONAL NEUROBIOLOGY

Postdoctoral positions available to work in the David G. Swanson Laboratory at the University of Arizona, Tucson, AZ 85721. Send applications to: Dr. David G. Swanson, The University of Arizona, Tucson, AZ 85721. FAX: 520-621-9435; Email: parker@nser.arizona.edu. Application deadline is January 5, 1996 and will continue until the positions are filled. The University of Arizona is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL OPPORTUNITIES available for biochemists with background and interest in mitogenic and/or growth factors and their receptors, kinases, phosphatases, calcium regulation, and hormone action in mammalian cells. Wide range of techniques and faculty interactions possible. Please send curriculum vitae and names of three references to: Dr. John R. Williams, Department of Biochemistry and Biophysics, University of Pennsylvania, Philadelphia, PA 19104. FAX: 215-898-9191. The University of Pennsylvania is an Equal Opportunity Employer.

POSTDOCTORAL FELLOWSHIPS AT HARVARD MEDICAL SCHOOL/Brigham and Women's Hospital available to study the cellular and molecular mechanisms of drug resistance in the isolates of drug-resistant tuberculosis in the human immunology and/or molecular biology required. Send resume and three references to: Dr. Vicki Rubin Kelley, Department of Pharmaceutical Sciences, Harvard Medical School, Boston, MA 02115. FAX: 617-732-6392; Telephone: 617-732-5915. Harvard Medical School/Brigham and Women's Hospital are Equal Opportunity Employers.

RESEARCH ASSOCIATES, in new pharmacology. Adolor Corporation, a rapidly growing biopharmaceutical company, is seeking applicants at the B.S./M.S. level to conduct testing of novel analgesics. Excellent communication and teamwork skills are required. Experience in neuropharmacology, animal models of CNS disorders, statistics, and data management is also desirable. Please send resume to: LS, Adolor Corporation, 395 Phoenizville Pike, Malvern, PA 19355.

POSTDOCTORAL RESEARCH ASSOCIATE

Research on the molecular virus envelope protein function, trafficking and its role in membrane and nuclear membranes during baculovirus infection. Successful candidate should have training and expertise in molecular biology and recombinant DNA techniques. Candidates should have training in membrane biology/biochemistry, protein trafficking, or cell cycle regulation. Positions start immediately and continue through June 1996. Starting at $28,000, negotiable commensurate with experience. Please send resume and names of three references to: Dr. Michael G. Land, Center for Advanced Invertebrate Molecular Sciences, Texas A&M University, Department of Entomology, College Station, TX 77843-2475. Texas A&M University is an Affirmative Action/Equal Opportunity Employer.

RESEARCH ASSOCIATE for post secondary institution for education and research in northwest Ohio: Characterize gene expression and biological functions of a growth factor, amphiregulin; investigate the molecular mechanisms of signal transduction pathway through growth factor receptor, particularly transforming growth factor-beta receptor; investigate the molecular mechanisms involved in interactions between steroid hormones and growth factors. The use of biochemistry, cell culture, immunological, and molecular biology techniques including antibody production, immunocytochemistry, transfection, RNase protection assay, and gene promoter activity studies. Ph.D. in biochemical and animal science or endocrinology required. One year of experience in antibody production and immunological assay; one year of experience in gene expression studies, DNA quantitation; one year of experience in tissue culture and biochemical assays; one year of experience in work with steroids and growth factors. Preference will be given to candidates in theviea of 45 and who are citizens of the United States. Salary and benefits are negotiable. Please send resume to: Mrs. A. K. Maugans, Reference Number 1451, Ohio Bureau of Employment Services, P.O. Box 1618, Columbus, OH 43216.

AQUATIC CONSERVATION ZOOLOGIST

The Nature Conservancy (TNC) seeks a ZOOLOGIST to work with TNC, state, federal, and private institution researchers to develop databases and strategies for aquatic biodiversity surveys. This position will work collaboratively to identify priority ecosystems critical to the conservation of aquatic fauna. He or she will provide expertise in aquatic conservation practices, and will further develop databases on the status, taxonomy, distribution, ecology, and management of freshwater fauna and flora in the United States, Canada, and Mexico. The position is in Boston. Ph.D. or experience. Submit a cover letter and curriculum vitae to: Dr. L. M. Forstner, The Nature Conservancy, 201 Devonshire Street, Boston, MA 02110. Telephone: 617-542-1908; Email: lmastert@tnc.org. An Equal Opportunity Employer.
BURROUGHS WELLCOME FUND ANNOUNCES 1995/96 RECIPIENTS OF THE HITCHINGS-ELION FELLOWSHIPS IN THE BIOMEDICAL AND BEHAVIORAL SCIENCES

Burroughs Wellcome Fund recognizes our 11 Hitchings-Elion Fellows for 1995/96. The fellowships are intended to enhance the career development of outstanding young postdoctoral investigators by enabling them to train with scientists in the United Kingdom. Grants provide $150,000 to cover two years of support in the United Kingdom and a third year in the United States.

Awardees

Jill R. Beyette/Colorado State University
D. Scott Bohle/University of Wyoming
Elena S. Casey/Stanford University
Lori S. Friedman/University of Washington
Fenbiao Gao/Duke University
Maureen V. Gremillion/Los Alamos National Laboratory
Kenneth A. Johnson/Baylor College of Medicine
Perry M. Kirkham/University of Alabama-Birmingham
Laura Trinkle-Mulcahy/Thomas Jefferson University
David D. Pollock/Stanford University
Yimin Wu/NIAID, NIH

U.K. Host Institution/Sponsor

University of Leicester/A. J. Rivett
University of East Anglia/A. Thomson
National Institute for Medical Research/J. C. Smith
University of Cambridge/B. A. J. Ponder
University College London/M. C. Raff
Oxford University/J. J. B. Jack
University of York/G. G. Dodson
University of Cambridge/G. P. Winter
University of Dundee/P. Cohen
National Institute for Medical Research/W. Taylor
Oxford University/M. L. North

The application deadline for the 1996/97 Career Awards program is September 1. For information, contact the Burroughs Wellcome Fund, 4709 Creekstone Drive, Suite 100, Durham, NC 27703. Tel. (919) 991-5100, Fax (919) 941-5884, E-mail info@bwfund.org. The Fund is an independent private foundation established to advance the medical sciences by supporting research and other scientific and educational activities.

The Pennsylvania State University
Life Sciences Consortium

DIRECTOR, GRADUATE PROGRAMS

The Pennsylvania State University’s Life Sciences Consortium (LSC) seeks an individual for the position of DIRECTOR OF LSC GRADUATE PROGRAMS. The LSC is a newly-formed organization whose objective is to promote interdisciplinary life sciences research, as well as innovation in undergraduate and graduate education. The Pennsylvania State LSC graduate program participants are faculty of the Colleges of Medicine, Agricultural Sciences, Health and Human Development, Engineering, Liberal Arts, and the Eberly College of Science. Candidates must have a Ph.D. in a life science discipline, as well as experience in research and teaching. Some administrative experience is desirable, but not essential. The successful candidate will have a keen interest in developing new approaches to graduate education. He/ she will work with faculty directors of interdisciplinary, intercollege graduate programs to develop active group-centered learning curricula and establish liaisons with business, governmental, and other organizations to create innovative learning and research opportunities for students. He/she will organize and oversee graduate student recruitment, as well as be responsible for coordinating student activities both at the University Park and Hershey Medical Center campuses. Depending on the candidate’s previous background, the appointment will be either wholly within the LSC or a joint appointment with a college appropriate to the candidate’s scientific interests. Continued involvement in research or teaching is encouraged.

Applicants should submit their curriculum vitae, a brief summary of their experiences and interests most relevant to the present position, and have 3 letters of recommendation sent to Dr. Nina Fedoroff, Director, Life Sciences Consortium, 519 Wartik Laboratory, The Pennsylvania State University, University Park, PA 16802. Applications will be reviewed as received and until the position is filled. An Affirmative Action/Equal Opportunity Employer. Women and minorities are encouraged to apply.

Postdoctoral Position in Protein Tyrosine Kinase Signaling, Cell-Cell Adhesion, and Metastasis

Applications are invited for a postdoctoral position available immediately. Studies will incorporate molecular biology, cell biology, and genetic techniques to study the role of cadherin mediated cell-cell adhesion and signaling in tumor suppression and metastasis. The successful candidate will address the role of tyrosine phosphorylation of the novel catenin and Src-substrate, p120cat, in regulating cadherin mediated events. Qualified candidates should possess either a Ph.D. and/or M.D. in a relevant field. Experience in molecular/cell biology and in retroviral mediated protein expression in mammalian cells is preferred.

Please forward your CV and the names, addresses and phone numbers of three references to:

Albert B. Reynolds, Ph.D.
Dept. of Tumor Cell Biology
St. Jude Children’s Research Hospital
332 N. Lauderdale
Memphis, TN 38105

Women and minorities are especially encouraged to apply. SJCRH is an Equal Opportunity/Affirmative Action Employer.
We offer opportunity for:

**RESEARCH AND DEVELOPMENT**

**Scientists - Serum-Free Media**
- Ph.D. with at least 2 years' experience in Serum-Free Media for Bioreactors (Hollow fiber and Fermentor)
- Growth expression of insect and mammalian cell types
- Industrial experience would be desirable
- Strong written and communication skills

**Scientists - Human Cell and Media Development**
- Ph.D. or M.S. with several years' experience
- Experience in Human Cell Biochemistry and Physiology
- Optimization of Serum-Free Media
- Familiar with cell-based In Vitro toxicology
- Industrial experience would be desirable

**TECHNICAL SERVICE**

**Media Specialist**
- Individual with expertise in mammalian and insect cell culture systems
- Needs to understand cell culture physiology, how medium components and environmental conditions affect growth
- Must be able to effectively troubleshoot customer issues
- Knowledge of virus isolation procedures, serum-free and protein-free media application necessary
- Bench top production scale-up of bioreactors is a plus
- Strong written and oral communication and interpersonal skills a must

**Cell Communications Specialist**
- Individual with expertise in human cell biochemistry, physiology and culture system
- The ideal candidate will have an understanding of cellular communication, cytokines, adhesion molecules, growth factors, necrosis and apoptosis
- Should have an understanding of ELISA Assays, tissue section fixation and staining in flow cytometry
- An understanding of cell based toxicology assays a plus
- Strong written and oral communication and interpersonal skills a must

We offer an environment conducive to professional and personal growth, a competitive salary, and a comprehensive benefits package. For confidential consideration, please forward your resume to: Human Resources Dept. - COB, BioWhittaker, 8830 Biggs Ford Road, Walkersville, Maryland 21793. We are an equal opportunity employer m/f/h/v — offering a smoke/drug free environment.

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**Chair, Department of Biological Sciences**

The University of Delaware invites applications and nominations for the position of Chair of the Department of Biological Sciences. One of 24 departments in the College of Arts and Science, the current Biology Department has 25 faculty in the areas of ecology/evolutionary biology, genetics/molecular biology, microbiology, neurobiology and physiology/anatomy. The Department offers Ph.D. and M.S. degrees in Biological Sciences. Currently, there are 52 graduate students and over 1000 undergraduate majors in the Department. The University of Delaware has embarked on a major initiative in molecular biology. The new Biological Sciences Department will contain two separate, self-standing units - Molecular Biology and Integrative Biology. The Unit Directors report to the Chair. The University has assembled substantial resources that will be used to enable new faculty hires and associated start-up as well as building renovations and the development of core facilities. The appointment of a Chair will be at the rank of Professor. The successful candidate will have demonstrated leadership ability in working with faculty and students with diverse interests, a nationally recognized research program in molecular biology, and a commitment to undergraduate and graduate teaching. Appointment is available September 1996. Initial review of applications will begin February 1, 1996, and the committee will consider all applications received before March 1, 1996. Applicants should send a curriculum vitae with names of five references and a personal statement of administrative philosophy. Salary and benefits are competitive. Applications should be sent to: Dr. Michael T. Klein, Chair, Search Committee, Department of Chemical Engineering, University of Delaware, Newark, DE 19716-3110.

The UNIVERSITY OF DELAWARE is an Equal Opportunity Employer which encourages applications from Minority Group Members and Women.

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**UNIVERSITY OF SOUTH FLORIDA**

COLEGE OF MEDICINE AND H. LEE MOFFITT CANCER CENTER
AND RESEARCH INSTITUTE

**DIRECTOR OF CANCER CENTER BIOREPOSITORY**

The Department of Pathology and Laboratory Medicine and the H. Lee Moffitt Cancer Center and Research Institute at the University of South Florida College of Medicine seek a well-qualified M.D. or M.D./Ph.D. applicant for a position at the Professor level with strong expertise in tissue banking and research interests in Lung Epithelial Cancer Pathobiology. This position may be tenured.

As part of expansion of basic research, the Department and the Center are jointly recruiting an outstanding candidate with a track record of research contributions to the field of Thoracic Cancer Pathobiology. The successful candidate will direct the Tissue Procurement Laboratory of the Center and develop a biorepository with an accent on banking and culturing preneoplasia in support of basic and clinical cancer programs. Experience in tissue culture and general methods of molecular and cell biology is required. A successful record of funded research and postdoctoral training activities is highly desirable. The successful candidate will also act as a reference pathologist in thoracic oncology and should possess a valid license with eligibility for Florida medical license and be Board-certified in Anatomic and Clinical Pathology.

Applicants should send their curriculum vitae to: Santo V. Nicosia, M.D., Professor and Chairman, Department of Pathology and Laboratory Medicine, University of South Florida College of Medicine, Office of Faculty Recruitment, Moffitt Cancer Center, 12902 Magnolia Drive, Tampa, FL 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, forty-eight hours in advance. Deadline for application receipt is February 9, 1996.

The University of South Florida College of Medicine and the H. Lee Moffitt Cancer Center and Research Institute are Equal Opportunity Affirmative Action Employers. Women and minorities are encouraged to apply.
** SENIOR SCIENTIST **

JOB# 9602

Ciba’s Biotechnology Research Unit (RTP) is seeking a creative, analytically rigorous, highly skilled individual to contribute to our Weed Control project team. The successful candidate will be responsible for developing methods to identify sites of action for novel crop protection chemicals. You will develop a cutting-edge research program that makes significant scientific advances and generate valuable intellectual property. You will be a key member of a focused, interdisciplinary project team, and must be an effective communicator and motivator. Some international travel will be required. Position requires a Ph.D. with at least 2 years of postdoctoral experience, and a background in plant genetics, molecular biology and biochemistry.

We offer a competitive salary, benefits and relocation package.

Resumes should be forwarded with a cover letter (which should include Job# 9602), and three (3) references to: Ciba Biotechnology Research Unit, Human Resources Department, P.O. Box 12257, Research Triangle Park, NC 27709-2257. Resume deadline is: December 29, 1995.

We are an Equal Opportunity Employer.

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** POSTDOCTORAL **

Brookhaven National Laboratory has an immediate opening for a Postdoctoral position in Protein Crystallography to determine structures of major outer surface proteins (OspA, OspB and OspC) from ticks. The tick-borne Lyme disease spirochete, *Borrelia burgdorferi*, by X-ray crystallography.

Structural information from proteins crystallized both by themselves and in complexes with antibody Fab fragments will be used for vaccine design in a well-established collaborative project involving scientists from BNL and SUNY Stony Brook. Our department has ample graphics and computing power, a rotating anode generator, and frequent access to protein crystallography beamlines at the National Synchrotron Light Source (NSLS).

Experience in crystallographic structure determination is required; experience with protein expression, purification and crystallization is highly desirable.

For immediate consideration, send a curriculum vitae with the names of three references to: Dr. Catherine Lawson, Biology Department, Building 463, Brookhaven National Laboratory, Associated Universities, Inc., Upton, NY 11973-5000; E-mail: lawson@bnl.gov. We are an equal opportunity employer committed to workforce diversity.

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** DEPARTMENT OF PHARMACOLOGY **

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

** ASSISTANT PROFESSOR POSITIONS AVAILABLE **

The F. Edward Hébert School of Medicine of The Uniformed Services University of the Health Sciences (USUHS) invites applications for two tenure-track positions of Assistant Professor in the Department of Pharmacology. Applicants must have a Ph.D. or M.D. degree, a rigorous research program with the potential to develop significant extramural funding, an interest in collaborative research, and a commitment to teaching medical and graduate students. Positions are available in the following areas:

*Cell Signaling/Signal Transduction*

Applications are encouraged from persons using cellular and molecular approaches to study cell to cell, and/or intracellular communication. Individuals applying these approaches to problems in cardiovascular or immunopharmacology are especially encouraged to apply. Contact: Dr. Cinda Helke, Chair, Pharmacology Search Committee 1.

*Molecular Toxicology/Drug Metabolism*

Applications are sought from persons applying molecular and mechanistic approaches to the study of toxicity of drugs and environmentally-derived xenobiotics. Applications from individuals using these approaches to study drug metabolism are also encouraged. Contact: Dr. Jeffrey Harmon, Chair, Pharmacology Search Committee 2.

Generous start-up packages including equipment and technical support are available. Faculty salaries are fully supported from University resources. Research facilities and environment for professional development are excellent. Review of applications will begin in January 1996 and will continue until the positions are filled. Applicants should submit a curriculum vitae and bibliography, the names of three references, and a statement of current and future research interests to either: Dr. C. Helke (position 1) or Dr. J. Harmon (position 2), Dept. of Pharmacology, Pharmacology Search Committee, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814-4799. Foreign nationals will be considered only if qualified United States citizens are not available. USUHS is an Equal Opportunity/Affirmative Action Employer with a strong commitment to racial, cultural, and ethnic diversity.

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** Di agnostic Research Scientist **

Become a Diagnostics Research Scientist with the Advanced Technology Development Group of DuPont Diagnostics R&D, now. After our divestiture, you will be in the forefront of our new organization.

Our Glasgow, Delaware location is where you will be developing a detailed and fundamental understanding of the dynamics of reactions employed in the automated clinical diagnostic assays essential to developing functional prototype assays, while critically evaluating analytical performance.

The successful candidate will be highly motivated and have a Bachelor’s degree in Chemistry and a Ph.D. in a chemical discipline with 2 or more additional years postdoctoral or industrial experience. Strong physical chemistry and mathematical skills are important along with experience in biochemical research and/or development. Excellent writing and verbal communication skills are required. Expertise in light scattering and particle aggregation would be very useful.

We offer a competitive salary and excellent benefits. For consideration, please send resume with salary history to: DuPont Human Resources, PSS-0117, Wilmington, DE 19898 OR you may fax it to: (800) 831-2206. We are an equal opportunity employer.
Georgetown Institute for Cognitive and Computational Sciences
Washington DC

Faculty Positions

Georgetown University seeks applications from qualified individuals for positions (tenure-track and research-track) at all levels of seniority in its newly created Institute for Cognitive and Computational Sciences (GICCS) on the beautiful Georgetown campus. Areas of interest are in neural mechanisms of higher auditory processing, biologically oriented computational neuroscience, cognitive neuropsychology, and functional brain imaging. The institute is located in a new research building with state-of-the-art facilities for higher mammals, including primates. Generous start-up funds are available to successful candidates.

Georgetown University is one of the oldest academic institutions in North America and has a strong commitment to the neurosciences. Various collaborative ties exist with researchers at the nearby National Institutes of Health in Bethesda, Maryland. Please send applications (c.v. and names of at least three referees) to: Dr. Alan I. Faden, Dean of Research and Director, GICCS, 3900 Reservoir Road, NW, Washington, DC 20007. For inquiries about further details please contact: Dr. Josef P. Rauschecker, Associate Director for Cognitive Neuroscience, (GICCS) (e-mail:Josef@helix.nih.gov).

Postdoctoral Positions

Cognitive Neuroscience Laboratory: Several Postdoctoral positions are available immediately. State-of-the-art animal facilities are available for research on higher mammals, including primates. An optical recording set-up as well as several sound chambers are part of the laboratory. Areas of interest are higher auditory processing, visual-auditory interactions, and compensatory plasticity in the cerebral cortex of cats and monkeys. Preference will be given to candidates with training in single-unit electrophysiology of awake behaving monkeys. Dr. Josef Rauschecker

Systems Neurobiology: Two areas of investigation are currently being pursued: (1) The distributed processing in simple nervous systems and (2) spatial-temporal dynamics in vertebrate brains including oscillations and synchronized activities during normal function and abnormal spreading of synchronized activities during epilepsy. We are currently studying the reconfiguration of circuits during simple behaviors by recording from hundreds of neurons simultaneously. A second project involves imaging the spreading of excitation waves in the cortex (in vivo) and brain slices during model epileptic events to study the non-linear dynamics of networks that initiate a seizure. Experience in brain slicing and in vivo electrophysiology, computer programming and/or mathematical modeling preferred. Dr. Jian-young Wu

Nuclear Magnetic Resonance Laboratory (NMR): The NMR Laboratory, now under construction, will begin operation in early 1996. It will feature a state-of-the-art horizontal-bore seven Tesla rodent scanner, plus a physiology lab, an electronics shop and ample computational resources. The NMR Laboratory has two openings for postdoctoral fellows: (1) One postdoctoral fellow experienced with in vivo magnetic resonance imaging and spectroscopy in animals, preferably with a focus on the brain. Ph.D. or equivalent in physics, radiology, biophysics or related field required. The ideal candidate will conduct collaborative research in the neurosciences, including animal models of CNS disorders. (2) One postdoctoral fellow experienced in experimental work on neural plasticity and/or electrophysiology. Ph.D. or equivalent in neuroscience, neuropsychology or related field required. The ideal candidate will conduct collaborative research on cortical plasticity using magnetic resonance imaging. Dr. James Pekar

Signal Transduction Laboratory: Postdoctoral Position is available for Ph.D. to study the role of protein tyrosine kinases in synapse formation and function at the neuromuscular junction. Two postynaptic Src-like kinases, Fyn and Fyk, that phosphorylate the muscle nicotinic acetylcholine receptor have been identified. Major projects involve: (1) examining the effect of innervation on Fyn and Fyk activity, (2) identifying extracellular factors that activate Fyn and Fyk, (3) characterizing the signal transduction cascade mediated by Fyn and Fyk using the two hybrid system, and (4) determining the effect of Fyn and Fyk on acetylcholine receptor expression, clustering, and channel kinetics. An individual is sought with experience in molecular biology; biochemistry or cell culture experience a plus. Dr. Sheridan Swope

Applied Neuroscience Laboratory: Two postdoctoral positions are available immediately. The principal research interests of the recruiting laboratory are cellular and molecular aspects of Alzheimer's Disease and other neurodegenerative disorders. In addition, complementary research on molecular aspects of associative learning will be conducted. The principal techniques include Patch-Clamp, Artificial Lipid Bilayers and Calcium Imaging. Experience in electrophysiology and/or calcium imaging preferred. Dr. Renu Etchepareiguy

To apply, please send curriculum vitae, description of research interests, and names of three references to the individual listed after each description at: GICCS, Georgetown University Medical Center, The Research Bldg., 3970 Reservoir Rd., NW, Washington, DC 20007-2197 (Fax: 202 687-0617)

Initial Postdoctoral appointment is for two years.
An Equal Opportunity/Affirmative Action Employer

Assistant or Associate Professor of Environmental Science and Master's Program Director: This graduate program has 24 students enrolled. Applicants for this tenure-track position must have a completed Ph.D. in a related Natural or Physical Science with a substantial record of research, applied experience in environmental science and teaching experience: area of expertise is open. The candidate will be expected to attract external funding, direct the program, teach courses and interact with the community on environmental issues.

Assistant Professor of Genetics/Developmental Biology: A tenure-track opening for an individual with demonstrated abilities to teach undergraduate genetics and developmental biology, demonstrated enthusiasm for undergraduate instruction at the introductory and specialist levels, ability to supervise undergraduate research and teach molecular methods and be innovative. Ph.D. required.

Columbus College is a senior unit of the University System of Georgia, enrolling over 5,500 students. The College recently opened a research and education center. Applicants should send a resume, statement of teaching/research interests and areas and at least three reference names, addresses, and phone numbers by January 30. Send materials to: School of Science, Columbus College, Columbus, GA 31907-5645. Further information: cleveland.art@cc.cc.peachnet.edu. Position contingent upon funding. Members of under-represented groups are encouraged to apply. An EEO/A employer.

COLLABORATIVE PROGRAMS WITH THE FORMER SOVIET UNION

The National Research Council/National Academy of Sciences announces support for collaborative programs with the former Soviet Union:

The Cooperation in Applied Science and Technology (CAST) program supports joint research in applied scientific fields between U.S. scientists and their colleagues in the former Soviet Union. The application deadline is March 1, 1996.

The NAS/NRC will also sponsor two summer Young Investigator Programs (YIPs) in Siberia for scientists who have received their Ph.D. within the past seven years. The programs are on forest management and urban water quality. The application deadline is February 21, 1996.

For more information and/or to receive an application packet for these and other programs, please address inquiries to:

National Research Council
Office for Central Europe and Eurasia
(FO2014)
2101 Constitution Avenue, NW
Washington, DC 20418
Telephone: 202-334-3680
Fax: 202-334-2614
Internet: OCEE@NAS.EDU
World Wide Web: http://www.nas.edu/ocee
Postdoctoral position immediately available in the area of oncology. Successful candidate would be involved in validating cancer targets including transcription factors and telomerase. Requires a Ph.D in Molecular Biology with 0-2 years of experience. Expertise in protein expression, cell biology and animal models will be an added advantage. Publication and interactions with outside investigators are strongly encouraged. Send resume to: Dr. R. Narayanan, Division of Oncology - 102/5, Roche Research Center, 340 Kingsland Street Nutley, NJ 07110. Fax - 201-235-7300.

Hoffmann-La Roche is an Equal Opportunity
Affirmative Action Employer.

DEKALB Genetics Corporation
Career Opportunities
M.S. and Ph.D.

DEKALB Genetics Corporation is the fastest growing agricultural seed company in the U.S. Our mission is to provide our customers with seed products that improve their productivity and profitability. We believe our biotechnology research program will play an increasingly important role in fulfilling that mission. We seek bright, creative and ambitious scientists to join our expanding multidisciplinary team focused on the genetic improvement of crop plants.

PROTEIN BIOCHEMIST: We seek resourceful and independent scientists at the M.S. and Ph.D. levels who have expertise in the purification and characterization of proteins from natural and recombinant sources to work with both our seed discovery and product development teams. Applicants should have demonstrated ability to design and perform biochemical studies, purify proteins from complex mixtures and establish enzyme and immunological assays. Some industrial experience is desirable.

The successful candidates will be located at DEKALB’s Discovery Research laboratory facility in Mystic, CT, a scenic shoreline community located on Long Island Sound, halfway between New York and Boston. In addition to a stimulating scientific environment, DEKALB offers competitive compensation, an attractive benefits package and an outstanding working environment.

Send applications and the names, addresses and phone numbers of three professional references to: Ms. Katrina Henry, DEKALB Discovery Research, 62 Maritime Drive, Mystic, CT 06355-1958.

University of Massachusetts Lowell

Dean of Sciences
The College of Arts & Sciences

The University of Massachusetts Lowell invites applications and nominations for the position of Dean of Sciences in the College of Arts and Sciences. The Dean of Sciences serves with the Dean of Humanities and Social Sciences and reports to the Provost. The appointment will commence on September 1, 1996 or as soon as possible thereafter.

The University: The University of Massachusetts Lowell traces its origins back over 100 years with the founding of both the Lowell Textile School and the Lowell Normal School. Throughout its years of growth, the University has remained committed to providing educational programs, research, extension and continuing education services in the liberal arts and the sciences. The University has also taken on the mission to support the economic and cultural development of the region.

The College: The College of Arts & Sciences was established in 1989 through the combination of the College of Liberal Arts and the College of Pure and Applied Sciences. The College consists of 238 faculty members in 16 departments. Within the College of Arts and Sciences, the six departments that constitute Sciences are: Biological Sciences, Chemistry, Computer Science, Earth Science, Mathematical Sciences and Physics & Applied Physics. They offer graduate, as well as undergraduate degrees and are part of an emerging engineering - applied sciences - management continuum that will influence program and course development. The graduate programs in Sciences award approximately 30 doctorate’s and 150 Master’s degrees each year. Faculty in Sciences secure a substantial portion of its $19M annually in external grants and contracts processed through the UML Research Foundation; many participate in interdisciplinary research centers that enhance opportunities for applied problem solving. Faculty also expect to make substantial contributions to the various research centers and to IMPACT (the Institute for Mass Partnering and Commercialization of Technology), a public/private collaborative venture designed to promote development of new technologies and the rapid transfer of results from research and development to commercially viable processes and products.

The Position: The primary role of the Dean of Sciences is to foster excellence in teaching, research, and service by personal example and through the exercise of vision and leadership. He or she must demonstrate a commitment to quality graduate and undergraduate education and a record of developing and evaluating cross-disciplinary programs. The Dean must also foster cooperative relationships within the College of Arts & Sciences to support collegiality among the faculty and students. The successful candidate will have demonstrated the ability to represent the College effectively in interactions with the public and private sectors. The Dean must also demonstrate the ability to articulate the goals and plans of the Sciences department, as well as to build productive long-term relationships among students, faculty, staff, and alumni.

Qualifications: Candidates must have an earned doctorate, and a record of distinguished teaching and scholarly research commensurate with an appointment as a tenured full professor in a department of the College. The successful candidate must be an active advocate of significant research programs, and will be expected to demonstrate a knowledge of the national research and funding environment, as well as a record of excellence in administration that includes strategic planning. To expand the College’s relationship with industry, the Dean must demonstrate the ability to represent the College and will be expected to articulate the goals and plans of the Sciences department, and to build productive long-term relationships among students, faculty, staff, and alumni.

Salary: The salary is highly competitive with excellent fringe benefits.

The Application: Screening of applicants will begin February 1, 1996 and continue until the position is filled. Applicants should submit a letter of application including discussion of educational and administrative philosophy and vision; a curriculum vitae; 2 letters of recommendation; and the names and addresses of 4 additional references to: Dr. Stanley C. Israel, Co-Chair, Search Committee for Dean of Sciences, College of Arts and Sciences, University of Massachusetts Lowell, One University Avenue, Lowell, MA 01854; Tel: (978) 934-3690; Fax: (978) 934-3013; E-Mail: israel@woods.uml.edu

UMass Lowell
The University of Massachusetts Lowell is an Equal Opportunity/Affirmative Action Employer. Title IX/H/V. ADA 1990 Employer.
stand at technology's forefront with a national resource behind you.

At David Sarnoff Research Center in Princeton, you'll have a chance to bring your superior technical acumen to a nationally renowned, technology-driven research and development team.

We are now entering new applications areas that merge our traditional strength with chemistry and biology. This has created two significant new programs developing technologies for combinatorial chemical and clinical diagnostics. These programs focus on developing revolutionary miniaturized devices and chemistries, and will require expertise from a variety of disciplines.

We are currently seeking individuals with the following backgrounds:

**DNA Diagnostics**
PhD in Biochemistry, Molecular or Cellular Biology with substantial clinical diagnostic product development experience in an industrial setting is required.

Experienced, graduate or post-graduate Bimolecular Chemists.

Optical and instrumentation engineer with experience in designing/developing luminescent-based imaging system for detection of biomolecules.

**Combinatorial Chemistry**
Post-doctoral pharmaceutical chemist with 5+ years' experience to support activities to transfer synthetic procedures to microminiaturized devices.

Computational chemist with experience in developing software for the design and analysis of combinatorial libraries.

Chemist/biochemist experienced in establishing leading-edge High Through-put Screening technologies in a pharmaceutical or biotech company.

We offer a competitive salary and comprehensive benefits. Please respond by sending/faxing your resume and salary history, to: David Sarnoff Research Center, Employment Dept. PH. CN 5300, Princeton, New Jersey 08543-5300. Fax: (609) 734-2276. employment@sarnoff.com Equal opportunity employer.

David Sarnoff Research Center
Subsidiary of SRI International

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**EXECUTIVE DIRECTOR**

This position is responsible for planning and administering the operation of a State research-funding facility with a staff of 25 and an annual operating budget of approximately $5 million.

The mission of the Institute is to identify, fund or conduct, and ensure the scientific validity of research that will result in assessment and resolution of significant phosphate industry issues affecting the environment and the health and safety of Florida citizens, and also lead to the implementation of new technology which will be of joint benefit to the industry and to Florida citizens.

Required: M.S. and 10 years experience in one or more of these technical fields: mining, mineral processing/extractive metallurgy, chemical engineering, chemistry, environmental sciences/engineering.

Preferred: Ph.D. plus minimum of 5 years experience soliciting, evaluating and initiating research projects; administering research budgets; and demonstrating the ability to maintain a credible public image with industry, environmental, regulatory, political and scientific groups.

Applications should include a letter of interest, detailed resume and three professional references (names, addresses, phone numbers). Postmark deadline - February 1, 1996. Desired starting date May 1, 1996.

Florida Institute of Phosphate Research
Executive Director Search Committee
c/o William F. Wyllie
1855 West Main Street
Bartow, Florida 33830

Equal Opportunity/Equal Access/Affirmative Action Institution. For disability accommodations, contact William F. Wyllie, (941)534-7160 a minimum of five working days in advance. The selection process will be conducted under the provisions of Florida Government in the Sunshine and Public Law.

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**Diversity Conference '95 Highlights**

Don't miss the 26 January 1996 issue of SCIENCE, where we will highlight our 1995 conference: Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries.

This special advertising supplement will feature interviews with key speakers from the conference and will examine diversity programs at leading pharmaceutical companies.

The results of an industry-wide survey on diversity programs will also be explored.

This special advertising supplement is the perfect place to showcase career opportunities at your company and to reaffirm your company’s commitment to diversity.

Other benefits include:
- Bonus Distribution to scientific minority organizations.

Issue date: 26 January
Reservation deadline: 9 January

Please contact Janis Crowley at phone: 212-496-7704
fax: 202-682-0816

SCIENCE
Amgen, the world’s largest biotechnology company, seeks a Postdoctoral Fellow for its Boulder, CO facility.

To qualify, you will need a PhD in Molecular Biology or equivalent, with a strong emphasis on gene isolation via expression cloning, hybridization, and PCR technologies. A background in inflammation biology and/or signal transduction is desirable.

We recognize that diverse perspectives are a key factor in the process of discovery.

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 and three weeks’ vacation. Please e-mail your resume/c.v. to: jobs@amgen.com and indicate resume as your subject or mail your resume to: Amgen, Human Resources Dept., Job Code: BPSC, 3200 Walnut Street, Boulder, CO 80301. Please consult our on-line Job Bulletin Board at http://www.bio.com for information on other career opportunities available at Amgen. Principals only, please.

EEO/AA Employer M/F/D/V

DEAN
College of Natural and Mathematical Sciences
Towson State University

Applications and nominations are invited for the position of Dean of the College of Natural and Mathematical Sciences at Towson State University beginning July 1996. The Dean is responsible for providing leadership for the Departments of Biological Sciences, Chemistry, Computer and Information Sciences, Mathematics and Physics and for outreach to the community. Undergraduate programs are offered in each department; Master’s programs are offered in Biological Sciences and Computer Sciences.

A successful candidate will have a Ph.D. in a natural or mathematical science with a proven record in

- Academic or research administration
- Teaching excellence and familiarity with current technologies
- Scientific scholarship
- External funding

An application should include a detailed resume, addresses and telephone numbers of three to five references and a one to two page statement of the applicant’s perception of the role of the Dean of the College at a public, comprehensive university. Applications must be completed by February 5, 1996. Nominations will be accepted until January 19, 1996. Correspondence should be sent to:

Professor James C. Hull, Chair
Search Committee for Dean of the College of Natural and Mathematical Sciences
Office of the Provost
Towson State University
Towson, Maryland 21204-7097

Towson State University, with an enrollment of 15,000 students, is located in a northern suburb of Baltimore, close to the varied educational, cultural, industrial and recreational opportunities available in the Baltimore-Washington area. WWW://http://towson.edu/http

Towson State University is an equal opportunity/affirmative action employer and has a strong institutional commitment to diversity. Women, minorities, persons with disabilities, and veterans are encouraged to apply.
RESEARCH MANAGER - #1076
Gene Expression

Responsibilities include establishing a program on molecular aspects of transgene expression in dicotyledonous plants. This effort will complement existing gene discovery, plant transformation, transgenic analysis, and molecular capabilities. Special emphasis will be placed on facilitating the engineering of defensive strategies against fungal pathogens. A Ph.D. degree in plant, biological or related sciences plus three years of directly related molecular biology research experience are required. The ability to effectively collaborate with internal and external research groups is essential. For confidential consideration, send 2 copies of your resume and cover letter by January 15, 1996 to: Pioneer Hi-Bred International, Inc., Attn: Linda Tuttle, Job #1076, 7300 NW 62nd Ave., P.O. Box 1004, Johnston, IA 50131-1004.

RESEARCH MANAGER - #1386-0
Nucleic Acids Analysis

This person will direct analytical research in the Nucleic Acids Analysis (NAA) lab, a part of the Analytical Biochemistry Department. Responsibilities will include managing the day-to-day operations of the NAA lab and leading efforts to develop and implement NAA technologies in this lab. The technology development component of this position will largely focus on techniques likely to have short-term impact and modification/adaptation of existing methodologies for use in high throughput analyses. A high degree of interaction with cell and molecular biologists, including other scientists working on development of NAA technologies, will be required. A Ph.D. or equivalent in biochemistry, molecular biology, or related field plus 3-5 years of relevant experience are required. Experience in all facets of nucleic acids analysis (DNA and RNA), preferably of transgenic plants, and supervisory experience are essential. Demonstrated experience in managing projects having deadlines is an advantage. Please send resume, cover letter and three references by January 15, 1996 to: Pioneer Hi-Bred International, Inc., Attn: Dawn Meyer, Job #1386-0, 7300 NW 62nd Ave., P.O. Box 1004, Johnston, IA 50131-1004.

We offer competitive salaries and excellent, comprehensive benefits such as 401(k), tuition and relocation reimbursement. Des Moines is a prospering heartland city that ranks well above the national averages in affordability and education. Our location provides a mix of beautiful open spaces and city life advantages.

PIONEER HI-BRED INTERNATIONAL, INC.
An Equal Opportunity Employer

The Science of a Superior Seed

Pioneer Hi-Bred International, Inc. is the world leader in agricultural genetics. Founded in 1926, we are a publicly held company that invests more than $115 million in research and product development. Pioneer brand products are grown in almost every crop-producing continent in the world. At our headquarters in Des Moines, Iowa, we're adding to our Research team.

AN UNBELIEVABLE OPPORTUNITY

NeXstar Pharmaceuticals, an integrated drug discovery, delivery, and development company based in Boulder, Colorado, is the world leader in combinatorial chemistry and liposomal drug delivery. The Company employs roughly 400 people worldwide and markets two approved drugs, Ambisome and DaunoXome. NeXstar has strengthened its research toward the treatment of immunological and inflammatory disorders. The focus of these efforts includes autoimmune diseases and oncology. Recently NeXstar acquired Supragen, a biotechnology company with 25 employees, to facilitate the effort. Supragen was founded by Drs. John Kappler, Brian Kotzin, and Philippa Marrack; these scientists will continue as exclusive consultants to NeXstar.

NeXstar seeks an established, outstanding, cellular immunologist to direct research and clinical development of lead compounds. The ideal candidate, a PhD or an MD, will have a distinguished professional reputation in the academic literature and a drive to treat disease. The candidate may come from either an academic or pharmaceutical background. Knowledge of T cell and APC biology is essential, as well as determination to turn tumors into vaccines and to down-regulate responses to auto-antigens. Clinical experience would be a strong asset, as would knowledge of molecular biology and nucleic acids. Proven management skills will be valued highly. NeXstar seeks an adventurer, a deep thinker, a person who cherishes exquisite data and a scientist strong enough to enjoy interactions in a highly charged and driven environment.

Boulder, Colorado has a wonderful environment for biotechnology as well as the rest of life's satisfactions. NeXstar has various research collaborations with the University of Colorado in Boulder and Denver, as well as a strong relationship with National Jewish Hospital in Denver. NeXstar also has valuable collaborations with many clinicians in Europe and the United States. As one of the few biotechnology companies that actually markets product derived from its own research, NeXstar understands and supports the interactions between powerful basic research and drug discovery and development. To apply, in strictest confidence, send a note directly to Dr. Larry Gold, Chairman of the Board, or simply call him at 303-546-7605. Don't miss this opportunity—you'll hate yourself forever.

NeXstar is an Equal Opportunity Employer
ASSOCIATE SCIENCTIST

Athena Neurosciences, Inc. is an established biotechnology-based company committed to the discovery & development of new products to diagnose and treat diseases of the central nervous system. We currently have an associate scientist position open at our South San Francisco facility.

This position involves investigation of CNS disorders and includes characterization of a transgenic model of Alzheimer’s Disease. The position requires at least two years’ experience in quantitative fluorescence and autoradiography using CNS tissue. A background in CNS anatomy and experience with other morphologically-based quantitative imaging techniques, histology, and immunohistochemistry is highly desirable.

Athena offers competitive salaries and benefits. Please send resume to: Athena Neurosciences, Inc., HR Dept., Attn: Job# S1215-AS, 800 Gateway Blvd., South San Francisco, CA 94080. EOE

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OUR EXPANDING UNIVERSE

Earlier this year, clinical research was completed on our lead proprietary biologic, a treatment for multiple sclerosis. We recently filed a Product License Application with the U.S. Food and Drug Administration seeking market approval for the product. We owe our success thus far to the hard work and dedication of our staff. Now, as we prepare to commercialize our first proprietary product, we seek talented individuals with strong values and a high level of commitment in a wide variety of areas to aid in our continued success.

Group Leader - Bioassay Method Development

Opportunity to lead a group of scientists in the design, development and validation of bio and immunoassays for detection and quantitation of novel biopharmaceutical products in samples from human and animal studies and from manufacturing processes. To succeed candidates must have a Ph.D. and 10+ years’ experience, including at least 3 in the pharmaceutical/biotech industry. Must have directed development projects and PhD level staff. A strong Immunology or Cell Biology background is required. Experience with regulatory submissions in GMP and GLP environments is highly desirable. (Code: GL/SCI)

Biogen offers what few companies in our industry can - Professional Challenge, Stability, Growth, and one of the strongest financial profiles in the industry. In addition, our compensation and benefits package, including equity participation, is one of the best in the industry, and is designed to attract and retain the finest talent available. If you are one of the best, this is your opportunity to join our expanding universe. Please forward your resume, indicating appropriate job code, to the address below. For more information about opportunities at Biogen, find us on the World Wide Web at CareerMosaic: http://www.careermosaic.com

Biogen, Inc., Dept. DP 14 Cambridge Center, Cambridge, MA 02142. FAX: (617) 679-2546

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MONSANTO

The Plant Science Technology group in Ceregen, a division of Monsanto, has immediate openings for highly motivated individuals to conduct research in the areas of molecular biology, biochemistry, and tissue culture for research in plant development, insect control and plant transformation. Ceregen is a world class organization with strong commitment to the discovery of novel traits for crop plants using biotechnology. The qualified individuals will join scientists with expertise in gene expression, plant development, plant growth regulators, plant transformation, molecular biology, and biochemistry to contribute to research to develop products that provide value to agriculture worldwide.

Molecular Biologist, Plant Growth and Development; JOB #CT02

Successful candidates will be responsible for studying genes involved in pollination, seed development, or germination for use in developing novel plant traits. Applicants should have a B.S. plus postdoctoral experience (or equivalent) with strong skills in molecular biology and research experience in one or more of these areas: gene expression, seed biology, hormone physiology, cell biology, genetics, or biochemistry. The ability and willingness to work in a multi-disciplinary research team environment is required.

Contact: Sherri Brown, Ph.D., Monsanto AA2G, 700 Chesterfield Parkway, St. Louis, MO 63198

Microbiologist, Insect Control Team, Ceregen; JOB #IC04

Duties: Provide the microbiology expertise for the discovery and development of novel insect control proteins. Applicants should have B.S., M.S. or Ph.D. in Microbiology with experience in microbial production of bioactive proteins. Innovation and adaptability will be key in developing fermentation protocols and assay systems designed to discover new genes for insect control. Strong team and communication skills are essential.

Contact: John Purcell, Ph.D., Monsanto G4C, 700 Chesterfield Parkway, St. Louis, MO 63198

Protein Biochemist, Insect Control Team, Ceregen; JOB #IC03

Duties: Protein biochemistry work to support the discovery and development of novel insect control proteins; purification of proteins from microbial and plant sources; assay development. Requirements include a Ph.D. in Biochemistry or related discipline with experience in protein purification and enzyme assay development. Immunological assay experience is a plus. Strong team and communication skills are essential.

Contact: John Purcell, Ph.D., Monsanto G4C, 700 Chesterfield Parkway, St. Louis, MO 63198

Crop Transformation; JOB #CT02

Immediate openings for innovative researchers (with a Ph.D. degree or with a B.S. and/or M.S. degree and extensive work experience) for the development of crop transformation techniques. Senior and entry level positions, as well as post-doctoral research associate positions, are currently available for the transformation of soybean, cotton, potato, wheat and corn. Candidates should have considerable experience with plant tissue culture and plant transformation techniques. The ability and willingness to work in a multi-disciplinary research team environment is required.

Contact: Barbara Rhodes, Monsanto G4J, 700 Chesterfield Parkway, St. Louis, MO 63198

Monsanto is an Equal Opportunity employer. Minorities, females, disabled, and veterans are encouraged to apply. We will provide reasonable accommodations upon request.

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VICAL, INC.

SR. RESEARCH ASSOCIATE

VICAL, INC., a leader in the development of gene-based pharmaceutical products for human gene therapy, is seeking an individual to be responsible for fermentation process development and GMP fermentation production.

Requires BS/MS and minimum of 5 years experience in high density E. coli recombinant fermentation development. Must have broad background in pharmaceutical manufacturing and GMP compliance. Excellent oral and written communication skills required.

Please send your resume to: Human Resources Dept., VICAL, INC., 9373 Towne Centre Drive, Ste. 100, San Diego, CA 92121, or fax to (619) 453-3452. EOE.

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Ceregen

The Neurosciences department at Ceregen, a division of Ceregen, is seeking an individual with an expertise in a multi-disciplinary research team environment is required.

Contact: Barbara Rhodes, Monsanto G4J, 700 Chesterfield Parkway, St. Louis, MO 63198

Monsanto is an Equal Opportunity employer. Minorities, females, disabled, and veterans are encouraged to apply. We will provide reasonable accommodations upon request.

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Athena Neurosciences

athena neurosciences

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Biogen

Biogen is an Equal Opportunity Employer.
Scientific/Research Opportunities

Inex Pharmaceuticals Corp. is an innovative leader in the development of systems for the targeted delivery of biologically active agents in vivo. This includes the intracellular delivery of antisense oligonucleotides and DNA vectors. Gene therapy is the central focus of the company. We are seeking highly motivated research staff at all levels, preferably with industrial experience.

**Molecular Biologist:** Ph.D. with 2+ yrs. industrial/academic experience in the study of viral and/or tissue specific transcription. Experience with promoter analysis, reporter gene construction, PCR (quantitative RT-PCR, differential display PCR, in situ PCR), and site directed mutagenesis desirable. Gene therapy or transgenic organism experience an asset.

**PDF - Molecular Biologist:** PDF to study tissue specific/inducible regulation of gene expression for gene therapy applications. Prefer Ph.D. who is eligible for MRC/N.S.E.R.C. fellowship. Candidates should have Ph.D. experience related to characterization of gene expression and promoter analysis. Must be highly motivated and willing to work in fast-paced research environment.

**Protein Biochemist:** Ph.D. in Biochem. with a minimum of 2 years academic/industrial experience in the following areas: Protein-Lipid interaction, membrane biochem. and biophysical characterization. Fluorescence spectroscopy, HPLC.

Please forward your resume to: H.R., Inex Pharmaceuticals Corporation, 1779 West 75th Avenue, Vancouver, B.C. Canada V6P 6P2, or FAX: (604) 264-9959 or email yaroshev@inexpharm.com

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**ASSISTANT PROFESSOR**

**CELL OR MOLECULAR BIOLOGIST**

Northwestern University Medical School seeks a full-time, non-tenure-track faculty member at the Assistant Professor rank, in the Department of Surgery to join an active wound healing laboratory. Applicants should have research interests in basic cellular and molecular mechanisms of wound repair. Of particular interest are studies in aging, and hypoxia, and their alterations on signal transduction. The desired start date is early 1996. Applicants must hold a Ph.D. and have demonstrated research experience in a relevant area. Support will be available for 3 years. The new person will be expected over time to develop an independent research program with external funding and work closely with the wound healing group.

Candidates should submit a curriculum vitae, a brief statement of research interests and future plans, copies of 3 recent publications, and three professional references to Thomas A. Mustoe, M.D., Professor of Surgery, Division of Plastic and Reconstructive Surgery, 707 N. Fairbanks Court, Suite 811, Chicago, IL 60611. Northwestern University is an Affirmative Action/Equal Opportunity employer. Hiring is contingent upon eligibility to work in the United States.

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**Assistant Professor of Biology**

The Department of Biological Sciences, Loyola University, New Orleans is seeking to fill one tenure-track faculty position at the level of Assistant Professor for Fall 1996. Applicants must have a Ph.D. in the biological sciences, be committed to high quality undergraduate teaching, and participate in directing UG student research. The department is dedicated to providing an educational and research environment that delivers outstanding academic experiences which develop within students an excellent knowledge base, problem-solving, research, and communication skills. It has the academic programs and resources to support these activities, and has an excellent and growing research infrastructure. The program is expanding, currently enrolling over 250 undergraduate majors, most of whom enter graduate or professional schools upon graduation.

This faculty position will have teaching responsibilities that contribute to one or more of the core courses in the department’s major curriculum (two focus on organismic diversity; ecology/evolutionary biology; genetics; and molecular/cellular/developmental biology); we are particularly interested in candidates with expertise in cell/developmental biology. Students select electives from diverse offerings, which may include courses in marine sciences offered at Louisiana Universities Marine Consortium (LUMCON).

The department’s research facilities include state-of-the-art equipment for isolation, characterization, and analysis of biomolecules. Standard growth, environmental, and cell culturing chambers, autoclaves, and water distillation systems support studies of living systems. Computer hardware (IBM and VAX mainframes, MAC and IBM pcs) and software support studies requiring univariate/multivariate statistics, morphometrics, image analysis, DNA sequence analysis, phylogenetic/population genetic analysis. Field studies are supported by a vehicle, field equipment, and our contacts with local landowners and knowledge of field sites in the region. The department has an APHIS-accredited animal care facility and greenhouse. Biology faculty have established outstanding research collaborations with researchers at nearby universities, federal research centers (U.S.D.A. and U.S.P.S. Southern Regional Offices), and biomedical and public health laboratories. Major research centers in Bioenvironmental and Global Change Research (Tulane Univ.), a nationally renowned Eye Center, and Neuroscience Research Center (L.S.U. Medical School) are available.

To apply, send your CV, a copy of your college transcripts, statements of teaching and research interests and expertise, and at least 3 letters of reference to: Biology Search Committee, Campus Box 140, Department of Biological Sciences, Loyola University, New Orleans, LA 70118. We will begin reviewing applications on January 15, 1996 and will continue until the position is filled.

The Department of Biological Sciences seeks a highly qualified, diverse applicant pool and especially encourages members of groups underrepresented in science to apply. Loyola University is an equal opportunity/affirmative action employer.

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**ONYX PHARMACEUTICALS**

**Development Scientist**

Onyx Pharmaceuticals is a dynamic young company engaging in the development of therapeutics for cancer and other diseases associated with abnormal cell growth. We’re seeking a highly qualified individual to assist in the development of a replicating adenovirus to treat cancers with p53 abnormalities.

You will be reporting to the COO, and responsible for developing and characterizing a scaleable suspension culture process for our adenovirus product, and for developing a stable formulation. You will also assist in the design and build-out of the Process and Product Development Lab. Minimum 7 years experience in development of biologic products (such as proteins made by rDNA technology or monoclonal antibodies), viral vaccines, gene therapy products; cell culture, purification and formulation experience required; analytical methods development desirable. Ph.D in Biological Sciences required; experience in transferring development processes to GMP manufacturing desired.

To apply, please send/fax resume to: Onyx Pharmaceuticals, Attn: Dept. BG, 3031 Research Dr., Richmond, CA 94806. Fax: (510) 222-9758 or e-mail to denise@onyxpharm.com. EOE
Postdoctoral Fellow/Research Fellow
VISION TOUCH & HEARING RESEARCH CENTRE

The Vision Touch & Hearing Research Centre is a Special Research Centre of the Australian Research Council. For further information see http://www.vthrc.uq.edu.au/vthrc. The Centre is embarking on a major new initiative using optical recording techniques to supplement studies of visual cortical organisation. A postdoctoral position is available in the laboratory of the Director, Professor Jack Pettigrew. The applicant should have a background in visual electrophysiology and be familiar with image analysis in both Mac and PC environments. Interest or experience in colour vision and the comparative method would be desirable. The appointment will be for five (5) years commencing in 1996.

Salary will be in the range of $A37,345 – $A40,088 per annum or $A42,198 – $A50,110 per annum (NHMRC Research Officer/Fellow) depending on qualifications and experience. Return airfare to take up appointment, plus travel allowance for yearly attendance at international meetings are provided.

Further information can be obtained from Professor Pettigrew on telephone +61-7-3365-3842, fax +61-7-3365-4522 or email J.Pettigrew@vthrc.uq.edu.au.

Written applications quoting Reference No. 59295, including a detailed curriculum vitae with contact details of three referees should be forwarded to Professor J. Pettigrew, Vision Touch & Hearing Research Centre, The University of Queensland, Brisbane Qld 4072 Australia.

Closing date for applications: 15 January 1996.

University of Cambridge

Professorship of Medical Genetics

Applications are invited for the above Chair which will be established from 1 January 1997. The University follows an equal opportunities policy.

Pensionable stipend £38,993.

Further information may be obtained 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 29 January 1996.

The University aims to achieve the highest quality in teaching and research.

KUWAIT INSTITUTE FOR SCIENTIFIC RESEARCH

Kuwait Institute for Scientific Research (KISR) is a nonprofit organization actively engaged in applied research in the fields of environmental and earth sciences; water resources; food resources; engineering; petroleum, petrochemicals and materials and techno-economics.

KISR has a vacancy in the following field:

SOIL CHEMISTRY OR PEDOLOGY

Major duties:

- Developing and evaluating land reclamation practices and suggestions of strategies for arid soils
- Evaluating soil laboratory analysis procedures and supervising team performance
- Interpreting and analyzing data on soil using advanced technology procedures
- Evaluating soil surveys and classification

Qualifications: Applicants should have a Ph.D. in Soil Chemistry or Pedology with 10 to 15 years of experience in land reclamation of arid areas. Quantitative skills such as statistics and GIS are highly desirable. Excellent knowledge of laboratory and field techniques for evaluation of physical and chemical properties of soils in addition to good understanding of soil surveys and irrigation systems. Good communication skills in Arabic and English preferred.

KISR offers attractive tax free salaries commensurate with qualifications and experience and generous benefits that include: gratuity, free furnished and air-conditioned accommodation, school tuition fees for children, six weeks annual paid vacation, air tickets, free medical care and life insurance.

Interested applicants are requested to send their Curriculum Vitae with supporting information not later than one month from the date of this publication, to:

Personnel Manager
Kuwait Institute for Scientific Research
P. O. Box 24885
13109 Safat, KUWAIT
**FRONTIER RESEARCH PROGRAM**

**RIKEN**

**Neuronal Function Research Group**

The Institute for Physical and Chemical Research (RIKEN), located in Wako, Saitama, Japan, a suburb of Tokyo, is a leading research institute and public corporation funded by the Japanese Government.

The Frontier Research Program of RIKEN recently launched the Neuronal Function Research Group which includes four new laboratories for cellular and molecular neuroscience — the laboratory for Neuronal Recognition Molecules, the Laboratory for Neuronal Signal Transduction, the Laboratory for Cellular Information Processing, and the Laboratory for Neuronal Structure. As detailed below, the Neuronal Function Research Group is now searching for a neurobiologist, to head the Laboratory for Neuronal Structure, and several postdoctoral research fellows:

1. **Head (Team Leader) of the Laboratory for Neuronal Structure.**

This is a new post that will be available from April 1 or May 1, 1996. It will be funded, along with a generous research grant, by the Frontier Research Program of RIKEN for a fixed term of seven and a half years. We are seeking a well-qualified scientist who has earned a Ph.D. or M.D., has completed at least 3 years postdoctoral or independent research, and has an outstanding record of achievement in the molecular and cellular approaches to the study of the structure of neurons and/or glial cells. Preference will be given to those individuals demonstrating a strong interest in either the morphological bases of neuronal plasticity, cytoskeletal transport and membrane targeting, or neuron-glia interaction. The successful candidate is expected to develop a vigorous research team on the RIKEN Wako campus.

2. **Postdoctoral Positions in the Laboratory for Neuronal Signal Transduction.**

These positions are available immediately and involve the study of synaptic transmission and plasticity in the developing and mature CNS. Ongoing projects include studies of the mechanisms of cerebellar LTD using transgenic mice, synaptic transmission during cerebellar development, and synaptic plasticity in the somatosensory and olfactory systems. A strong background in either electrophysiology, optical measurement, molecular biology, or behavioral neuroscience is desired. A Ph.D. or M.D. degree is required.

3. **Postdoctoral Positions in the Laboratory for Cellular Information Processing.**

We are inviting applications from postdoctoral research scientists in molecular neurobiology to work in the area of gene expression related to synaptic plasticity. The positions are available immediately and each candidate should have a Ph.D. degree. A strong background in molecular biology, together with a familiarity with neuronal cell culture or molecular imaging techniques is required.

Applicants should identify the position (1, 2, or 3) that they wish to apply for and send their full curriculum vitae listing all publications, a description of their research interest and experience, and the names, addresses, and telephone numbers of three references to the following people depending on the position applied for:

Dr. Kensaku Mori (1), Dr. Masanobu Kano (2), or Dr. Ryoji Yano (3)

Neuronal Function Research Group
Frontier Research Program, RIKEN
2-1 Hirosawa, Wako, Saitama, 351-01, Japan

For further information and details, please write to the above address or send a fax message to +81-48-467-2539. Unfortunately, we cannot accept telephone calls.

**THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF SCIENCE**

**Head of Department of Chemistry**

The Hong Kong University of Science and Technology (HKUST) was opened in October 1991 as a technological university with special emphasis on research, graduate education, and close collaboration with industry and business. Enrollment is expected to grow to 7,000 (FTE) by 1997/98. The School of Science which comprises five departments: Biochemistry, Biology, Chemistry, Mathematics, and Physics, enrolls about 1/4 of the University's undergraduate and graduate students.

The Department of Chemistry, presently with 19 faculty members, provides undergraduate and graduate education (including PhD) in both the basic and applied aspects of molecular science. The present research thrust of the Department includes: 1) Novel Analytical Techniques; 2) Laser Spectroscopy and Applications; 3) Advanced Materials/Polymer; and 4) Drug Discovery, Design and Synthesis. It is expected that by the academic year 1997/98, the Department's faculty size will grow to 26.

**Qualifications and Experience**

Applications/nominations are invited from well-qualified and accomplished chemists for the position of Head of the Department of Chemistry. In addition to extensive teaching and research experience, the successful candidate must have demonstrable leadership qualities necessary to lead and manage the Department.

**Salary and Conditions of Service**

Salary will be highly competitive. Generous fringe benefits including medical and dental benefits, annual leave, housing and children's education allowances are provided; air passages are also provided where applicable. Initial appointment will be on a three-year contract; a gratuity of an amount equal to 25% of the total basic salary drawn will be payable upon successful completion of contract.

**Application/Nomination Procedures**

Applications/nominations together with a detailed curriculum vitae and the names and addresses/fax numbers of three to five referees should be sent to the Chair, Search Committee for the Headship of Department of Chemistry, c/o The School of Science, Hong Kong University of Science and Technology, Clearwater Bay, Kowloon, Hong Kong (Fax No.: (852)2558-1464) before 31 January 1996. The search will continue until a suitable appointment is made.

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The world of SCIENCE On-line: Now you can access these exclusive features on the SCIENCE World Wide Web home page with just a click of your mouse:

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- **SCIENCE GLOBAL CAREER NETWORK:** On-line classified advertising.
- **Beyond the Printed Page:** Special interactive projects, important data and more.
- **SCIENCE On-line:** SCIENCE Table of Contents, the SCIENCE Editorial, This Week in SCIENCE available the same day that the printed version is published!

**SCIENCE WWW Address: http://www.aas.org**
POSITIONS OPEN

RESEARCH ASSOCIATE 2 for university in central Ohio. Assist in the development and implementation of clinical pharmacology protocols. Monitor studies for protocol adherence. Perform scientific data collection and management in clinical trials and research projects. Assist with recruiting patients for study under the direct supervision of a medical doctor in conducting physical exams and taking medical histories. Collect and process blood samples and other biological specimens for analysis. Check vital signs, operate electrocardiographs, telemetry equipment and emergency medical care equipment. Summarize and evaluate research findings, including laboratory results. Assist drug-related side effects. Verify, transcribe, and record data. Assist in training and coordinating staff, coordinating clinical research projects and pharmacological studies; supervising activities in the department; writing consent forms. M.A. in biological or health science and three years of experience in above-described duties or, in the alternative, a U.S. medical degree or its equivalent as determined by an accredited agency. 40 hours per week, 8 a.m. to 4 p.m., Monday to Friday, $28,573. Send two résumés and cover letters (no calls) to: T. Do, Reference Number 1258, Ohio Bureau of Employment Services, P. O. Box 1618, Columbus, OH 43216.

VERTEBRATE ZOOLOGIST (Tenure-track; Assistant Professor) to teach and conduct research in vertebrate zoology at the organismal level. Screening begins 31 January 1996. Responsibilities: teach general biology and zoology courses, advise students, and maintain a program of scholarly activity. Qualifications: Ph.D. in a biological field, teaching experience, and a background in vertebrate zoology at the organismal level with skills in biostatistics.Preference will be given to those with research experience in areas such as morphology, physiology, or behavior. Send cover letter addressing qualifications and experience in teaching and research, teaching philosophy and research interests; curriculum vitae; unoffcial transcripts; and names, addresses, and telephone/fax numbers of three references to: Dr. Sheldon Johnson, Biology, Central Washington University, Ellensburg, WA 98926-7587. This position is contingent on funding. For disability accommodations, call 509-963-2205 or TDD 509-963-2207. Central Washington University is an Affirmative Action/Equal Employment Opportunity/Title IX institution.

ACCOUNT MANAGER
NEW PRODUCT DEVELOPMENT

Medical communication company seeking an ACCOUNT MANAGER with experience and skills in project management along with managerial experience with programmers or software development. In addition, the candidate must have knowledge of the pharmaceutical industry and medical databases. Online and Internet familiarity helpful. Please send résumé to: Excerpta Medica, Personnel Department, 105 Raider Boulevard, Belle Mead, NJ 08502.

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