TV Documentary Spotlights Minority Scientists

Journeying 3 days by train to a conference in Siberia, University of Maryland physics professor James Gates has many hours to explore the theoretical calculations that are the heart of his work. His area of concentration is supersymmetry, an element of "superstring theory," that posits no fundamental correlations exist for matter versus energy due to the spin of the elementary particles in the universe.

At one point, Gates gets a new idea, one he thinks could be a major link in his work. Tired after a night of deep contemplation, and with the sun coming up on the horizon, Gates talks about that insight and about science as a creative process, as a documentary film maker accompanying him captures the moment.

Gates is one of four physicists and astronomers featured in the first episode of "BreakThrough: The Changing Face of Science in America," a six-part series that will air in prime time on public television stations beginning 8 April.

"BreakThrough" profiles 20 African-American, Latino, and Native American scientists and engineers who are forging new ground in biology, astronomy, physics, mathematics, and other scientific disciplines. Each show has a theme that explores the special challenges confronting minorities who pursue careers in science.

The series was made by Blackside Inc., a Boston-based producer of documentaries including the award-winning "Eyes on the Prize" and "The Great Depression.

To expand the impact of "BreakThrough," Blackside has worked closely with AAAS developing an extensive national outreach effort that will make related science education information available to viewers. It builds on formal and informal science education collaborations established by AAAS's Directorate for Education and Human Resources Programs.

School, community, and science organizations in 32 areas around the country are participating, and premieres of the program will be held in several cities.

Viewers can access program descriptions, print materials, and information about science-related activities in their areas via the Internet at <http://www.blackside.com>.

Those without on-line access can tap into an information database by using a push-button phone to call a toll-free number: 1-800-BIG-BREAK.

The project won strong support from the Alfred P. Sloan Foundation, which provided a major grant for program planning and production. Additional program support and funding for outreach efforts came from the National Science Foundation and Intel Foundation.

Executive producer Joe Blatt said a major challenge was to capture the essence of the scientists' work in a short span. "You have to give up the pretense that you can cover everything. You need to find one strand that conveys the heart of the science while capturing the excitement."

For the segment on Gates, it happened serendipitously during the 1994 trip to Siberia. The train ride was his suggestion, inspired by his childhood interest in Russia and scenes in the film Dr. Zhivago.

Gates believes his "very rich fantasy life" as a young boy was an important factor in his becoming a theoretical physicist. "Mathematics had always been part of my imagination, consisting of rules that were made up," he recalled. Then, doing an inclined plane experiment in high school physics, he had an epiphany. "Suddenly I realized that math represented something real. It broke down the barriers between the real and imagined worlds."

The ideas of supersymmetry have yet to be found experimentally, Gates noted. "But," he added, "I'm convinced Nature will find a way to use such a beautiful form of mathematics."

For more information, contact Judy Kass at AAAS, phone 202-326-6667 or by the Internet at: jkass@aaas.org. At Blackside, contact Jass Stewart, 617-536-6900 or: jass@blackside.com.

From Our History Files...

The 1950s were years of widespread public interest in the nation's scientific and technological status. A group of state and civic leaders in Washington state set about to plan a World's Fair, "Century 21," that would emphasize future developments. A major concern was making the U.S. science exhibit interesting and understandable to the general public. Would scientists offer guidance? The far's organizers approached AAAS with a request for help.

Not only did AAAS organize a committee of scientific advisers, but as the U.S. government underwent a change of administration, the association lent a staff member, Edward Sherburne Jr., to the Commerce Department to serve as interim science coordinator of the U.S. Science Pavilion.

When the fair opened on 21 April 1962, the U.S. science exhibit was by far the most popular attraction. Reluctant to dismantle it when the fair closed, the Seattle sponsors reopened the exhibit as the Pacific Science Center. Today, the center offers a wide array of programs and interactive exhibits designed to increase the public's understanding of science, mathematics, and technology.

The Stuff of Life

At Oak Ridge National Laboratory, we’re developing advanced materials for the hard knocks of the real world. Surface-treated plastics for “smart” credit cards. Reinforced ceramics for uniquely durable machining tools. High-temperature alloys for high-mileage trucks and jets. Thin films for next-generation computer chips. The stuff of life, you might say.

If you’d like to make a material contribution to the quality of today’s world—and the stuff of tomorrow’s—send a resume to ORNL Staffing Office, P.O. Box 2008, Oak Ridge, Tennessee 37831-6216 or e-mail us at jko@ornl.gov. ORNL is an equal opportunity employer committed to building and maintaining a diverse work force.
Arlington, Virginia—"This is a complex issue that will take complex solutions. The problem will be solved, not by women and minorities acting alone, but by everyone, in a concrete networking effort, a new paradigm in which we go to the community and ask them to be partners with us."

Shirley Malcom, head of the directorate for education and human resources programs for AAAS, spoke these words to a gathering of government officials, recruiters, business representatives, and minority scientists. The AAAS-sponsored conference, entitled "Fostering Diversity in the Scientific Workforce in the Pharmaceutical and Biomedical Industries," took place October 26-27, 1995, at the Crystal City Marriott Hotel. The "problem" Malcom referred to is one of the most pressing now facing industrial science: how to recruit and retain minority scientists.

On the first day of the conference, keynote speakers addressed the federal role in promoting diversity in the scientific workforce. The morning of the second day featured three panels: one on the status of minority scientists in the biopharmaceutical industry, another on federal investment in building the science and engineering workforce, and a third on university efforts to set up partnerships with industry. After a gala lunch, the final and much-awaited session focused on the efforts of biopharmaceutical companies to attract and keep minority scientists.

### The Value of Diversity

John Gibbons, assistant to the president for science and technology and director of the White House Office of Science and Technology Policy, spoke eloquently of the value of American diversity: "Our diversity creates a talent pool of unprecedented breadth and width. Creativity, the very heart of creativity, comes from merging these differences and having them rub up against one another. That's why we must capture this diversity in its fullest, most positive form, increasing the proportion of women, minorities, and people with disabilities in the work force."

Clearly, the problem is multifaceted and multileveled. Many participants spoke of a situation in which everyone is willing but no one seems networked. Beverly Bujanowski, from the human resources office of Johnson & Johnson, said, "From the perspective of industry, we've made the commitment. We have to, in view of the way our future population base is changing. Our biggest problem is how do we find these people?"

Conversely, one questioner said, "College minority students interested in science can't find the right information—they don't know where the good companies are."

Several speakers addressed the persistence of dropout gaps—the tendency of minority scientists who have completed one degree not to go on to the next. Norman L. Fortenberry, executive director of the National Consortium for Graduate Degrees for Minorities in Science and Engineering (GEM), recited the too-familiar statistics: "While minorities make up 22 percent of the US population and 19 percent of the workforce, that drops to 16 percent of undergraduate enrollment in the sciences, 10 percent of undergraduate degrees, and then between 3 and 4 percent of enrolled graduate students and graduate degrees."

Sheila Pyfrom, associate director for human resources at Bristol-Myers Squibb, spoke of the lack of role models for minority scientists: "Many minority kids have never known anyone in the sciences other than the doctor or the dentist." Speaker after speaker talked of the importance of a mentor at crucial stages of a scientist's career. And once the minority scientist lands the job, there is still considerable resistance to overcome. One working scientist took the microphone to say, "It hurts when you're on the job, doing the science, getting paid, and the person next to you perceives you as someone for whom special corners were cut."

Whatever outreach industry makes, it will have to reach from one culture to another. Norbert Hill of the American Indian Science and Engineering Society presented a bracing challenge to the biopharmaceutical industry. "Do you want a handshake or an embrace?" he asked. "Before you even consider recruitment and retention, you must look at the human investment you intend to make. This will be a long-term relationship with people from different contexts and cultures, and if you're not willing to make that investment, there's no relationship there."

Tim Seifritz of Promega Corporation said that industry definitely has a role: "We should work to get students excited about science. Who else is going to show people just how interesting a scientific career could be?" And almost everyone agreed that the time-window for this generation is very narrow. Jean Jackson-Swopes, manager of college relations at Abbott Laboratories, spoke of the need to identify promising minority students as early as possible in the educational process: "If we don't get them between the fourth and seventh grade, they're gone."

---

continued...
Accelerating Growth in R&D through our People

Bristol-Myers Squibb Pharmaceutical Research Institute, the R&D division of Bristol-Myers Squibb, is proud of the many talented and diversified scientists behind our scientific endeavors.

PRINCETON, NEW JERSEY

MEDICINAL CHEMISTRY
The Medicinal Chemistry Division is seeking well-trained and highly motivated scientists to be responsible for the synthesis of novel pharmacologically active compounds using organic synthesis techniques and combinatorial chemistry approaches. Requirements include a BS or MS in organic chemistry and 1-2 years relevant research experience. Candidates must be skilled in methods of organic synthesis including analytical techniques for compound purification and characterization, i.e., chromatography (TLC, HPLC) and spectroscopy (NMR, IR, MS). Knowledge of Macintosh-based software (ChemDraw, Word, Excel) is desirable. Reply to Human Resources #TG-418.

ONCOLOGY DRUG DISCOVERY & EXPLORATORY
Several oncology research positions are available in both drug discovery and exploratory research departments for highly motivated individuals. Successful candidates will possess skills, experience, and a good working knowledge in molecular biology techniques (DNA cloning, DNA/RNA isolation, PCR, western blotting, immunoprecipitation, bacterial protein expression). Additional experience in one or more of the following areas is desired: protein biochemistry, cell biology, eukaryotic cell culture or molecular genetics. Reply to Human Resources #TG-404.

TRANSGENIC UNIT
This position is responsible for the cultivation of embryonic stem (ES) cells and the establishment of ES cell lines. Overall experience in tissue culture techniques including the maintenance of proper sterile procedures (routine mycoplasma and bacteria testing), quality control for tissue culture supplies (fetal calf serum, cell serum, defined media) and maintaining records/protocols is required. Candidates should have a BS or MS and a minimum of 2-4 years related experience. Additional experience in tissue culture techniques, blastocysts aggregation and manipulation of embryos would be an asset. Reply to Human Resources #TG-405.

METABOLIC DISEASES
We are seeking an established scientist in the area of carbohydrate and fatty acid metabolism. Requirements include a Ph.D. in a relevant discipline, 2-5 years experience, as well as experience in state-of-the-art whole animal metabolic kinetic methods. Experience with animal models of diabetes and obesity would be an asset. Reply to Human Resources #NM-420.

Please forward/tax your resume with HR code to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, P.O. Box 11279, Trenton, NJ 08620-1279. FAX: 609-351-9841.

SEATTLE, WASHINGTON

IMMUNOLOGICAL DISEASES
BIOLOGICAL PROCESS RESEARCH - We are expanding our activities to accommodate increased research productivity in recombinant protein based projects. Openings at various levels from operator to line supervisor positions are currently open in a newly formed operations group. Positions are also available in process design and research. Reply to Human Resources #H096.

AUTOIMMUNITY - A research position is available to take a lead role in the expression and evaluation of fusion proteins and enzymes that are involved in the regulation of T cell and antigen presenting cell interactions. Particular emphasis will be placed on the study and identification of important interactions that control cell function. The successful candidate will have a Ph.D. with 2-4 years of postdoctoral experience in mammalian, insect, yeast or bacterial expression systems. Familiarity with the study of receptor binding, enzyme assays, and protein-protein interactions is desirable. Reply to Human Resources #FJ35.

A second position is available to identify, clone and express lymphocyte drug discovery targets with particular emphasis on tyrosine kinases and related signaling molecules. The individual will participate in a drug discovery program involving the characterization of the activity of drug candidates on these targets. A Ph.D. with 2-4 years of postdoctoral experience is required with a strong background in molecular biology and protein expression. Familiarity with enzyme characterization is desirable. Reply to Human Resources #GS96.

Please forward/tax your resume with HR code to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, 3005 First Avenue, Seattle, WA 98121. FAX: 206-727-3608.

WALLINGFORD, CONNECTICUT

CNS DRUG DISCOVERY POSTDOCTORAL FELLOWS
Fully funded Postdoctoral Fellow positions are available to participate in exploratory brain research. Opportunities exist for Postdoctoral Fellows to work with scientific mentors engaged in research related to neurodegenerative diseases, feeding disorders, and the regulation of receptors in the CNS. Applicants are invited from (but not limited to) individuals interested in cell biology, molecular biology, and pharmacology. Reply to Human Resources #HD-CNS.2.

Please forward/tax your resume with HR code to: Bristol-Myers Squibb Pharmaceutical Research Institute, Human Resources, P.O. Box 5181, 5 Research Parkway, Wallingford, CT 06492-7681. FAX: 203-264-7752.

Bristol-Myers Squibb Company
Equal Opportunity Employer, M/F/D/V.
Industry and its needs were the focus of the conference, so interest was high when representatives from SmithKline Beecham, Abbott Laboratories, and Bristol-Myers Squibb discussed their companies’ efforts to attract and keep minority and women scientists. David Wheadon, vice president and director, CNS/GI, clinical research, development and medical affairs at SmithKline Beecham (SKB), had two messages: one, that SKB and other companies have in place many programs to attract and encourage minority scientists; and two, that all scientists have to accept personal responsibility for their career trajectories.

Like many other companies, SKB has outreach programs with high schools, colleges, and universities. These programs send SKB scientists out to discuss their work with students. Summer internship and cooperative programs give prospective scientists a taste of the work life. Within the company, a mentoring program brings together minority protégés and mentors, who meet five times a year one-on-one. “The satisfaction level is very high with this mentoring process,” Wheadon said. “The scientist gains greater insight into the company and his or her place in it, and he or she now has a built-in contact.”

In an internal development program open to women and minorities, scientists leave their present jobs and work at another position within the company. They may stay in their new positions as a permanent replacement, if possible, or return to their previous jobs. A diversity council within the R&D department pays the rather high bill for a temporary replacement while the scientist explores the new position.

Accountability is both an extremely controversial issue and an absolute necessity in industry. “Sometimes a system indeed hinders your rise up the ladder—but you also have to accept personal responsibility,” Wheadon said. “That translates into realizing that it’s not always someone else’s fault that you didn’t get promoted. You have to ask some serious questions of yourself before you point the finger at someone else. Ask yourself, ‘What have I done? What is my role in this? What am I willing to do?’”

Jean Jackson-Swopes of Abbott Laboratories also had two messages: “Our goal is a technically strong, fiercely competitive, and fully diverse workforce” and “We recognize that the future quality of our bench strength will determine our future success.” In attaining both goals, recruitment and retention of minority scientists is crucial.

“The question we always get is, ‘How did you get started?’”, Jackson-Swopes said. In this case, the starting point was a common-sense one: ask the students. Abbott participated with 13 other companies in a survey of more than 200 college-level minority students interested in science. “We wanted to target the practices that were most attuned to the needs of these students,” she said.

Comments were often enlightening. They learned that minority would-be scientists had a poor image of the health care industry in general and knew little about Abbott. They tended not to use job fairs but instead preferred to rely on family, friends, and faculty connections. And they preferred to see minority executives at presentations. A student from Michigan University said, “It shows how you can advance at the company.”

By and large, it turned out that these students had practical concerns about company culture and the real status of minority scientists in industry. As Jackson-Swopes put it, “One of the most frequently asked questions was, ‘What’s it like to work for your company?’” A UCLA scientist said, “Do minorities get promotions at your company? That’s what matters.” Many students wanted honesty and openness. One student from Howard University said, “Companies need to be honest about minority representation. Don’t give me funny numbers.” A student from Spelman College concurred: “Let me see the real minority representation and culture of your company—let me see whether I ‘click.’”

To gain access to larger numbers of minority students, Abbott has established a partnership program with historically black colleges and universities (HBCUs). The program, involving most senior level executives at Abbott, has now established significant technical partnerships with 8 HBCUs. Abbott has further sought to strengthen its ties to the minority academic community in general. These efforts included targeting engineering schools with high minority enrollments, becoming sponsors of and advisors to key minority groups and conferences, and participating in key journals targeting minorities for science and engineering careers.

Sheila Pyfrom of Bristol-Myers Squibb (BMS) detailed her company’s efforts, alone and in partnership with other companies, to encourage positive role modeling and mentoring, establish cooperative programs, and help minority scientists stay in science. “We became active members in a variety of organizations concerned with minority science,” she said. “We got heavily into networking and newsletters. We established an in-company mentoring program.”

BMS is using an in-house communications system to make sure that all employees, minorities included, are in touch. An online system named CATHY allows people to set expectations for themselves and discuss how to meet those expectations, and another named DAVE helps them quantify their expectations and measure their performance. A third system allows all employees to access any job posting throughout the company. A large number of grants, awards, and stock option plans ensure that employees stay involved in and committed to their work and that the company in turn recognizes excellence.

Community outreach programs send BMS scientists out into the schools to talk about their jobs and working conditions. Internships for minority scientists and medical students, as well as a national minority medical fellowship program, encourage promising careers. BMS is also a major player in the Inroads program, and it has established postdoctoral and graduate student exchange programs.

All these are efforts to attract promising minority scientists and give them a clear sense of their role and importance in the company. Even the face of BMS advertising has changed. “We’ve put together a series of image advertisements featuring real people with real jobs, including minorities, women, and people with disabilities,” Pyfrom said. “These ads deliver two messages: we want as diverse a workforce as we can get, and we know that our people are our greatest asset.”

At a spirited question-and-answer session that closed the conference, the same point was made in many ways: the biopharmaceutical industry is doing a great deal to diversify its workforce, and the future of the industry depends on continuing and improving those efforts. As Pyfrom puts it, “We can never say, ‘Okay, we’ve made it, we’ve reached the goal.’ We always need to be taking our own pulse.” As David Wheadon of SmithKline Beecham put it, “Retention means not just getting people into the jobs but getting them to be the decision-makers of the next generation.”
At Abbott Laboratories, our professionals are researching, developing, and marketing the health care products that will make a significant impact on generations to come.

And with nearly $10 billion in annual sales, 12,000+ products being marketed in 130 countries, and more than 50,000+ employees worldwide, Abbott is succeeding at an unprecedented rate. Impressive? Perhaps. Important? Definitely. If you’re looking for the opportunity to join an organization committed to improving health care worldwide, look to one of the divisions of Abbott Laboratories — Pharmaceutical Products, Hospital Products, Diagnostics, International, Ross Nutritional Products, or Chemical & Agricultural Products.

For information on BS, MS or PhD scientific opportunities currently available, please forward your resume in confidence to: Abbott Laboratories, Job # 96-SCI-0226, D393, AP51, 200 Abbott Park Road, Abbott Park, IL 60064. Abbott is an Affirmative Action Employer/Smoke Free Environment.
PRINCIPAL RESEARCH BIOLOGIST

Your clinical research skills will help us bring new products to market.

At Unilever, commercial success begins with a commitment to innovation and integrity in scientific research. Since 1902, this commitment has resulted in a steady stream of innovative products and an environment where there is continual challenge to enhance and improve some of the world’s best known brands.

As we plan for the future, we are seeking a Biologist to play a key role in supporting our efforts in the development of new personal wash products. We’ll look to you to develop standardized clinical methods for evaluating skin benefits delivered from skin cleansers; establish clinical methodologies for determining efficacy; identify new technologies and techniques, and coordinate the execution and analysis of internal and external clinical studies.

To qualify, you should possess a PhD in the biosciences, preferably with some experience in skin and/or clinical research, but we will consider candidates with a related BS or MS and proven skin research experience. As a leader, you will also be expected to bring with you the motivation and training skills necessary to establish a research team which provides significant advances in personal washing clinical research.

If you’re looking for a company committed to seeking out new ideas, new products and new ways of thinking, we invite you to consider Unilever Research. For more information, forward your resume to: Ms. Jane Goodwin, Human Resources, Unilever Research U.S., 45 River Road, Edgewater, NJ 07020. We are an equal opportunity employer.

Unilever Research U.S.

Full page recruitment advertisements in the special advertising supplement in this issue of SCIENCE begin on page 537.

AAAS Conference on Diversity: Biomedical and Pharmaceutical Industries

Abbott Laboratories page 541
Bristol-Myers Squibb page 539
Oak Ridge National Laboratory page 537
Research Associate
Reproductive Toxicology

Sanofi Winthrop, Inc. is a major multinational developer and marketer of ethical pharmaceuticals. The Sanofi Research Division (SRD) is dedicated to the development of innovative new therapies, and we anticipate significant future growth within the industry. We currently have an opportunity available at our suburban Philadelphia facility for a Research Associate.

The successful candidate will assist the Assistant Research Director in designing, conducting, and reporting toxicity studies as well as managing/administering the Reproductive Toxicology section. You will also participate in as well as act as the Study Director/Monitor for GLP reproductive toxicology studies in support of the toxicological evaluation of SR Compounds.

Requirements include a Ph.D. with 6 months - 2 years, M.S. with 4-6 years, or B.S. with 8-10 years Reproductive Toxicology Industry or related experience.

At Sanofi Winthrop, you'll enjoy a highly competitive salary and benefits package. For confidential consideration, forward your resume and salary requirements to:

Human Resources, Position #V039/95/JRC
Sanofi Winthrop, Sanofi Research Division
9 Great Valley Parkway, P.O. Box 3626, Malvern, PA 19355

Equal Opportunity Employer, M/F/D/V.
A tenure-track (ASSISTANT OR ASSOCIATE PROFESSOR) position is available for a broadly trained Ph.D. with demonstrated expertise in molecular virology. While the specific area of research is open, the development of an independent research program focused on poultry viruses or a member of a viral family which includes important poultry pathogens is required. Applicants are expected to actively participate in the training of graduate and undergraduate research assistants in the teaching and research activities of the Department. The candidate must hold a doctoral degree and must have at least two years of postdoctoral training and research experience in the relevant area. Interested candidates should send curriculum vitae, three letters of reference, and a description of their research interest to April 30, 1996 to: Dr. Barry Wolf, Search Committee Chair, Department of Human Genetics, Medical College of Virginia/Virginia Commonwealth University, P.O. Box 980033, Richmond, VA 23298-0033.

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.

MOLECULAR VIROLOGIST

The Department of Human Genetics at the Medical College of Virginia/Virginia Commonwealth University is currently seeking applications for a tenure-track position at the rank of ASSOCIATE/ASSOCIATE PROFESSOR. The successful candidate will be expected to establish and direct an independent research program in human molecular genetics and to participate in teaching activities of the Department. The candidate must hold a doctoral degree and must have at least two years of postdoctoral training and research experience in the relevant area. Interested candidates should send curriculum vitae, three letters of reference, and a description of their research interest to April 30, 1996 to: Dr. Barry Wolf, Search Committee Chair, Department of Human Genetics, Medical College of Virginia/Virginia Commonwealth University, P.O. Box 980033, Richmond, VA 23298-0033.

Virginia Commonwealth University is an Equal Opportunity/Affirmative Action Employer. Women, minorities and persons with disabilities are encouraged to apply.

ASSISTANT PROFESSOR, Community/Systems Plant Ecologist

The Department of Biological Sciences at Florida Atlantic University invites applications for a tenure-track position at the rank of ASSISTANT PROFESSOR. The successful candidate will be expected to teach and develop an independent research program in community/systems plant ecology. Teaching duties will include both undergraduate and graduate courses. The Department currently offers degrees through the Masters level. Applicants should send résumé, pertinent reprints, a statement of teaching and research interests and the names of three references to: Dr. Alex Marsh, Department of Biology, Florida Atlantic University, Boca Raton, FL 33431-0991. The closing date will be March 4, 1996. Florida Atlantic University is an Equal Opportunity/Affirmative Action Employer.

FRIEDRICH MIESCHER INSTITUTE

JUNIOR GROUP LEADER POSITION

In Plant Cell and Molecular Biology

Applications are invited for a TENURE-TRACK POSITION as Junior Group Leader in Plant Cell and Molecular Biology. The candidate would begin on January 1, 1997. Candidates should have postdoctoral experience in the plant sciences and demonstrate the ability to develop a vigorous research program focused on cellular signaling in plants. Possible topics include, but are not limited to, growth regulation, molecular physiology, cell-to-cell communication, and plant-microbe interactions. The successful candidate will be expected to lead a group consisting of postdoctoral fellows, graduate students, and technical staff. The Friedrich Miescher Institute offers an attractive package, including salary and start-up funds, to qualified candidates. To apply, candidates should send (a) a detailed description of their research plans, (b) three letters of recommendation, and (c) a curriculum vitae to: Dr. Werner Reber, Friedrich Miescher Institute, CH-5430, Basel, Switzerland, before January 1, 1997.

FACULTY POSITION IN PROSTATE CANCER RESEARCH

The University of Iowa, Department of Urology is seeking to fill an endowed PROFESSORSHIP to participate in a research program on prostate cancer. The individual will join the University of Iowa’s Prostate Cancer Research Program. The applicant must hold the Ph.D. or M.D. degree or both with a demonstrated expertise in molecular biology and/or genetic techniques that can be applied to problems in prostate cancer research. The applicant will be an established investigator with current peer-reviewed support and a strong record of publication. To be considered, the applicant must be willing to extend his or her research to prostate cancer. The investigator will be expected to develop and maintain a high quality research program in prostate cancer, to collaborate with other faculty in the area, and to participate in teaching of students, fellows, and residents.

The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.

ASSOCIATE PROFESSOR

FULL PROFESSOR

Biochemistry/Molecular Biology

The Department of Biochemistry at the F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Maryland, invites applications for TWO FULL TIME, TENURE-TRACK FACULTY POSITIONS available in 1996. Outstanding candidates in the areas of biochemistry, molecular and cell biology are encouraged to apply. Candidates are expected to have postdoctoral or equivalent experience and be expected to develop a vigorous basic research program. Applicants for Associate Professor are expected to have a strong record of research productivity and to have demonstrated the ability to establish a successful research program. The successful candidate must participate in training of students in medical school and in a graduate program. Please send curriculum vitae, a statement of research interests, and two letters of recommendation to: Dr. Robert Schauer, Department of Biochemistry, Uniformed Services University of the Health Sciences, F. Edward Hébert School of Medicine, 4801 Jones Bridge Road, Bethesda, MD 20814-4799. The University of Iowa is an Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.

ASSISTANT, ASSOCIATE DIRECTOR

Immunobiology Initiative/Program

Applications are invited for the position of DIRECTOR of a new program in immunobiology within the College of Medicine at the University of Illinois at Chicago. Candidates for this position should possess the Ph.D. and/or M.D. degree, a distinguished record of scholarly activity and a nationally recognized research program in immunobiology. The candidate should also have the ability to administer and foster interdisciplinary research endeavors among cell and molecular scientists. The University and College of Medicine will commit considerable resources to this initiative as part of its strategic planning process. The incumbent will have the opportunity to establish and develop a new center of excellence in the research of new space, equipment acquisition, and the recruitment of additional faculty and key personnel. The University is committed to the principle of equal opportunity in employment and does not discriminate on the basis of race, color, religion, national origin, sex, age, or disability. Women, minority and persons with disabilities are encouraged to apply.

The University of Illinois at Chicago invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.

The University of Illinois at Chicago invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.

UNIVERSITY OF ILLINOIS AT CHICAGO COLLEGE OF MEDICINE DIRECTOR

The Department of Pharmaceutical Chemistry (Pharmacetics), School of Pharmacy, invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.

The University of Illinois at Chicago invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.

The University of Illinois at Chicago invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.

The University of Illinois at Chicago invites applications and nominations for the Takeru and Aya Higuchi Distinguished PROFESSORSHIP. Applicants should be national or international leaders in pharmacology or a related scientific discipline whose research programs have made a significant impact on the formulation, delivery, and development of drugs to treat human diseases, particularly in the elderly. The successful candidate must have demonstrated excellence in research and the ability to secure financial resources to support research programs; and a strong commitment to teaching, graduate and undergraduate education. Applications will be accepted until the position is filled. Screening of applications will begin March 1, 1996. A full job description is available upon request. Applications, including a letter of interest, names and addresses of three references, or nominations should be submitted to: Dr. Ronald T. Borchardt, Department of Pharmaceutical Chemistry, 2001 S. Peoria Street, Chicago, IL 60612.
Executive Director  
Foundation for Research Development of the  
Medical University of South Carolina

A new position is available for a scientist-entrepreneur manager to direct the recently established MUSC Foundation for Research Development, a not-for-profit corporation designed as an innovative and flexible foundation to enhance research on the MUSC campus. This includes development of new relationships between the Medical University of South Carolina (MUSC) and businesses, corporations and other agents of entrepreneurship and economic development. Located in historic Charleston with convenient access to major business and financial centers on the East Coast, MUSC is South Carolina’s only free-standing academic health center, with over 1000 full-time faculty on campus and a $66 million per year biomedical research program. The mission of the MUSC Foundation for Research Development is to:

- support the research mission of MUSC by fostering creativity and innovation
- initiate and sustain cooperation and collaboration between MUSC and business and industry
- act as an intellectual property management and technology transfer and marketing arm for MUSC
- advance health-related economic development in South Carolina and the nation

Responsibilities: The Executive Director reports to the Board of Directors of the Foundation for Research Development. He or she is responsible for developing and implementing an aggressive and comprehensive strategic plan. The plan will include a program for expanding effective relations with potential private sector sponsors, linking potential sponsors with university researchers, marketing existing technologies, evaluating and creating action plans for university-based inventions and technology developments, developing networks to increase faculty-industry linkages, negotiating, signing and managing agreements with industry that optimize the position of the university, and counseling faculty and staff on principles involved in negotiating with industry and agents of free enterprise and entrepreneurship. It is anticipated that the range of foundation activities will include licensing, facilitating the start-up of new companies, coordinating the development of incubator space, and interfacing with potential sources of venture capital.

An important aspect of the job is to manage and moderate the inherent differences between academic and commercial values, educating both sides in the process.

Qualifications: Preferred qualifications are an appropriate combination of the following: Advanced degree in an area of the physical or life sciences, an MBA or equivalent, significant experience in a business or academic setting, significant experience in technology or invention evaluation and licensing, experience with start-up companies or venture capital, familiarity with patents and patent management. All candidates must have exceptional oral/written communications and interpersonal skills. Personal experience in biomedical technology transfer and/or start-up management is essential.

Salary: Commensurate with education and experience, with opportunity for incentive income.

Application: The deadline for receipt of applications for this position is March 15, 1996. Candidates should submit a letter of application and a curriculum vitae, along with the names, addresses and phone numbers of at least three references to: John N. Vournakis, Ph.D., Chair, Search Committee, Foundation for Research Development, Medical University of South Carolina, Hollings Cancer Center, Room 334, 171 Ashley Avenue, Charleston, SC 29425, Tel: 803-792-1484 Fax: 803/792-3940

---

**SENIOR STAFF SCIENTIST**

A position(s) is available immediately for a senior staff scientist for the design and development of recombinant vaccines for cancer immunotherapy, in the Laboratory of Tumor Immunology and Biology (Dr. Jeffrey Schilom, Chief), National Cancer Institute, National Institutes of Health, PHS, Bethesda, MD. Non-replicating and replicating pox viruses as well as other vectors are being employed to induce specific T-cell responses to oncogene and tumor associated gene products, both in experimental systems and in clinical trials. Studies also involve the construction of recombinant vaccines expressing multiple gene products. A background in molecular biology/virology is required. This is an appointment for two years with an option for renewal for two additional years. Salary range is $60,925 to $93,166. If interested, please call Nancy Bagley (301) 496-1771 to request the mandatory application/CV requirements for position #CA-85-0233.

NIH is an Equal Opportunity Employer
The Department of Biology invites applications for the following tenure-track ASSISTANT PROFESSOR level positions to begin August 1996. An appropriate Ph.D. degree is required, given to candidates with postdoctoral research experience. Applicants must have a strong commitment to teaching and supervision of undergraduate research projects. Research interests should be in the basic/medical molecular cellular approaches to vertebrate evolution and systematics.

Introductory Biology: Responsibilities will include teaching courses covering major biology core courses and coordinating multi-section laboratories. Dr. John Kupinski, Search Chairman.

Anatomy and Physiology: Duties will include teaching freshman biology and physiology, comparative anatomy and kinesiology laboratory courses. Dr. George Lapennas, Search Chairman.

Applicants submitting a letter that contains a statement describing teaching and research interests together with a curriculum vitae including names and telephone numbers of three professional references to: Search Chair, Department of Biology, St. Bonaventure University, St. Bonaventure, NY 14778. One position is currently scheduled for the fall 1996 semester and the other is pending approval depending on budgetary and fall of 1996 enrollment constraints. Applicant review will begin March 1, 1996. Equal Opportunity Employer.

The Center for Drug Evaluation and Research (CDER) announces an opening for the position of DIRECTOR, Office of New Drug Chemistry. Applications must be received by March 15, 1996. New Drug Chemistry performs the chemistry and manufacturing controls as well as the microbiology reviews associated with Investigational New Drug Applications (INDS), New Drug Applications (NDAs), and their supplements and amendments for the purpose of determining the acceptability of such submissions. This opening is a civil service position in the Senior Biomedical Research Service (SRS). The SRS salary range is $67,941 to $148,400. Applicants employed by institutions of higher learning who are appointed to the SRS have the option of participating in the Social Security Retirement System or subject to certain limitations, continue to participate in the retirement program of their institution. Applicants must have a doctorate in chemistry or related sciences; demonstrated skills and expertise to command the respect of professionals in the chemistry field in the medical and scientific community, and strong managerial experience or potential. It is desirable that applicants have experience conducting and administering a chemistry or pharmacutical program in either the Federal government, academia or industry and have national and international recognition as a chemist. Submit application material to: John Anderson, Office of Human Resources and Management Services, Food and Drug Administration, 5 Parklawn Building, 5600 Fishers Lane, Rockville, MD 20857. For further information contact Mr. Anderson, Telephone: 301-443-1755 or FAX: 301-443-6703.

ASSISTANT or ASSOCIATE PROFESSOR of Pharmacology, tenure-track position. Scientist with training in Pharmacology and research interests that complement department research programs in cellular, molecular, and behavioral pharmacology. Send nominations/applications including curriculum vitae, a statement of research goals, teaching interests and names of three references to: Search Committee, Department of Pharmacology, University of North Texas Health Science Center at Fort Worth, 3001 Stephen F. Austin Boulevard, Fort Worth, TX 76107-2699. An Equal Opportunity/Affirmative Action Employer/Educator.

ASSISTANT PROFESSOR, Molecular Biologist. The Department of Biological Sciences at Florida Atlantic University invites applications for a tenure-track position. Particular interest will be shown to an individual with experience in molecular biology and in the genetics of model organisms. Teaching duties will include both undergraduate and graduate courses. The Department currently offers degrees in biology and marine biology. Applicants must have an earned Ph.D. in a relevant field, a record of productive research, and evidence of strong potential for excellence in teaching. Applications should include a curriculum vitae, a statement of research interests, and names of three references to: Dr. M. Sadel, Chair, Department of Biological Sciences, Florida Atlantic University, Boca Raton, FL 33431-0991. The closing date will be March 4, 1996. Florida Atlantic University is an Equal Opportunity/Affirmative Action Employer.

The Biology Department, Indiana University (IU) Southeast, invites applications from qualified Ph.D.s with excellent teaching credentials for a TENURE-TRACK POSITION to begin fall of 1996. The successful candidate will teach in a comprehensive biological sciences course with laboratory, introductory physiology sections, and courses in related areas, and supervise individual undergraduate research projects. Interested candidates should submit a letter of application, curriculum vitae, and names and addresses of three professional references to: Search Committee, Biology Department, Indiana University Southeast, Box 95-22, ATTN: Dr. Carl Christenson, Chair, Physics and Biology Search Committee, 4201 Grant Line Road, New Albany, IN 47150.

The Biology Department at Memorial Sloan-Kettering Cancer Center invites applications for a position at the rank of ASSISTANT ATTENDING in the area of Clinical and Investigative Molecular Pathology. Applicants should be board-certified in Anatomic Pathology and have substantial training and experience regarding the application of molecular pathology techniques. Candidates are expected to take part in the development of a multidisciplinary investigative molecular pathology program. Emphasis will be placed on the development of molecular technologies which can be applied to diagnostic laboratory medicine. This includes the expectation that the individual have the ability to help support this work. Please address applications to: Juan Rosai, M.D., Chairman, Department of Pathology, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. Memorial Sloan-Kettering is an Equal Opportunity/Affirmative Action Employer and complies with all applicable federal and state laws regarding non-discrimination and affirmative action.

Yale University School of Medicine

The Section of Pulmonary and Critical Care Medicine of the Department of Internal Medicine at Yale University School of Medicine invites applications for a research faculty position at the rank of ASSOCIATE RESEARCH SCIENTIST level. Outstanding candidates with a Ph.D. or M.D. degree will be considered. Experience in molecular and cell biology is essential. Interest in inflammation, cytokine biology and virology is highly desirable. Selection will also be based upon an expressed interest in collaboration with the Pulmonary Immunobiology Laboratory on research projects focusing on cytokines, viruses and asthma. Please respond with curriculum vitae and letters of recommendation. Address application to: Jack A. Elias, M.D., Professor of Medicine, Chief of Pulmonary and Critical Care Medicine, Yale University School of Medicine, Section of Pulmonary and Critical Care Medicine, Department of Internal Medicine, 333 Cedar Street, 105 LCI, New Haven, CT 06520-8057. Telephone: 203-785-4163; FAX: 203-785-3826. Yale University School of Medicine is an Equal Opportunity/Affirmative Action Employer.

The Department of Pathology at Memorial Sloan-Kettering Cancer Center invites applications for a position at the rank of ASSISTANT ATTENDING in the area of Developmental and Immunological Sciences. The successful candidate will teach in a combined course of immunology, histology, and cell biology and will be expected to provide direct instruction in the area of immunology. The successful candidate will be expected to participate in the education of medical students and residents in pathology and of postdoctoral fellows in the area of immunology. A Ph.D. or M.D. degree is required, with relevant experience in the area of immunology. The successful candidate will be expected to develop an active research program in the area of immunology. Applications should be sent to: Dr. Richard W. Faldon, Chair, Department of Pathology, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. The position of Associate Professor is an equal opportunity position.

The Pew Charitable Trusts have announced the availability of two postdoctoral positions in the department of Developmental and Immunological Sciences. The positions will be open to candidates with Ph.D. degrees, who have demonstrated expertise in the areas of immunology, cell biology, and molecular biology. The successful candidates will be expected to participate in the education of medical students and residents in pathology and to develop an active research program in the area of immunology. Applications should be sent to: Dr. Richard W. Faldon, Chair, Department of Pathology, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021. The position of Associate Professor is an equal opportunity position.

The Section of Pulmonary and Critical Care Medicine of the Department of Internal Medicine at Yale University School of Medicine invites applications for a research faculty position at the rank of ASSOCIATE RESEARCH SCIENTIST level. Outstanding candidates with a Ph.D. or M.D. degree will be considered. Experience in molecular and cell biology is essential. Interest in inflammation, cytokine biology and virology is highly desirable. Selection will also be based upon an expressed interest in collaboration with the Pulmonary Immunobiology Laboratory on research projects focusing on cytokines, viruses and asthma. Please respond with curriculum vitae and letters of recommendation. Address application to: Jack A. Elias, M.D., Professor of Medicine, Chief of Pulmonary and Critical Care Medicine, Yale University School of Medicine, Section of Pulmonary and Critical Care Medicine, Department of Internal Medicine, 333 Cedar Street, 105 LCI, New Haven, CT 06520-8057. Telephone: 203-785-4163; FAX: 203-785-3826. Yale University School of Medicine is an Equal Opportunity/Affirmative Action Employer.
University of California, San Diego  
School of Medicine

Two Tenure Track or  
Tenured Positions in Immunology

Applications are invited for two available positions at the assistant professor or full professor rank in basic immunology. Areas of interest should include: signal transduction in immunological functions, protein trafficking related to receptor assembly and antigen presentation, structure related to function in immuno-specific molecules, the role of cytokines, cell adhesion molecules and inflammatory reactions in immune responses, mechanisms of host-pathogen interactions, development of immune systems, functional organization of immunity-relevant organs and mechanisms and genetics of autoimmune responses. Rank and salary commensurate with experience and based on UC scale.

Applicants should have a M.D. or Ph.D. degree with relevant postdoctoral experience and demonstrated ability to conduct an independent research program using modern techniques. They should also have skills and interest in teaching. Submit curriculum vitae, bibliography, statement of professional goals and research interests and names and addresses of 5 references to:

Immunology Search Committee  
c/o Gordon N. Gill, M.D.  
University of California, San Diego  
9500 Gilman Drive, #119 CMM Bldg.  
La Jolla, CA 92036-0650

Application deadline: April 15, 1996  
EOE/AA

---

Miami University  
Rosedale School of Marine  
and Atmospheric Science

Rosenstiel School of Marine  
and Atmospheric Science

TRITIUM LABORATORY  
is seeking a  
Research Assistant/Associate/Professor  
With interest in Oceanography or  
Groundwater Hydrology

Ph.D. in math or a natural science required.

The Tritium Laboratory does low-level tritium measurements in oceanographic and hydrological projects in cooperation with US and foreign institutions. Funding for the operations and staff of about five, is derived from semi-commercial measurement service to institution and businesses, and from regular research grants and contracts from US agencies.

The applicant should have research interests in Hydrology or Oceanography, a strong background in measurement techniques and basic knowledge in chemistry. Previous experience in low-level beta counting is very desirable, and an undergraduate degree in nuclear engineering would be a plus. We envision that the scientist would pursue their own fundable research interests, improve and modernize the present measurement system, and oversee routine laboratory operations.

Send resume and three references to:  
Search Committee Chair, TL  
UM/RSMAS/MAC  
4600 Rickenbacker Cswy.  
Miami, FL 33149

The University of Miami is an Equal Opportunity/Affirmative Action Employer,  
Drug Free Workplace

---

RADIATION ONCOLOGY/MOLECULAR BIOLOGY  
FACULTY POSITION

The Division of Radiation Oncology of the Mayo Clinic at Rochester, Minnesota is seeking a BC/BE Radiation Oncologist with demonstrated clinical and basic science research skills. The successful candidate will devote time to clinical activities, teaching and basic investigation (preferably in a research area that would complement our existing group of oncology scientists who are interested in the mechanisms of action of multiple chemotherapeutic agents, radiation and the interaction of radiation and chemotherapy). The successful candidate will have the opportunity to participate in the clinical research activities of the North Central Cancer Treatment Group. This group and other Mayo Cancer Center Clinical activities could serve as a source to implement translational research endeavors that arise as a result of the investigators basic investigations. The successful candidate’s division of time will be dependent upon the candidate’s previous experience and extramural funding. Please forward curriculum vitae to:

James A. Bonner, M.D.  
Research Chair, Division of Radiation Oncology  
Mayo Clinic  
200 First S. W.  
Rochester, MN 55905  
or  
Leonard L. Gunderson, M.D.  
Chairman, Division of Radiation Oncology  
Mayo Clinic  
200 First S. W.  
Rochester, MN 55905

Mayo Foundation is an affirmative action and  
equal opportunity employer.

---

Group Leader  
Sample Processing

Becton Dickinson, a Fortune 500 health care conglomerate, has a challenging opportunity for a Group Leader on its Sample Processing team for projects associated with its DNA Diagnostic Systems Unit, located in Sparks, Maryland.

Reporting to the Senior Manager, you will lead our team through the current instrumented product development schedule and into novel, next-generation methodologies for preparing clinical samples to be compatible with nucleic acid amplification. A potential outlet for methodologies could be automation.

To qualify, we require a PhD in Molecular Biology, Microbiology or Biochemistry and 5 years’ industrial experience. Proven expertise in nucleic acid amplification and/or in sample processing essential. We also require a track record of accomplishments as evidenced by any of the following: patents, publication and/or team leadership.

In exchange for your skills, we offer competitive salary and comprehensive benefits. For prompt, confidential consideration, please send your resume, and salary requirements, to: Becton Dickinson, Human Resources, Diagnostic Instrument Systems, P.O. Box 999, Sparks, MD 21152.

We are an equal opportunity employer.

Superior quality is the only way.  
BECTON  
DICKINSON

---


POSIIONS OPEN
POSTDOCTORAL TRAINING PROGRAM RHEUMATOLOGY/IMMUNOLOGY DIVISION FUNDAMENTAL IMMUNOLOGY RESEARCH LABS, National Institutes of Health/National Institutes of General Medical Sciences 801 North Coast Hwy, La Jolla, CA 92037


RENSSELAER POLYTECHNIC INSTITUTE Postdoctoral Position in Solid State Physics Department of Physics & Astronomy, Rensselaer Polytechnic Institute, Troy, NY 12180-5590.

A POSTDOCTORAL POSITION in the Department of Physics, Applied Physics, and Astronomy is available for a period of up to three years. The work is in the area of solid state physics, and involves the synthesis and study of organometallic compounds, synthesis and growth of films and/or thin films using molecular-beam epitaxy, and thermal transport properties of solids is desired. Expected start date is early 1996. Applications should be addressed to: Kate Spiker, Solid State Postdoctoral Position, Department of Physics, Applied Physics, and Astronomy, Rensselaer Polytechnic Institute, Troy, NY 12180-5590.

PLANT DEVELOPMENT AND EVOLUTION POSTDOCTORAL POSITION available to study evolution of fertilization patterns in seed plants (particularly basal angiosperms). Strong background in developmental biology and for cell with theory in the study of angiosperms is required. Send curriculum vitae and names of three references to: J. William E. Friedman, Department of Cell Biology, University of Colorado, Denver, CO 80209. Email: jef002@wou.edu Equal Employment Opportunity Employer.

POSTDOCTORAL POSITION POSTDOCTORAL POSITIONS available open for work on host-bacterium interactions, control of virulence factors, drug sensitivity, and oxidative stress in Mycobacterium tuberculosis. Applicants should have a Ph.D. in molecular biology or in a related field. Candidates with experience in mycobacterial physiology, drug resistance, molecular biology, or work with macropathogens or infection models are highly encouraged.

Send curriculum vitae, bibliography, and names of three references to: Dr. Vojo Deretic, University of Michigan Medical School, University of Michigan Medical School, Ann Arbor, MI 48109-0620 or Fax to Dr. Deretic at 313-764-3100. Interested candidates should contact information for three references to: Dr. D. Garfinkel, c/o Personnel, ABL Basic Research Program, P.O. Box B, Building 428, Frederick, MD 21702-1200. Equal Employment Opportunity Employer. The University of Michigan is an Affirmative Action/Equal Opportunity Employer and encourages the application of qualified women and underrepresented minorities.

POSTDOCTORAL POSITION POSTDOCTORAL POSITION in Cell Biology/Biochemistry posted available to study protein and lipid traffic and glycosylation in cultured cystic fibrosis transmembrane conductance regulator (CFTR) cells. Experience in cell biology or carbohydrate/lipid analysis desirable. Send letter of application, curriculum vitae and names of three references to: Ora A. Weisz, Ph.D., Division of Medical Chemistry and Molecular Biology, 3550 Terrace Street, Pittsburgh, PA 15261. Fax: 412-383-8956; Email: weisz@novell1.dept.med.pitt.edu.

POSTDOCTORAL POSITION available in fall 1996 to study the molecular biology of vascular growth with special emphasis on the role of the renin angiotensin system and nitric oxide. The position requires a recent Ph.D. and experience in the above fields. Please send curriculum vitae, name of references and a key publication to: Nabil Anis, M.D., Ph.D., Division of Clinical Pharmacology, Georgetown University, Med-Dent Building, NE-035, 3900 Reservoir Road, Washington, DC 20007. Applications from minority groups are encouraged. Equal Employment Opportunity Employer.

POSTDOCTORAL POSITION available for studies of human melanoma and melanocyte-specific genes. Experience in molecular biology/genetics or molecular immunochemistry is desirable. Interested candidates should send their current vita and three names of three references to: Dorothea Becker, Ph.D., Department of Medicine, University of Pittsburgh, BST E1050, 211 Lothrop Street, Pittsburgh, PA 15213-2582.

YALE UNIVERSITY POSTDOCTORAL POSITION to study the mechanism of immunoglobulin gene somatic hypermutation, using recombinase-deficient mouse models. Please send curriculum vitae, statement of research accomplishments and interests, and three letters of reference to: John H. Milzel, Department of Molecular Biophysics and Biochemistry, Yale University, 266 Whitney Avenue, New Haven, CT 06520-8114.
Applications are invited for the position of the Alan Thicke Scientist in Juvenile Diabetes Research at the University of Western Ontario. This is a joint initiative of the Alan Thicke Centre for Juvenile Diabetes Research and the Faculty of Medicine, University of Western Ontario.

The successful candidate will be a full-time investigator whose research will advance knowledge of the processes involved in insulin-dependent diabetes and its complications, and will be committed to the development and application of improved understanding of the biology of pancreatic β-cells, mechanisms and prevention of β-cell destruction, or amelioration of the excruciating morbidity and mortality of early onset of type-1 diabetes, a human insulin translational diabetes laboratory, and a scientist working on the physiology of islet growth and function, insulin action and sensitivity, and diabetes and pregnancy. The scientist will have her/his laboratories based within either a Department of the Faculty of Medicine at the University, or at one of its associated Research Institutes, and will have a pivotal role in the future development of clinical and basic research initiatives in juvenile diabetes. The successful applicant will be expected to establish an independent research program, and to apply for external operating and personnel awards. There may be minimal teaching responsibilities attached to this appointment.

Applicants must have a M.D. or Ph.D. and necessary postdoctoral experience with a strong background in cellular and/or molecular biology. Salary will be commensurate with qualifications and experience. The initial appointment will be for a five-year period at the level of Assistant Professor.

Applications are invited, and should include a curriculum vitae and names of three referees, to Dr. Paul Harding, Associate Dean, Research, Health Sciences Addition, University of Western Ontario, London, Ontario, Canada N6A 5C1. Fax: (519) 661-3797. Closing date is February 28, 1996.

In accordance with Canadian immigration requirements this advertisement is directed to Canadian Citizens and Permanent Residents of Canada. The University is committed to employment equity, welcome diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities.

Faculty Position in Advanced Healthcare Technology
Department of Applied Science
University of California, Davis
and Lawrence Livermore
National Laboratory

Applications are invited for a tenured, senior faculty position in the area of Advanced Healthcare Technology. This position will be a joint appointment with the Department of Applied Science, University of California, Davis and the Lawrence Livermore National Laboratory (LLNL). The applicant is expected to build and direct a vigorous program of research in the development of high technology solutions to healthcare problems, in collaboration with the new LLNL Center for Healthcare Technologies. Individuals with programs and research interests in, but not limited to, the areas of biomedical imaging, tissue engineering, biosensors, micro-instrumentation, medical photonics and physics based therapies are invited to apply. As a member of the faculty of the Department of Applied Science, he/she will teach and supervise graduate students at both the Davis and Livermore campus sites. Qualifications include a Ph.D. degree and a strong research record in relevant areas. Previous university experience in teaching and administration is desirable. Send resume, list of references, and research plan to Chair, Search Committee, Advanced Healthcare Technology, Department of Applied Science, P.O. Box 808, L-794, Livermore, CA 94550. A decision for filling the position will be made after April 1, 1996.

Applications will be accepted until such a decision is made. The University of California is an affirmative action/equal opportunity employer and encourages applications from women and minority groups.

RESEARCH SCIENTIST IN JUVENILE DIABETES
FACULTY OF MEDICINE
UNIVERSITY OF WESTERN ONTARIO

The Stanford University Ocean Margins Initiative (SOMI) is a multi-disciplinary program focusing on the coastal margins of the world. The SOMI Faculty includes professors in all areas of oceanography, marine geology, marine biology, and environmental sciences. SOMI members are located at Stanford University and at the Monterey Bay Aquarium Research Institute in Monterey, California. The SOMI Faculty is composed of 18 primary faculty members, including 13 tenured professors and 5 visiting scientists.

Applications are invited for the position of Assistant Professor in Oceanography at Stanford University. This position is located at the Monterey Bay Aquarium Research Institute, with some appointments at Stanford University. The successful applicant will be expected to carry out research on coastal margins and to participate in the faculty of the Stanford University Ocean Margins Initiative. The SOMI is particularly interested in candidates who have expertise in one or more of the following areas: marine biology, marine geology, marine geochemistry, marine chemistry, and marine geology.

The successful candidate will be expected to establish an independent research program, and to apply for external operating and personnel awards. There may be minimal teaching responsibilities attached to this appointment.

We plan to begin filling the three positions in the Autumn Quarter of 1996. Applications will be made at the Assistant Professor level for at least two of the three appointments. Senior scientists or engineers may also be considered for the other appointment. Applications, including a curriculum vitae, a statement outlining research plans, and a letter that materially contribute to the Stanford Ocean Margins Initiative, and names and addresses of three referees, should be sent by March 1996 to:

Dr. Franklin M. Orr, Jr., Dean, School of Earth Sciences
101 Mitchell Building
Stanford University
Stanford, CA 94305-2210

Stanford University has a strong institutional commitment to the principle of diversity. In that spirit, we particularly encourage applications from women, members of ethnic minorities, and individuals with disabilities.

UNIVERSITY OF PENNSYLVANIA
-health system
University of Pennsylvania
Institute for Human Gene Therapy
Department of Medicine

The Institute for Human Gene Therapy is recruiting an Associate Professor or Professor in the area of AIDS research at the University of Pennsylvania, who will report directly to Dr. James Wilson, Institute Director. This individual will direct a multidisciplinary program in basic and translational research of gene therapy for AIDS. Research experience in immunobiology and/or hematology is preferred. Candidates should have an M.D. or Ph.D. with clinical training in hematology/oncology, immunology or infectious diseases. We invite applications for an Associate Professor or Professor with tenure at the University of Pennsylvania Health System. Interested individuals should send their CV, along with 3 references, to: James M. Wilson, M.D., Ph.D. Director, Institute for Gene Therapy 204 Wistar Institute 3601 Spruce Street Philadelphia, PA 19104-4268

Equal Opportunity/Affirmative Action Employer. We encourage minority and women candidates.

STANFORD UNIVERSITY
Ocean Margins Initiative
Faculty Positions

A major component of future research and teaching in the School of Earth Sciences at Stanford will be improved understanding of ocean margins from the coastal plain to the base of the continental slope. The Stanford University Ocean Margins Initiative operates three tenure-line faculty positions to establish a new program focused on the geology, physics, chemistry, and engineering science of the ocean margins and the record of environmental change preserved within coastal sediments. Research areas which might fit well into the new program include, but are not limited to: coastal geochronology/geo-geochronological cycles, with an emphasis on the fluxes between human sources and sinks (organisms) and natural aquatic sediments; coastal paleoclimatology; ocean margin tectonic processes; submarine fluids (water, oil, gas and associated clathrates) and flows across the coastal interface; and fluid dynamics along ocean margins.

The Stanford Ocean Margins Initiative seeks scientists with demonstrated records of excellence in research. Candidates must be committed to quality in undergraduate and graduate teaching. An interest in applying new technologies to the coastal margin setting is particularly important. Special opportunities exist for collaborations with the Monterey Bay Aquarium Research Institute, which has remarkable experimental access to the coastal ocean, and with Stanford's Hopkins Marine Station.

We plan to begin filling the three positions in the Autumn Quarter of 1996. Applications will be made at the Assistant Professor level for at least two of the three appointments. Senior scientists or engineers may also be considered for the other appointment. Applications, including a curriculum vitae, a statement outlining research plans, and a letter that materially contribute to the Stanford Ocean Margins Initiative, and names and addresses of three referees, should be sent by March 1996 to:

Dr. Franklin M. Orr, Jr., Dean, School of Earth Sciences
101 Mitchell Building
Stanford University
Stanford, CA 94305-2210

Stanford University has a strong institutional commitment to the principle of diversity. In that spirit, we particularly encourage applications from women, members of ethnic minorities, and individuals with disabilities.

UNIVERSITY OF PENNSYLVANIA
Health System
Institute for Human Gene Therapy
Department of Medicine

The Institute for Human Gene Therapy is recruiting an Associate Professor or Professor in the area of AIDS research at the University of Pennsylvania, who will report directly to Dr. James Wilson, Institute Director. This individual will direct a multidisciplinary program in basic and translational research of gene therapy for AIDS. Research experience in immunobiology and/or hematology is preferred. Candidates should have an M.D. or Ph.D. with clinical training in hematology/oncology, immunology or infectious diseases. We invite applications for an Associate Professor or Professor with tenure at the University of Pennsylvania Health System. Interested individuals should send their CV, along with 3 references, to: James M. Wilson, M.D., Ph.D. Director, Institute for Gene Therapy 204 Wistar Institute 3601 Spruce Street Philadelphia, PA 19104-4268

Equal Opportunity/Affirmative Action Employer. We encourage minority and women candidates.

CHAIR DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY
WRIGHT STATE UNIVERSITY
School of Medicine
Dayton, Ohio

We seek a Ph.D. or M.D. with an established record of external funding and commitment to scholarly achievement in research and teaching. We participate in the University's Biomedical Sciences Ph.D. Program and have teaching responsibilities for medical and nursing students. The combined chair/faculty position has a 12 month salary commensurate with experience, start-up funds, new positions, and an opportunity to build and shape the direction of the department. Opportunities exist for collaboration with basic and clinical scientists at a nearby toxicological research center, local hospitals, and at the Dayton VA Medical Center. The Chair will be expected to maintain excellence in medical and graduate teaching in pharmacology and to develop externally supported faculty research programs. The School of Medicine has 292 full-time faculty and over $10 million in extramural research support. It is a model for community-based medical education and is a leader in recruiting and retaining minority students.

Submit curriculum vitae, three references with telephone numbers, and a letter of interest to: Jerald Kay, M.D., Chair, Search Committee, Wright State University School of Medicine, P.O. Box 927, Dayton, Ohio 45401-0927, (FAX 513-275-2817).

Review of applications will begin February 15 and will continue until the position is filled.

Wright State University is an EOA/A employer.
POSITIONS OPEN

PALEOECOLOGY POSITIONS

PALEONTOLOGIST. POSTDOCTORAL RESEARCH ASSOCIATE position to investigate the effects of terrestrial ecosystem change on lake ecosystems and their biodiversity. We are seeking a highly motivated, experienced and knowledgable individual who will join a postdoctoral team working on the Longwood study. This position will work within an interdisciplinary project comprising paleontologists, archaeologists, and soil scientists, to understand the implications of human disturbance on fossil pollen and other indicators of ecosystem change. Experience in stratigraphic analysis relating to lake history and development, strong quantitative skills, and experience in working in an interdisciplinary context are essential.

PALEOECOLOGIST. RESEARCH ASSISTANT POSITION available to contribute to a paleontological and ecological analysis of lake and wetland sediments in a project examining forest dynamics and wetland development over the last 2,000 years. Experience in fieldwork, data collection, and synthesis is required. Experience in working in a team environment is essential.

SELECTED UNIVERSITY OPPORTUNITIES

TWO POSTDOCTORAL POSITIONS

Slow Virus/Neurodegenerative Disease

Established and new rodent models of human Creutzfeld-Jakob Disease are being used 1) to understand fundamental mechanisms of pathogenesis, 2) to investigate diagnostic and therapeutic strategies that can be applied to human disease, and 3) to determine the essential molecular structure of the infectious agent. Self-motivated individuals with a strong background in either molecular virology or neuroscience/cell biology will have the opportunity to pursue cross-disciplinary projects. This program includes a range of technically advanced facilities, including transgenic, molecular biology and in-vivo/in-vitra structural resources. Send letter, curriculum vitae, and names of three references to: Dr. Laura Manuelidis, Head, Section of Neurology, Yale Medical School, New Haven, CT 06710. FAX: 203-785-6381.

POSTDOCTORAL POSITION, Johns Hopkins School of Medicine. Position available June 1, 1996 for the study of the structure, function, and regulation of miconchondrial ATP synthase. The successful candidate will have a chemistry, molecular biology, or biochemistry background and knowledge of membrane protein membrane and transmembrane ion channel function. Send curriculum vitae, a brief description of research experience, and names of three references to: Dr. Peter L. Pedersen, Department of Biological Chemistry, Johns Hopkins University School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205-2185. An Equal Opportunity/Affirmative Action Employer.

ANNOUNCEMENTS

CAENORHARDITIS GENETICS CENTER (CGC)

The CGC acquires, maintains, and distributes genetic stocks of Caenorhabditis elegans for use by investigators initiating or continuing research on this nematode. The CGC collects genetic strains including any allele of each mapped gene, all available chromosome rearrangements, and selected multiply mutant stocks for genetic mapping. Requests for strains should include a brief statement of the research or training activity for which the stocks are intended. Interested individuals should contact the CGC, which is supported by NIH’s National Center for Research Resources. Information resulting from use of the strains and to provide the CGC with reprints of those publications. The CGC also provides information on C. elegans, largely through the publication and distribution of a newsletter, the Worm Breeder’s Gazette. Inquiries should be addressed to: Theressa L. Sterngale, Curator Caenorhabditis Genetics Center 250 Biological Sciences Center University of Minnesota Minneapolis, MN 55105-1095

CALL FOR PAPERS

The Fourth Conference on the Extracellular Matrix of the Reproductive Tract

June 24 to 27, 1996

Bad Waldeck, Germany

Registration and Conference Fee: $750.00. To register, please contact: R. Osmers, M.D., Department of Obstetrics/Gynecology, University of Gottingen, Robert-Koch-Straße, Postfach 2304 37075 Gottingen, Germany. P. C. Lepper, M.D., Ph.D., U.S. liaison to organizing committee.

CAREER CHANGE OPPORTUNITY

This unique program offers the candidate with an earned doctorate in the sciences the opportunity to obtain a certified optometrist (O.D.) degree in two calendar years. Employment opportunities exist in private practice, industry, education, and research. Contact: Dr. D. Chauncey, Program Director, Accelerated Program, The New England College of Optometry, Room S 424 Beacon Street, Boston, MA 02115.

POSITIONS OPEN

UNIVERSITY OF TORONTO

Fellowship Opportunities in Immunology Pathology and Transplantation

POSTDOCTORAL POSITIONS available immediately with a multidisciplinary group investigating inflammatory and parenchymal mechanisms of organ injury. We offer an excellent environment for training in cell biology and molecular biology as applied to cell and molecular biology, leukocyte, and endothelial cell adhesion and coagulation in inflammation. Please send curriculum vitae with names of three references to: Dr. Thomas B. Ikese, The Toronto Hospital, Conacher-Marshall Research Institute, College Street, Toronto, Ontario MSG 2C4 Canada. FAX: 416-597-9479. Email: tisekut@torhop.toronto.on.ca.

A POSTDOCTORAL POSITION in the Department of Cell Biology and Medicine is available to study the molecular basis for intestinal epithelial differentiation and transformation (Col 83, 493-501, 1995). Experience in cell culture, advanced molecular biology techniques and eicosanoid biochemistry is preferred. Send a letter delineating your research interests with curriculum vitae and have three references sent. Knowledge of basic bench top skills and experience in histotechnology are preferred. Position is contingent upon funds. Contact: Dr. Andrew Hansen, Biology Department, Montana State University, Bozeman, MT 59717. Telephone: 406-994-5046; Email: UBH1@msu.oscs.montana.edu.

RESEARCH ASSOCIATE

LANDSCAPE ECOLOGY

Opening available for a landscape ecologist (M.S. or Ph.D. level) with expertise in GIS, remote sensing, and/or simulation modeling of primary productivity and population viability to do studies in Greater Yellowstone. Position is contingent upon funds. Contact: Dr. Andrew Hansen, Biology Department, Montana State University, Bozeman, MT 59717. Telephone: 406-994-5046; Email: UBH1@msu.oscs.montana.edu.

COURSES & TRAINING

GRADUATE STUDIES IN MOLECULAR BIOPHYSICS AND BIOCHEMISTRY

YALE UNIVERSITY

The Ph.D. PROGRAM IN MOLECULAR BIOPHYSICS and BIOCHEMISTRY (MBB) is designed to prepare students for careers as independent investigators in the broad area of molecular and structural biology. The faculty have diverse interests including: control of the cell cycle and animal development; structure and function of proteins, of phospholipid metabolism; and the application of advanced computational methods to the study of macromolecules. Researchers in the MBB group are interested in understanding how the cell functions and how they can be altered. For further information contact: Amelia Johnson, Graduate Registrar Molecular Biophysics and Biochemistry Yale University 260 Whitney Avenue P.O. Box 280114 New Haven, CT 06511-8114 Telephone: 203-432-5662 Email: mmbl.grad@yale.edu
MESENCEPHALIC DOPAMINERGIC CELL CULTURES

Two-day meeting, March 11-12, 1996
Natcher Conference Center, Bldg. 45
National Institutes of Health
Bethesda, MD

Preliminary Program

Monday, March 11, 1996
Session I: METHODS
Cultures of human cells
Postnatal cultures
Explant cultures
Role of serum in dopaminergic cell cultures
Long-term cultures
Micro-island cultures
Spengler (Switzerland)
Nakajima (USA)
Ostergaard (Denmark)
Takeshima & Shimoda (Japan)
Heller (USA)
Commissioning (USA)

Session II: NEUROTROPHIC FACTORS
Dopaminergic neurotrophic factors
Glia-derived neurotrophic factors
Glial cell line-derived neurotrophic factor
Plasticity of the dopaminergic neuronal phenotype
Molecular mechanisms in the ontogeny of dopaminergic neurons
Special lecture: Dopamine function in the basal ganglia
Unsicker (Germany)
Dreyfus (USA)
Lin (USA)
Iacovitti (USA)
Hynes (USA)
Gerfen (USA)

Tuesday, March 12, 1996
Session III: MOLECULAR AND FUNCTIONAL CORRELATES
Very early expression of tyrosine hydroxylase
Transcriptional regulation of tyrosine hydroxylase
Function of tyrosine hydroxylase during development
Cloning and cellular expression of the Weaver gene: links to Parkinson’s disease?
Dopaminergic neurons in the Weaver mutant mouse
Special lecture: Molecular approaches to Parkinson’s disease
Joh (USA)
Chikaraiishi (USA)
Zhou (Canada)
Patil (USA)
Ghetti (USA)
McKay (USA)

POSTER SESSION
Twenty posters will be on display on Monday, March 11. Posters will be manned and discussed from 11:30 am - 1:00 pm.

Organizing Committee:
John Commissiong (Chairman)
Cheryl Dreyfus
Charles Gerfen
Ron McKay
Klaus Unsicker

INFORMATION:
There is no registration fee. However, to attend the meeting, you must pre-register. Registration will be limited to 250 people. To register, please include the following information on a single sheet of paper:

"MESENCEPHALIC DOPAMINERGIC CELL CULTURES"
March 11-12, 1996

Name:
Institutional address:
Fax No:
Tel No:
e-mail address:
Send this information by fax to: 301-402-4526
or by e-mail to: commjw@helix.nih.gov

The deadline for receipt of the registration form is February 16, 1996

Rooms have been reserved for the meeting at the Holiday Inn (Tel 301 652-2000), Hyatt Regency (Tel 301 657-1234), and Marriott Hotel (Tel 301 979-9400) in Bethesda. There are also several small motels in the immediate area. The final program for the meeting, together with information about hotels and motels, transportation and restaurants, will be sent by Friday, February 23, 1996.

Sponsored by the National Institute of Neurological Disorders and Stroke (NINDS), NIH.
BIOSCIENCE JOB FAIRS

We've got what you want!

Life Science Associates has the best in bioscience recruiting. Whether you're looking for a career change, or you're a company seeking experienced biotech, pharmaceutical or medical device professionals, LSA has what you want - the highest quality career fairs in the industry.

February 21
San Francisco
Hyatt Regency Hotel
10am-1:30 & 3 to 6pm

March 29
Boston
May 9
San Francisco
September 12
Philadelphia
October 17
San Francisco

Plus, a very special event
June 5-7
Santa Clara, CA
“Channels for Change”
a Conference and Job Fair
for Women in
Science and Technology
Presented by WITI
Women in Technology Int'l

LIFE SCIENCE ASSOCIATES
(510) 436-3705
logop@dcai.com
http://www.logop.com/logicponents
Register FREE at the door for the SF event & bring plenty of resumes. For information on future events or to have your resume distributed, see our home page or write to: LSA/Dept. S
2100 Embarcadero, #205, Oakland, CA 94606.

THE J. DAVID GLADSTONE INSTITUTES
University of California, San Francisco

The Institute of Cardiovascular Disease
CHEMOKINES
Dr. Israel F. Charo, M.D., Ph.D.: A Postdoctoral position is available at the Gladstone Institutes in San Francisco in the laboratory of Dr. Israel F. Charo to pursue studies of the receptors for MCP-1, MIP-1α, and related chemokines. Current projects are focused on the role of chemokines/receptors in atherosclerosis (using knockout mice), molecular mechanisms of leukocyte chemotaxis and signal transduction, and suppression of HIV infection by chemokines. Strong background in molecular biology is required. Address inquiries to: H.R. - C95-063, P.O. Box 419100, San Francisco, CA 94141-9100, or fax (415) 826-3708.

The Institute of Virology and Immunology
Positions available in the labs of:
Mark A. Goldsmith, M.D., Ph.D.
Postdoctoral Fellowship; (1) Study structure/function relationships in cytokine receptors that regulate growth, differentiation, and function of lymphocytes. Will use molecular and biochemical approaches to investigate mechanisms of specificity and receptor subunit sharing in transmembrane signaling. May employ tissue culture, in vitro and in vivo model systems of normal and diseased states. (2) Study interactions between lymphotropic viruses and receptor-dependent signal transduction pathways in target cells. Will use tools of molecular virology and immunology to investigate the contributions of transduced cellular genes to the viral life cycle and pathogenicity, as well as the influences of infection on normal cellular signaling and regulation. May employ both tissue culture and animal models. Address inquiries to: H.R. - V96-004, P.O. Box 419100, San Francisco, CA 94141-9100, or fax (415) 826-3708.

MICHIGAN STATE UNIVERSITY
SEA LAMPREY RESEARCH POSITION
TENURE-TRACK, ASSISTANT/ASSOCIATE PROFESSOR

The Department of Fisheries and Wildlife at Michigan State University invites applications for a 12-month, tenure-track position, at the assistant/associate professor level, specializing in the research and management of sea lampreys in the Great Lakes. The Ph.D. is required and preference will be given to applicants with demonstrated, strong quantitative skills and background in fisheries ecology, behavior or physiology. Experience in designing and undertaking successful collaborative research, applying quantitative methods, and guiding a research team is required, as is evidence of working effectively with state, federal, and private organizations, obtaining research grants, and publishing findings. Primary responsibilities include: conduct research aimed at improving methods of sea lamprey control in the Great Lakes; cooperate with Great Lakes Fishery Commission and the National Biological Service in conducting research on sea lampreys and their management; develop and teach a graduate-level course in area of expertise, participate in a partnership research program, faculty committees, professional service and extension programs, and advise students. APPLICATION DEADLINE: MARCH 1, 1996, or until a suitable candidate is found. Salary is competitive and commensurate with education, experience, and demonstrated ability. Interested persons should submit a) a letter of application stating professional goals and objectives, b) a current curriculum vitae with supporting materials, c) transcripts, and d) three letters of reference to Robert Batie, Search Committee Chair, Department of Fisheries and Wildlife, 13 Natural Resources Building, Michigan State University, East Lansing, MI 48824-1222. Telephone: 517-355-4479; FAX: 517-432-1699; E-mail: rbatie@msu.edu

Michigan State University is an equal opportunity/affirmative action employer. Minorities and women candidates are encouraged to apply. Handicapped have the right to request and receive reasonable accomodation.

CHAIR - DEPARTMENT OF BIOLOGY

Applications are invited for the position of Chair of the Biology Department at the University of Evansville to begin June 1996. Applicants should have a strong commitment to teaching and the independent university tradition. Teaching responsibilities include cell biology, introductory biology, and an advanced course in the successful applicant's area of expertise. Interest and experience in interdisciplinary studies are important. The candidate will be expected to develop a research program involving undergraduate students, advise biology students, serve on the premedicine advisory committee, and engage in professional development and University service. Duties of the Chair include administration of departmental affairs, coordination with other academic and administrative units, development of the department, and leadership in terms of scholarship and teaching. The Chair serves on a faculty, tenure-track appointment; Ph.D. is required; salary is commensurate with qualifications and experience.

Applicants should send a curriculum vitae, copies of undergraduate and graduate transcripts, a statement describing commitment to undergraduate teaching and research, a statement describing administrative experience, and three letters of reference to: Karen Ott, Chair, Department of Biology, University of Evansville, 1800 Lincoln Avenue, Evansville, IN 47722. Review of applications will commence March 1, 1996 and continue until the position is filled.

The University of Evansville is an independent, church-related, selective admissions University located in a city of 135,000 in southwestern Indiana. It offers a comprehensive program of instruction including liberal arts and sciences, engineering, business, nursing, physical therapy, and education. Enrollment numbers approximately 2,700 full-time students. The University also includes a study abroad campus in England, Harlaxton College.

The University of Evansville operates under a nondiscriminatory policy with regard to race, color, religion, national origin, gender, age or disability.
The interdisciplinary biological research of laboratory research of further information may benefit women. An term Dr. information Equal women California etiology, research of differences in molecular mortality New successful candidate. February 15, Biological applications PHONE BREAST ell. In "-- laboratory-based, research of both seminars and labo- core training in molecular biology and genetics, discrete algorithms, mathematical modelling, and probability and statistics, so that important biological problems can be addressed effectively through a collaborative effort between researchers in these different fields. Advanced training includes both seminars and laboratory research opportunities, drawing on expertise of the Penn faculty, visiting scholars, and colleagues in the pharmaceutical and biotechnology industry. Further information may be obtained from: http://www.cbl.upenn.edu/UPCB An attractive stipend is provided for student and postdoc support, including health, travel, and equipment benefits. Applicants must be US citizens or permanent residents. Interested individuals should send a CV, brief statement of research interests and long-term goals, 3 letters of recommendation, and any other relevant information to: Dr. Susan Davidson, Dept. Computer and Information Sciences, 299 South 33rd Street, University of Pennsylvania, Philadelphia, PA 19104-6389 The University of Pennsylvania is an Affirmative Action/ Equal Opportunity Employer, and applications from women and minorities are strongly encouraged.

Boehringer Mannheim corporation in California has excellent opportunities for Biochemists/Chemists in the following areas:

**New Assay Feasibility**
This position is responsible for the demonstration of new immunoassay feasibility in a team environment. You will develop critical reagents by conjugations, modifications, and purifications of biological and organic chemicals. You will also develop/optimize immunoassays and characterize assay performance. BS/MS/PhD degree with 4-10 years of lab experience in protein chemistry and immunoas- say development is required. You must be analytically oriented and have hands-on experience in chromatographic, electroforetic, spectrometric and immunochemical methods. (Ref: NAF)

**Product Support**
This position is responsible for the investigation and resolution of product performance and/or manufacturing issues in a team environment. Activities include investigation of product related problems, identification of causes and solutions, and implementation of appropriate process changes. The successful candidate must have excellent, analytical, and communication skills. Previous relevant experience in immunodiagnostics, immunoassay development or manufacturing process development is desirable. (Ref: PS)

**Product Transfer**
This position is responsible for transferring new and reformulated products from R&D to Operations, assisting in identifying/implementing process improvements and supporting scale-up of new products/ procedures. Requires a Ph.D./MS degree in a scientific discipline with a minimum of 6 years lab experience in the diagnostics/pharmaceutical industry, including a background in the development of chemiluminescence and fluoresceimmunoassays with emphasis on heterogeneous essays. (Ref: PT)

**Development**
Chemical synthesists varying levels are invited to inquire about positions within our R&D groups which focus on developing immunoassay products for Infectious Disease and other Therapeutic Drug Monitoring Systems. Participation will involve review and interpretation of scientific literature, laboratory investigations, program planning and interaction with other departments in support of the program. You will be responsible for the design, development, execution, and implementation of scientific research and for evaluating ideas for application to projects that lead to new or improved products or processes. Requires a BS/MS/PhD in a scientific discipline with a minimum of 3-5 years immunoassay development experience in the diagnostics or pharmaceutical industry. (Ref: DMT)

Competitive salary, benefits and relocation allowance provided.

For consideration, please forward your CV with salary requirements to the Human Resources Department at Boehringer Mannheim Corporation, 2400 Bisso Lane, P.O. Box 4117, Concord, CA 94524-4117 or fax your resume to (510) 674-1680. Please include the reference code. Principals only please.

---

**USC/Norris Comprehensive Cancer Center**

**BREAST CANCER RESEARCH PROGRAM**

**1441 EASTLAKE AVENUE ROOM 803**

**LOS ANGELES, CA 90033**

**PHONE (213) 764-0802 FAX (213) 764-0103**

**USC/Norris Comprehensive Cancer Center**

**BREAST CANCER RESEARCH PROGRAM**

**1441 EASTLAKE AVENUE ROOM 803**

**LOS ANGELES, CA 90033**

**PHONE (213) 764-0802 FAX (213) 764-0103**

**R&D OPPORTUNITIES AVAILABLE IN DIAGNOSTICS**

Boehringer Mannheim Corporation in California has excellent opportunities for Biochemists/Chemists in the following areas:

**New Assay Feasibility**
This position is responsible for the demonstration of new immunoassay feasibility in a team environment. You will develop critical reagents by conjugations, modifications, and purifications of biological and organic chemicals. You will also develop/optimize immunoassays and characterize assay performance. BS/MS/PhD degree with 4-10 years of lab experience in protein chemistry and immunoas-say development is required. You must be analytically oriented and have hands-on experience in chromatographic, electroforetic, spectrometric and immunochemical methods. (Ref: NAF)

**Product Support**
This position is responsible for the investigation and resolution of product performance and/or manufacturing issues in a team environment. Activities include investigation of product related problems, identification of causes and solutions, and implementation of appropriate process changes. The successful candidate must have excellent, analytical, and communication skills. Previous relevant experience in immunodiagnostics, immunoassay development or manufacturing process development is desirable. (Ref: PS)

**Product Transfer**
This position is responsible for transferring new and reformulated products from R&D to Operations, assisting in identifying/implementing process improvements and supporting scale-up of new products/ procedures. Requires a Ph.D./MS degree in a scientific discipline with a minimum of 6 years lab experience in the diagnostics/pharmaceutical industry, including a background in the development of chemiluminescence and fluoresceimmunoassays with emphasis on heterogeneous essays. (Ref: PT)

**Development**
Chemical synthesists varying levels are invited to inquire about positions within our R&D groups which focus on developing immunoassay products for Infectious Disease and other Therapeutic Drug Monitoring Systems. Participation will involve review and interpretation of scientific literature, laboratory investigations, program planning and interaction with other departments in support of the program. You will be responsible for the design, development, execution, and implementation of scientific research and for evaluating ideas for application to projects that lead to new or improved products or processes. Requires a BS/MS/PhD in a scientific discipline with a minimum of 3-5 years immunoassay development experience in the diagnostics or pharmaceutical industry. (Ref: DMT)

Competitive salary, benefits and relocation allowance provided.

For consideration, please forward your CV with salary requirements to the Human Resources Department at Boehringer Mannheim Corporation, 2400 Bisso Lane, P.O. Box 4117, Concord, CA 94524-4117 or fax your resume to (510) 674-1680. Please include the reference code. Principals only please.

---

**PRE- AND POST-DOCTORAL FELLOWSHIPS IN COMPUTATIONAL BIOLOGY**

The University of Pennsylvania has established an interdisciplinary training program for PhD students and postdoctoral researchers in computational biology. Areas of interest include:

- Biological databases and informatics
- Molecular evolution and phylogeny
- Construction
- Physical and genetic mapping
- Statistical methods in population biology
- Discrete algorithms and combinatorial optimization in biology

We are particularly interested in individuals with experience in molecular biology or phylogenetic analysis, but whose training in computer science and/or quantitative analysis extends beyond routine use of applications software. Outstanding computer scientists with demonstrated interest and training in the biological sciences will also be considered.

The research training program provides core training in molecular biology and genetics, discrete algorithms, mathematical modelling, and probability and statistics, so that important biological problems can be addressed effectively through a collaborative effort between researchers in these different fields. Advanced training includes both seminars and laboratory research opportunities, drawing on expertise of the Penn faculty, visiting scholars, and colleagues in the pharmaceutical and biotechnology industry. Further information may be obtained from:

http://www.cbl.upenn.edu/UPCB

An attractive stipend is provided for student and postdoc support, including health, travel, and equipment benefits. Applicants must be US citizens or permanent residents. Interested individuals should send a CV, brief statement of research interests and long-term goals, 3 letters of recommendation, and any other relevant information to:

Dr. Susan Davidson, Dept. Computer and Information Sciences, 299 South 33rd Street, University of Pennsylvania, Philadelphia, PA 19104-6389

The University of Pennsylvania is an Affirmative Action/Equal Opportunity Employer, and applications from women and minorities are strongly encouraged.

---

**ASSISTANT PROFESSOR OF PHARMACY AND PHARMACEUTICAL CHEMISTRY (CIT) TRACK)**

**DEPARTMENT OF PHARMACY**

**UNIVERSITY OF CALIFORNIA**

**SAN FRANCISCO**

The Department of Pharmacy invites applications for an Assistant Professor. Applicants should have a strong research background combining advanced techniques at the cutting edge of molecular and cellular biology together with physical chemical and/or bioengineering sciences as applied to drug delivery and biotechnology. Primary research may be in:

1. Biophysical, biochemical or molecular biological aspects of gene delivery;
2. Molecular biology, biochemistry or biophysics of membrane transport;
3. Novel biomaterials design or interactions with the biophase;
4. Self-assembling systems for biomedical applications.

Teaching responsibilities will be in professional curriculum and in graduate and elective courses in topics related to biotechnology and drug delivery.

Send curriculum vitae, three letters of reference, a summary of current research, and a concise outline of future research by March 12, 1996 to:

FRANCIS C. SZOKA, JR., PH.D.

DEPARTMENT OF PHARMACY

BOX 0446

SCHOOL OF PHARMACY

UNIVERSITY OF CALIFORNIA

SAN FRANCISCO, CA 94143-0446

UCSF is an Equal Opportunity/Affirmative Action Employer. Women and minorities are encouraged to apply.
You'll earn a master's degree in biology or chemistry:
> M.A. in Cell & Molecular Biology; Microbiology; Marine Biology; Ecology & Systematics; Physiology & Behavior or Conservation Biology
> M.S. in Biochemistry or Chemistry

You'll move on to your Ph.D. in our Cooperative Doctoral Programs with:
> University of California, Davis - 19 Ph.D. Programs
> University of California, San Francisco - 13 Ph.D. Programs

(You can, of course, choose another university for your Ph.D. work)

Check out our predoctoral fellowships:
> From the National Institutes of Health (NIH), for groups underrepresented in sciences (African American, Hispanic, American Indian and Pacific Islander):
> $12,000/year for 27 MA/MS students
> You choose one of these programs:
  - Master’s/Ph.D. Bridge Program (NIH Bridge)
  - Minority Biomedical Research Support (MBRS)
  - Minority International Research Training (MIRT)
  - Study in Belize, Cameroon, Peru.

> From the U.S. Department of Education, financial need based fellowships:
> $15,500/year (approx) for 25 MA/MS students
> Graduate Assistance in Areas of National Need (GAANN) program aims to increase the number of women and people of color in the sciences.

Write: Professor Frank Bayliss
Office of Minority Opportunities
Department of Biology
San Francisco State University
San Francisco, CA 94132
e-mail: fbayliss@sfsu.edu

Equal Opportunity/Affirmative Action Employer. Women and minorities are strongly encouraged to apply.
**BIOINFORMATICS**

at Schering-Plough

The Schering-Plough Research Institute is expanding its program in Bioinformatics - creating excellent opportunities for scientists with experience in DNA/Protein sequence analysis, database searches and homology motif recognition to establish and lead a new bioinformatics facility. This bioinformatics resource center will collaborate closely with molecular biologists in the application of informatics tools to new and ongoing projects in drug discovery.

The successful candidates will have a PhD and 2 or more years of bioinformatics experience in a research setting along with strong interpersonal and communication skills. Exceptional individuals with an MS degree are also encouraged to apply.

We offer an excellent compensation package including a competitive salary and comprehensive benefits. For prompt, confidential consideration, we invite you to forward a resume with salary requirements to: Human Resources-BP-K15-1, MSP #1255, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ 07033-0539. We are an equal opportunity employer. We regret we are unable to respond to each resume. Only those selected for an interview will be contacted.

---

**SENIOR PHARMACOLOGIST**

NeXstar Pharmaceuticals, an integrated drug discovery and development company based in Boulder, Colorado, is a world leader in combinatorial chemistry and liposomal drug delivery. We currently have an excellent opportunity available for a Senior Pharmacologist.

The ideal candidate will have a Ph.D., 7-10 years experience in cancer biology, and specific hands-on experience in conducting studies with rodent cancer models including nude mouse xenografts of human tumors.

The selected candidate will be a co-team leader with a counterpart in molecular biology for the Company's cancer biology program. This team has responsibility for formulating scientific direction and conducting in vitro and in vivo experiments with potential new anti cancer therapeutic compounds.

In addition to being a part of a growing and exciting company, you will have all the advantages of living in Boulder, Colorado - stunning scenic beauty, a healthy lifestyle, stimulating University atmosphere, diverse culture and superior educational standards. Send your c.v. now to:

NeXstar Pharmaceuticals, Inc.
2860 Wilderness Place
Boulder, CO 80301
Attn: KH
Position #228

---

**POSTDOCTORAL OPPORTUNITIES**

**RETROVIRIOLOGY-INFECTION DISEASES**

The successful candidate will investigate the role of RNA structure and RNA-protein interaction in viral gene expression. Experience in molecular biology, basic virology techniques including HIV, and tissue culture are essential. A strong background in RNA viruses and motility to develop new techniques are important. You will participate in a multi-disciplinary approach to retrovirology research and be encouraged to develop external collaboration. Job number DS-PM

**MICROBIAL BIOCHEMISTRY & GENETICS - INFECTIOUS DISEASES**

The successful candidate will study intrinsic mechanisms of antibiotic resistance in bacteria. You will employ the tools of molecular biology, genetics and biochemistry to explore structure function relationships of regulatory proteins that control inducible antibiotic resistance systems in Escherichia coli. Similar projects in gram-positive systems are also available. Candidate should have a solid background in molecular biology and an awareness of the assets available to prokaryotic systems. Strong interpersonal and collaborative skills also important. Job number DS-LS

**CARDIOVASCULAR THERAPEUTICS**

A two year post-doctoral position available immediately for a candidate to join active research group to study the role of cytokines and growth factors in the response to vascular injury including cell cycle control of cellular proliferation, matrix formation and vascular remodeling. The research will be directed towards mechanistic studies in previously established primate and rodent models of angioplasty-induced injury. Particular emphasis is placed on an integrative approach utilizing molecular and cellular techniques to explore pathologic model systems. Candidate should have a Ph.D. with a strong background in vascular biology as well as molecular techniques; immunocytochemistry and in situ hybridization skills are preferred. (Job number DS-JK

Qualified candidates should send their cv, referencing appropriate job number to: Parke-Davis, Box DS, 2800 Plymouth Road, Ann Arbor, MI 48105 or via e-mail to: resume@aadw.com (reference job number in subject window).

---

**PARKE-DAVIS**

People Who Care

"Equal Opportunity in Action"
Director of Research Administration
University of Arkansas for Medical Sciences

This health sciences campus seeks a dynamic leader for administrative support of research and sponsored programs. A minimum of 5-10 years experience in university (including medical school) research administration as a Director or Associate Director is required; NCURA participation is expected, and CRA status is desired. Expertise and in-depth knowledge of federal rules, regulations, and policies; strong contract and grant development and administration experience; management and supervisory experience; computer and information management skills; a bachelor’s degree in an appropriate field; and a strong service orientation are essential. Detailed acquaintance with federal and other funding sources and with technology transfer activities is important, and a relevant higher degree is an asset. The successful candidate will have excellent interpersonal and negotiating skills, a sense of excitement in new directions of university sponsored program activity, and a deep interest in and commitment to faculty services.

The Office of Research and Sponsored Program Administration serves a faculty of 800 by processing applications; maintaining data systems of proposal status, faculty interests and funding opportunities; monitoring policies such as those relating to research integrity and conflict of interest; supporting the Institutional Review Board for human experimentation and the Patent and Copyright Committee; negotiating contracts; and maintaining a program of trend analysis and publications relating to UAMS research activity. The Office works closely with Associate Deans of the colleges for other activities, including faculty development, technology transfer, clinical trial coordination, and other research support services. Other close interactions are with directors of research centers, Grants Accounting, Institutional Advancement, research administration of the affiliated institutions, and the University of Arkansas General Counsel.

UAMS, with annual external awards approaching $50 million, consists of Colleges of Health Related Professions, Medicine, Nursing, and Pharmacy, the Graduate School, and the University Hospital. There is a vigorous Area Health Education Center program spanning the entire state, and close affiliations are maintained with Arkansas Children’s Hospital, the John L. McClellan Memorial Veterans Affairs Medical Center, and other campuses of the University of Arkansas system. Located in Little Rock, the campus enjoys the advantages of a vibrant state capital along with easy access to the countryside of the Natural State.

Candidates should send a letter of interest, complete CV, and names, addresses, and phone numbers of three references by February 28, 1996, to:

Search Committee for Office of Research and Administration Director
Office of the Vice Chancellor for Academic Affairs
Mail Slot 541
4301 W. Markham Street
Little Rock, AR 72205

UAMS is an Equal Opportunity Employer. Minority and female candidates are encouraged to apply.
Synaptic Pharmaceutical Corporation

We have immediate openings for staff positions in our Molecular and Cell Biology Department. Successful candidates will join a multi-disciplinary team focused on the discovery of novel G protein-coupled and kinase receptors expressed in the central nervous system.

Electrophysiologists

Applicants should have demonstrated expertise in Xenopus oocyte electrophysiology and either a Ph.D. Degree with 2 years of postdoctoral experience or an M.S. Degree. Experience in expression cloning and/or second messenger systems would be beneficial. The ideal candidate will possess effective oral and written communication skills and be a highly motivated individual with primary interest in the molecular biology and pharmacology of neuropeptide receptors.

Molecular Biologist

Applicants should have an M.S./B.S. Degree with experience in molecular biology, experience in expression cloning would be beneficial. The ideal candidate will be a highly motivated individual with primary interest in the molecular biology and pharmacology of neuropeptide receptors.

Protein Biochemist

Applicants should have a Ph.D. Degree with 2 years of postdoctoral experience in protein purification and characterization, experience with protein kinase receptors would be beneficial. The ideal candidate will possess effective oral and written communication skills and be a highly motivated individual with primary interest in protein biochemistry and receptor signal transduction.

Synaptic Pharmaceutical Corporation offers excellent compensation and benefits that include a 401(k) plan and equity participation programs.

For consideration, indicate to which position you are responding and send resume in confidence:

Human Resources Manager, Dept. 170 Synaptic Pharmaceutical Corporation, 215 College Road, Paramus, New Jersey 07652.

---

Project Manager, Custom Animal Services

Charles River Laboratories, recognized for excellence as the world leader in the biomedical research community, has a career opportunity for a Project Manager with a Bachelor's degree in the life sciences and 5-7 years of related experience. Previous experience managing rodent toxicity or oncology projects in a GLP environment plus.

This position is responsible for the technology transfer and maintenance of major commercial projects including nude mouse xenograft transplantation, oncology and toxicity research projects. Also responsible for overseeing project support activities, directing technicians, regulatory compliance, and interacting with customers in support of such projects. Duties associated with this position also include the preparation and maintenance of Standard Operating Procedures (SOPs) and community and compliance policies and procedures to employees. This position is based in Wilmington, MA. No relocation offered.

Please send resume with salary requirements to:

Human Resources - PM
Charles River Laboratories
251 Ballardvale Street
Wilmington, MA 01887,
or fax it to (508) 658-4150

CHARLES RIVER LABORATORIES
A Bausch & Lomb Company
An Equal Opportunity Employer

---

Biomedical Engineer

NIH In Vivo NMR Research Center
Biomedical Engineering and Instrumentation Program
National Center for Research Resources
National Institutes of Health

Salary: $52,867 to $68,729 (includes 6.04% locality pay)

The NMR Center is a central intramural NIH facility for in vivo NMR research, equipped with a SIGMA 1.5T (upgraded with fast gradients; "EchoSpeed"), and 2.0T and 4.7T animal instruments equipped with different sets of fast, shielded gradients with maximum strength up to 100 G/cm. All instruments are linked with the NMR Center's computer facilities including SPARC20, HP, and PowerMacs.

Applicants must have strong background in computing, data processing and spin physics, including imaging. Incumbent will provide expertise in: data processing and image analysis using IDL and other software packages; and spin physics, as a basis for providing guidance to users of the facility in MR imaging and spectroscopy. Will oversee a LAN with connections to all MR instruments and participate in collaborative research to develop new methods for physiological MRI.

U.S. citizens should apply for position as GS-13, Biomedical Engineer. Non-citizens should apply for position as a Visiting Scientist. Visiting Scientist positions are temporary, renewable annually by mutual agreement.

Applications must be postmarked by February 20, 1996
To apply: Submit an SF-171, or Optional Form (OP) 612, or CV to NCRR Personnel Office; plus three references to: Building 31/Room 3B38; 31 Center Drive; MSC 3133; National Institutes of Health; Bethesda, Maryland 20892-2130;
Attn: Eugene McDougal; telephone (301) 496-1524;
FAX (301) 402-2110

For additional details about position, please contact Dr. Chrit Moonen at (301) 496-8440 or moonen@helix.nih.gov

---

Much of the success of Bayer Corporation, Pharmaceutical Division, is based on innovation and research. At the same time, all of our success is based on the talent and drive of our people. As an integral part of Bayer, a $26.8 billion global leader, we have the resources to provide our employees with a supportive, state-of-the-art, multidisciplinary environment that encourages their professional growth and makes our success possible. Join our dedicated team of professionals in the following position:

Sr. Associate Research Scientist

You will conduct established biochemical and pharmacological procedures. In addition, you will be responsible for the development and implementation of new methodologies. Experience with biochemical and pharmacological methods related to studies in the CNS including cell culture, receptor binding, enzyme assays, second-messenger assays, Western blots, immunoassays, spectrophotometric and chromatographic techniques in relation to drug development is required.

Applicants must possess a BS degree with a minimum of 4 years experience or an MS degree with at least two years experience in the biological sciences. Experience in CNS research and drug development in the pharmaceutical industry is required.

We offer attractive compensation and generous benefits. For immediate consideration, please forward a resume, including salary history, to: Bayer Corp., Pharmaceutical Division, Dept. ECLU, 400 Morgan Lane, West Haven, CT 06516.

No phone calls please. An Equal Opportunity Employer M/F/V. Bayer Corp. is committed to creating and maintaining a diverse and inclusive workplace.
AIDS Postdoctoral Training Positions for Minority Researchers

The Dana-Farber Cancer Institute seeks to fill postdoctoral training positions in AIDS-related research. Background and/or experience in this area is preferred but not essential. Candidates must be U.S. citizens or nationals and commit to a minimum two-year training period. Training opportunities are available in the areas of immunology, retrovirology, and cell biology/pharmacology.

A joint appointment will be held in an appropriate department of the Harvard Medical School.

Please send CV and 3 references to:

AIDS Postdoctoral Training Program
Dana-Farber Cancer Institute
44 Binney Street- LHRRB 210
Boston MA 02115

The Dana-Farber Cancer Institute is an Equal Opportunity Employer

Senior Virologist
Veterinary Infectious Disease Organization

The Veterinary Infectious Disease Organization (VIDO) at the University of Saskatchewan is seeking a Senior Virologist to be part of a research team studying the pathogenesis of viral infection in livestock and poultry plus the development of novel vaccines. Qualified candidates will have a PhD in Molecular Virology or a related field plus at least four years post doctoral experience. The successful candidate will have strong communication, interpersonal and leadership skills as well as the ability to work in a team-based research environment. Demonstrated creativity and productivity as evidenced by a strong publication record and ability to attract competitive funding is essential.

VIDO is a non-profit research institute focusing on the study of the immunobiology of bacterial and viral infections of animals. We offer a stimulating research environment which allows for an integrated approach to research and development. Our facilities are state-of-the-art, including laboratories, animal isolation facilities and a large field station.

The salary and benefits package for this position are competitive. Interested candidates should forward a copy of their resume, including names, addresses, phone and fax numbers and E-mail addresses (if available) of three references to:

Dr. Andrew A. Potter
Associate Director, Science
Veterinary Infectious Disease Organization
University of Saskatchewan
120 Veterinary Road
Saskatoon, Saskatchewan S7N 5E3
CANADA
Ciba's Biototechnology Research Unit (RTP) is seeking scientists to contribute to our Pharma Sequencing Group.

Position I (Job #9609) is for a Scientist III. The successful candidate will be an essential member of a high throughput DNA sequencing team and must possess an MA/MS degree in Molecular Biology or related field, and one (1) year of experience in large scale genomic sequence analysis or Ph.D in Molecular Biology or related field, with a focus on the acquisition and analysis of DNA sequence information. Additional duties include ensuring quality of DNA sequence information via waveform and computer-assisted analysis. Will also align/manipulate/assemble DNA sequence information generated by automated sequencing.

Positions 2 & 3 (9610) are for Science I. The successful candidates will have a BS/BA in Molecular Biology or related field, plus two (2) years of recombinant DNA experience. Must be highly organized and efficient at standard recombinant DNA techniques and familiar with a variety of molecular biology methods. These positions will be responsible for growth of bacteria, bacteriophage, and yeast. Construction of cDNA, genomic, and synthetic random-fragment libraries with appropriate vectors. Assist with automated DNA sequencing, and with the assembly of multiple overlapping DNA fragments.

Resumes should be forwarded with a cover letter (which should include the Job# of the position of interest, #9609 or #9610), and a list of three (3) references to: Ciba Biototechnology Research Unit, Human Resources Department, F.O. Box 12257, Research Triangle Park, NC 27709-2257. Resume deadline is FEBRUARY 9, 1996.

We are an Equal Opportunity Employer, m/f/d/v.

---

Distinguished Graduate Research Fellowships in Molecular Life Sciences at The Ohio State University

The Ohio State University is undertaking a major initiative in Molecular Life Sciences Research that will include at least thirty new faculty hires in the next five years. As part of this initiative, the University is supplementing its present graduate programs with a Distinguished Fellowship Program in Molecular Life Sciences. These competitive Fellowships will carry a stipend of $18,000 per year plus full tuition authorization. The Molecular Life Sciences Predoctoral Fellowships will enrol in one of the Departmental or Interdepartmental Graduate Programs in The Colleges of Medicine, Biological Sciences, Pharmacy, Veterinary Medicine, Dentistry, Mathematical and Physical Sciences, or Food, Agricultural and Environmental Sciences. The graduate programs encompass the full range of basic and applied Molecular Life Sciences Research. Research facilities on campus are excellent and include the Comprehensive Cancer Center, Biototechnology Center, Children's Hospital, and Center for Retrovirus Research. Currently more than 150 molecular life scientists perform state-of-the-art research in biochemistry, molecular genetics, neurobiology, immunology, bacteriology, virology, molecular medicine, pharmacology, and plant molecular biology. Columbus was recently named by Newsweek magazine as one of America's top cities and the quality of life on campus and in the city is excellent. Consideration of fellowship applications will begin on March 15, 1996. Inquiries and applications for graduate research fellowships should be directed to Dr. Michael Lairmore, The Ohio State University, Department of Veterinary Biosciences, 1925 Coffey Road, Columbus, OH 43210-1092. Inquiries about faculty positions should be directed to Dr. Alan Lambowitz, Department of Molecular Genetics, The Ohio State University, 1756 Bioscience Building, 444 W. 13th St., Columbus, OH 43210. The Ohio State University is an Equal Opportunity/Affirmative Action Employer. Women, minorities, Vietnam era veterans, disabled veterans and individuals with disabilities are encouraged to apply.

---

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 world's premier new-product innovator. Come discover what's in it for you. Find your place among the following positions.

---

The University of California, Irvine invites applications and nominations for the position of DIRECTOR of the WILLIAM GILLESPIE NEUROSCIENCE RESEARCH FACILITY, the first component of the Center for the Health Sciences on the UCI campus. The Director will hold a professorial appointment in an appropriate department.

The Gillespie Neuroscience Research Facility is a joint project of the College of Medicine and the School of Biological Sciences which will house collaborative, multidisciplinary investigations that further basic and clinical neuroscience research at UC Irvine. The 79,000 sq. ft. facility is designed to accommodate the research programs of 10 - 14 principal investigators, a large vivarium, and administrative support functions. The facility, currently under construction adjacent to the College of Medicine complex, will be available for occupancy in March 1997.

The Director will be responsible for recruiting 5 new tenure-track faculty investigators in areas relevant and complementary to UCI's established areas of excellence in neuroscience research: brain aging, learning and memory, schizophrenia, neuropsychopharmacology, brain imaging, developmental neurobiology, and ion channels. The Director will also be expected to provide campus leadership in the development and coordination of UCI neuroscience research programs, and to identify new initiatives and opportunities for basic and clinical investigation.

Candidates must have 1) M.D. and/or Ph.D. degrees, 2) an active and distinguished research record in a clinical or basic neuroscience discipline, 3) demonstrated administrative/leadership skills, 4) demonstrated excellence in teaching, 5) experience in securing extramural funding, 6) a commitment to the acquisition of new funding for the Facility's interdisciplinary programs, and 7) experience in working with the private sector in developing new research initiatives.

Applicants should submit a letter of interest, a curriculum vitae, and the names and addresses of three professional references to:

Dr. Dennis Cunningham
Chair, Neuroscience Directorate Search
Department of Microbiology & Molecular Genetics
University of California
Irvine, CA 92717.

Nominations should be sent to the same address. Applications will be accepted until an individual has been selected. The University of California is an equal opportunity employer.
NATIONAL UNIVERSITY OF SINGAPORE
DEPARTMENT OF PHARMACY

Applicants with the appropriate qualifications and experience are invited to apply for teaching appointments in the following areas:

<table>
<thead>
<tr>
<th>Areas</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceutical Chemistry</td>
<td>PhD with a basic degree in Pharmacy</td>
</tr>
<tr>
<td>Pharmacy Practice</td>
<td>Pharm D with postdoctoral research experience in Clinical Pharmacy</td>
</tr>
</tbody>
</table>

Gross annual emoluments range as follows:

- **Lecturer**: S$ 66,320 - 129,600
- **Senior Lecturer**: S$104,830 - 189,920
- **Associate Professor**: S$140,830 - 225,000
  
(USS$1.00 = S$1.40 approximately)

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

Leave and medical benefits will be provided. Other benefits may include: an end-of-contract gratuity, a settling-in allowance, subsidised housing or a housing allowance, education allowance for up to three children subject to a maximum of S$16,425 per annum per child, passage assistance and baggage allowance for the transportation of personal effects to Singapore. Staff members may undertake consultation work, subject to the approval of the University, and retain consultation fees up to a maximum of 60% of their gross annual emoluments in a calendar year.

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

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

**The Director**
Personnel Department
National University of Singapore
10 Kent Ridge Crescent
Singapore 119260

Enquiries may also be sent through INTERNET to: PERCNC@NUS.SG, or through Telefax: (65)7783948

---

Wanted: Committed, ambitious scientist. Must be a team player with a vision for the future. M.D./Ph.D., Ph.D., M.S. or B.S. degree necessary.

**Does this describe you?**

If it does, then plan to attend the bioSCIENCE Career Fairs sponsored by SCIENCE. The bioSCIENCE Career Fairs offer the perfect opportunity for scientific professionals to meet in person with representatives from top biotechnology and pharmaceutical companies, universities, governmental agencies and institutions. You can also attend the seminar, *How to get a paper published in SCIENCE*. This exclusive seminar is offered free of charge and will be conducted by one of SCIENCE's editors.

**1996 bioSCIENCE Career Fairs**
Cambridge, MA on the MIT Campus in Cambridge.
March 1: 11 am - 4 pm; March 1 Seminar: 11 am - 11:30 am.
March 2: 12 pm - 4 pm.
La Jolla, CA at the Scripps Research Institute, October 4-5.

**bioSCIENCE CAREER FAIRS**
For more information please call (202) 326-7018.
bioSCIENCE Career Fair Information On-Line:
http://www.sasa.org
(Choose SCIENCE Classified Advertising from the menu)
**NEWMAN SCHOLAR**

University College Dublin is pleased to announce

The Pfizer Newman Scholar in Arthritis Research as part of its programme to provide research opportunities for young scholars of proven academic excellence. Newman fellowships are prestigious three-year appointments, which enjoy an attractive remuneration package.

This fellowship is funded by Pfizer Ltd. The Scholar will be based in the St. Vincent's Hospital, Education and Research Centre, Dublin and will join an arthritis research group in the Department of Rheumatology. Applicants should have an excellent academic record to PhD level or equivalent. They should also have a proven record of research in molecular or cellular biology. The applicant will be asked to submit a research proposal.

Further details and application forms may be obtained from the Personnel Office, University College Dublin, Belfield, Dublin 4, Ireland. Telephone: (+353 1) 706 1409. Fax: (+353 1) 269 2472. Email: acadrec@irlreir.ucd.ie

The closing date for receipt of completed applications is Thursday, 29 February 1996.
Would you rather trust your results to an unpurified peptide, or to one that's guaranteed pure?

No, that's not a trick question. Because — for about what you pay for a crude product from other suppliers — you can get a fully characterized, guaranteed >70% pure custom peptide from Genosys.

You'll get proof of performance to convince even the most hardened skeptic: mass spectral analysis for composition, and HPLC verification of purity. Plus a cast-in-stone, 100% satisfaction guarantee.

Of course, you can also choose higher levels of purity to suit your research, as well as the exact quantity you need. Along with just about any modification you can think of: MAPS, biotin, N-acetylation, C-amidation, phosphorylation, D-amino acids, or KLH / BSA conjugation. Hassle-free antisera services, too. And if you're doing mapping studies, you'll want to check out our time-saving SPOTS™ custom peptide array system.

Skeptical? Call today to discuss your requirements. To erase all doubts, just place an order.
Kodak brings digital imaging to electrophoresis.

Now, capture electrophoresis images in a digital format for rapid analysis, economical documentation and powerful presentation with the new Kodak Digital Science* Electrophoresis Documentation and Analysis System (EDAS).

**Optimum sensitivity at a lower cost**
Using the EDAS's Kodak Digital Science DC40 camera with Kodak BioMax 1D Image Analysis software, obtain sensitivity comparable to instant photography. View and manipulate images immediately. Transfer images to colleagues or insert them into documents in seconds.

And, because EDAS images go straight to disk, you’ll do it all without the waste and cost of instant film or the upfront expense of video hardware.

**Faster, more accurate image analysis**
Kodak BioMax 1D Image Analysis software provides powerful analysis of nucleic acid and protein gels. Fully compatible with Macintosh, Windows 3.1 and Windows 95 operating systems, it rapidly and accurately calculates mass and molecular weight data.

**High-resolution prints at your desk**
The system’s inkjet printer outputs glossy prints in either color or gray scale—at a fraction of the price of instant photography. You’ll save even more by viewing images on-screen first and printing only those you want.

**Bring your electrophoresis imaging into the digital age**
To learn more about this Digital Science system from Kodak, the worldwide leader in autoradiography films, contact Kodak Scientific Imaging Systems at 1-800-225-5352 or 1-716-722-5813. Or visit us on the Worldwide Web at http://www.kodak.com.